Stella-Jones Corporation
Bay Minette, Alabama
EPA I.D. Number ALD 031 490 501

FACT SHEET

A draft Alabama Hazardous Waste Management and Minimization Act (AHWMMA) renewal permit has been prepared for the Stella-Jones Corporation facility. This hazardous waste facility is located in Bay Minette, Alabama. This fact sheet has been prepared to briefly advise the public of the principal permitting, legal and policy issues of the draft permit.

I. PERMIT PROCESS

The purpose of the permitting process is to allow the State and the public to Stella-Jones Corporation's ability to comply with the hazardous waste management requirements of the AHWMMA, as amended. Stella-Jones Corporation must comply with hazardous waste management conditions set forth in the permit during the effective period of the permit, which is ten (10) years from the last permit renewal.

II. PROCEDURES FOR REACHING A FINAL DECISION

The Alabama Department of Environmental Management (ADEM or Department) is proposing to issue Stella-Jones Corporation-Bay Minette Hwy 31 a renewal permit for post-closure care for a closed surface impoundment which has been closed as a single landfill unit with wastes and/or contaminated soils remaining in-place.

ADEM Admin. Code r. 335-14-8-.08(6)(b)1. requires that the public be given at least a 45-day comment period for each draft permit. The comment period will begin on September 17, 2025, which is the date of publication of the public notice in major local newspaper(s) of general circulation, and will end on November 3, 2025. The public notice will also be broadcast over local radio station(s).

Any person interested in commenting on the application or draft permit must do so within the 45-day comment period discussed above.

All persons wishing to comment on any of the permit conditions or the permit application should submit their comments in writing to the Alabama Department of Environmental Management, Permits and Services Division, 1400 Coliseum Blvd. (zip 36110-2059), P.O. Box 301463 (zip 36130-1463) Montgomery, Alabama, ATTENTION: Mr. Russell A. Kelly.

ADEM will consider all written comments received during the comment period while making a permit decision for this facility. When the Department makes its final permit decision, notice will be given to the applicant and each person who has submitted written comments or requested notice of the final permit decision.

III. FACILITY DESCRIPTION

The facility has been conducting wood preserving operations since 1958. Creosote was the only preservative in use from 1958 to 1976. Pentachlorophenol was added in 1976, and from 1976 to 1989, both creosote and pentachlorophenol were used. Only pentachlorophenol has been in use since 1989. The principal products produced are utility poles. The hazardous waste which was managed in the closed surface impoundment (SWMU 1) contained a K001 waste code. SWMU 1 has an approved cap and cover installed over the remaining waste. These actions are intended to

mitigate the potential for future groundwater contamination. The permit will contain provisions for post-closure care for the closed surface impoundment and corrective action for groundwater contamination.

Additional provisions have been included in the permit as a result of the changes made to AHWMMA to incorporate the requirements of the 1984 Hazardous and Solid Waste Amendments (HSWA) to RCRA. These requirements are included in accordance with ADEM Admin. Code r. 335-14-5-.06(12), which addresses corrective action for Solid Waste Management Units (SWMUs). This rule requires a RCRA Facility Assessment (RFA) of all SWMUs to be conducted at the facility. The RFA for Stella-Jones Corporation has been completed and SWMUs have been identified. SWMUs are recommended for further sampling and corrective action if necessary.

IV. TECHNICAL CONTACT

Amber Hicks
Engineering Services Section
Industrial Hazardous Waste Branch, Land Division
Alabama Department of Environmental Management
1400 Coliseum Blvd (zip 36110-2059)
P.O. Box 301463 (zip 36130-1463)
Montgomery, Alabama
(334) 270-5608

Alabama Department of Environmental Management

HAZARDOUS WASTE FACILITY PERMIT

PERMITTEE:	**Stella-Jones Corporation**
ADDRESS:	**1101 Highway 31 North Bay Minette, Alabama 36507**
PERMIT NUMBER:	**ALD 031 490 501**
UNITS PERMITTED:	**Post Closure Care For a Surface Impoundment Closed As Landfill**
ISSUANCE DATE:	**XXX XX, 2025**
EFFECTIVE DATE:	**XXX XX, 2025**
EXPIRATION DATE:	**XXX XX, 2035**

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This Permit is issued pursuant with the Code of Alabama 1975, §§ 22-30-1-et. seq., as amended, and regulations adopted thereunder and the Hazardous Wastes Management and Minimization Act and in accordance with the plans and specifications and applications filed with the Department subject to the conditions appended hereto, all of which are considered a part of this Permit. This Permit shall be subject to all applicable laws of the State of Alabama, rules and regulations and orders of the Department of Environmental Management and shall be effective from the date of issuance.

Alabama Department of Environmental Management

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
HAZARDOUS WASTE PERMIT

Permittee:

OWNER/OPERATOR:
Stella-Jones Corporation
1101 Highway 31 North
Bay Minette, Alabama 36507
Baldwin County

Permit Number: ALD 031 490 501
Identification Number: ALD 031 490 501

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Pursuant to the Alabama Hazardous Wastes Management and Minimization Act (AHWMMA), Code of Ala. 1975, Section 22-30-1, et. seq., as amended, and attendant regulations promulgated thereunder by the Alabama Department of Environmental Management (ADEM or the Department), a permit is issued to Baldwin Pole & Piling Company, Inc. for the facility located in Bay Minette, Alabama, at latitude N 30º 52' 30" and longitude W 87º 46' 27".

The Permittee must comply with all terms and conditions of this permit, which consists of the conditions set forth herein (including those in any attachments), and the regulations applicable to the Permittee's facility contained in Chapters 335-14-1, 335-14-2, 335-14-5, 335-14-8, and 335-14-9 of the ADEM Administrative Code of Regulations (hereinafter referred to as the "ADEM Admin. Code r."). Applicable regulations are those which are in effect on the date of issuance of this permit.

This permit is based on the assumption that the information submitted in the permit application attached to the Permittee's letter dated March 6, 2024, as modified by subsequent amendments dated October 9, 2024 (hereby incorporated by reference and hereafter referred to as the Application) is accurate and that the facility will be constructed and operated as specified in the Application. Any inaccuracies found in this information could lead to the termination or modification of this permit in accordance with ADEM Admin. Code r. 335-14-8-.04(2), 335-14-8-.04(3), and 335-14-8-.04(4) and could lead to potential enforcement action. The Permittee must inform ADEM of any deviation from or changes in the information provided in the Application that would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

This permit is effective as of _____ and shall remain in effect until _____ unless revoked and reissued, or terminated under ADEM Admin. Code r. 335-14-8-.04(2) and 335-14-8-.04(4) or continued in accordance with ADEM Admin. Code r. 335-14-8-.05(2).

Alabama Department of Environmental Management

Date Signed

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Documents Incorporated By Reference:

Part A and Part B Permit Application submitted on March 6, 2024, as modified by subsequent amendments dated October 9, 2024.

Groundwater Sampling and Analysis Plan (Exhibit 14 of the permit application), dated March 1, 2024.

Corrective Action Plan (Exhibit 28 of the permit application), dated June 19, 1989, as modified by subsequent amendments dated March 1, 2024.

Corrective Measures Study (Exhibit 29 of the permit application) dated October 1, 1999, as modified by subsequent amendments dated June 15, 2005.

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PART I

STANDARD AND GENERAL FACILITY CONDITIONS

I.A. EFFECT OF PERMIT

Issuance of this permit does not authorize any injury to persons or property, any invasion of other private rights, or any infringement of state or local law or regulations. Compliance with the terms of this permit does not constitute a defense to any action brought under the AHWMMA, or any other law governing the protection of public health or the environment, for any imminent and substantial endangerment to human health, welfare, or the environment.

I.B. SEVERABILITY

The provisions of this permit are severable and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

I.C. DUTIES AND REQUIREMENTS

1. Duty to Comply

   The Permittee shall comply with all conditions of this permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance, other than noncompliance authorized by an emergency permit, constitutes a violation of the AHWMMA, and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application.

2. Duty to Reapply

   a. If the Permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Permittee must apply for and obtain a new permit.

   b. The Permittee must submit an application for a new permit for both post-closure and Solid Waste Management Unit (SWMU) corrective measures at least 180 calendar days before the expiration of this permit. The Permittee must reapply in order to fulfill the 30-year post-closure care period required by ADEM Admin. Code r. 335-14-5-.07(8)(a)1. The Department may shorten or extend the post-closure care period applicable to the hazardous waste facility in accordance with ADEM Admin. Code r. 335-14-5-.07(8)(a)2 and 335-14-8-.03(1)(b).

3. Need to Halt or Reduce Activity Not a Defense

   It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

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4. Duty to Mitigate

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

5. Proper Operation and Maintenance

The Permittee shall, at all times, properly operate and maintain all facilities and systems of treatment, monitoring, and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance (O&M) 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 backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this permit.

6. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause as specified in ADEM Admin. Code r. 335-14-8-.04(2), 335-14-8-.04(3), and 335-14-8-.04(4). The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay any permit condition.

7. Property Rights

Issuance of this permit does not convey any property rights of any sort, nor any exclusive privilege.

8. Duty to Provide Information

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

9. Inspection and Entry

The Permittee shall allow duly designated officers and employees of the Department or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

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

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

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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 AHWMMA, any substances or parameters at any location. The Permittee shall have the opportunity to split samples during sampling.

10. Monitoring and Records

a. 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 ADEM Admin. Code r. 335-14-2-Appendix I or the methods specified in Exhibit 14 of the permit application. 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), Standard Methods for the Examination of Water and Wastewater (latest edition), the methods specified in Exhibit 14 of the permit application, or an alternative method approved by ADEM. [ADEM Admin. Code r. 335-14-8-.03(1)(j)1.]

b. The Permittee shall maintain at the facility records of all monitoring information including all calibration and maintenance records, all original strip chart recordings for continuous monitoring instrumentation, the certification required by ADEM Admin. Code r. 335-14-5-.05(4)(b)9., records of all data used to prepare documents required by this permit, copies of all reports 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 certification, application, sample, measurement, report or record, or until corrective action is completed, whichever date is later. This period may be extended by the Department at any time and is automatically extended during the course of any unresolved enforcement action regarding this facility. [ADEM Admin. Code r. 335-14-5-.05(5)(b) and 335-14-8-.03(1)(j)2.]

c. The Permittee shall maintain, at the facility, records of all groundwater monitoring wells, piezometers, and associated groundwater surface elevations throughout the post-closure care period. These records shall include the surveyed location, surveyed elevation, surveyed elevation reference point, total depth, screened interval, construction details, well log, and all other pertinent information for each well and piezometer.

d. Records for monitoring information shall include:

i. The date(s), exact place, and times of sampling or measurements;

ii. The names of individual(s) who performed the sampling or measurements;

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iii. The date(s) analyses were performed;

iv. The names of individual(s) who performed the analyses;

v. The analytical techniques or methods used; and,

vi. The results of such analyses.

e. The following documents and information shall be maintained throughout the post-closure care period at the Facility.

i. Complete copy of this permit and the permit application.

ii. Operating record as required by ADEM Admin. Code r. 335-14-5-.05(4) and this permit.

iii. Copies of all plans, reports, inspection schedules, and inspection logs as required by ADEM Admin. Code Chapter 335-14-5 and this permit.

11. Signatory Requirements

All applications, reports or information required by this permit and submitted to the Department shall be signed and certified in accordance with ADEM Admin. Code r. 335-14-8-.02(2) and 335-14-8-.03(1)(k).

12. Reporting Requirements

a. Planned Changes

The Permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility and any solid waste management units identified under Part IV of this permit.

b. Anticipated Noncompliance

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

c. Transfer of Permits

This permit may be transferred to a new owner or operator only if it is modified or revoked and reissued pursuant to ADEM Admin. Code r. 335-14-8-.04(1) or 335-14-8-.04(3)(a)1.(vii). Before transferring ownership or operation of the facility during its post-closure period, the Permittee shall notify the new owner or operator, in writing, of the requirements of ADEM Admin. Code Chapters 335-14-5 and 335-14-8 and this permit.

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d. Monitoring Reports

Monitoring results shall be reported at the intervals specified elsewhere in this permit.

e. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted to the Department no later than 14 calendar days following each schedule date.

f. Twenty-Four Hour Reporting

i. The Permittee shall report to the Department any noncompliance with this permit that may endanger human health or the environment. Any such information shall be reported orally within 24 hours from the time the Permittee becomes aware of the circumstances. This report shall include, but is not limited to, the following:

(I) Information concerning the release of any hazardous waste which may endanger public drinking water supplies; and,

(II) Information concerning the release or discharge of any hazardous waste, or hazardous waste constituents, or of a fire or explosion at the facility, which could threaten the environment or human health outside the facility.

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

(I) Name, address, and telephone number of the owner or operator;

(II) Name, address, telephone number, and EPA Identification Number of the facility;

(III) Date, time, and type of incident;

(IV) Name and quantity of material(s) 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 accident.

iii. A written submission shall also be provided within 5 calendar days of the time that the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its

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cause; the periods of noncompliance (including exact dates and times); whether the noncompliance has been corrected, and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

g. Other Noncompliance

The Permittee shall report to the Department all instances of noncompliance not otherwise required by Permit Conditions I.C.12.d., I.C.12.e., or I.C.12.f. at the time any other reports required by this permit are submitted. The reports shall contain the information required by Permit Condition I.C.12.f.

h. Other Information

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information. In addition, upon request, the Permittee shall furnish to the Department any information related to compliance with this permit.

13. Certification of Construction

The Permittee may not commence treatment, storage or disposal of hazardous waste or contaminated media at any new or modified portion of the facility until the Permittee has submitted to the Department, by certified mail or hand-delivery, a letter (together with the certification by the Construction Quality Assurance (CQA) officer required by ADEM Admin. Code r. 335-14-5-.02(10)(d) and any other certifications required by this permit or ADEM Admin. Code Division 335-14) signed by the Permittee and an Alabama-registered professional engineer, stating that the facility has been constructed or modified in compliance with this permit where appropriate; and,

a. The Department has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of this permit; [ADEM Admin. Code Rule 335-14-8-.03(1)(1)2(ii)(I).] or

b. The Department has either waived the inspection or has not notified the Permittee, within 15 calendar days of the notification from the Permittee, of its intent to inspect. [ADEM Admin. Code r. 335-14-8-.03(1)(1)2(ii)(II)]

14. The Permittee shall assure that all measures necessary to maintain and/or achieve compliance with all applicable requirements of ADEM Admin. Code Division 335-14 are taken during the active life of the facility and throughout the post-closure care period, corrective action period, and the term of this permit.

15. In the event that circumstances beyond the Permittee's control arise to prevent achievement of any deadline set forth by this permit, the Permittee may immediately, upon the occurrence thereof, request an extension by sending a written request to the Department explaining the need for the extension. The Department may, after consideration of the circumstances, grant the extension. Requests for extensions may require a permit modification pursuant to ADEM Admin. Code r. 335-14-8-.04(2) or (3).

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I.D. DEFINITIONS

For the purposes of this permit, terms used herein shall have the same meaning as those in ADEM Admin. Code Chapters 335-14-1, 335-14-2, 335-14-5, and 335-14-8, unless this permit specifically provides otherwise. Where terms are not defined in the regulations or this permit, a standard dictionary reference or the generally accepted scientific or industrial meaning of the term shall define the meaning associated with such terms.

"Area of concern" (AOC), for the purposes of this permit, includes any area having a probable release of a hazardous waste or hazardous constituent which is not from a solid waste management unit and is determined by the Department 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 Section 3005(c)(3) of the Resource Conservation and Recovery Act and ADEM Admin. Code r. 335-14-8-.03(3)(b)2. in order to ensure adequate protection of human health and the environment.

"Contamination," for the purposes of this permit, refers to the presence of any hazardous constituent in a concentration that exceeds the naturally occurring concentration of that constituent in the immediate vicinity of the facility (*i.e.*, areas not affected by the facility).

"Corrective action", for the purposes of this permit, is the sum of all corrective measures necessary to protect human health and the environment for all releases of hazardous constituents from any SWMU at the facility, regardless of the time at which waste was placed in the unit, as required by ADEM Admin. Code r. 335-14-5-.06(11) and/or 335-14-5-.06(12). Corrective measures may address releases to air, soils, surface water, or groundwater.

"Corrective measures", for the purposes of this permit, include all individual measures taken and/or necessary to remedy releases and to protect human health and the environment for all releases of hazardous waste or hazardous constituents from any SWMU at the facility, regardless of the time at which waste was placed in the unit, as required under ADEM Admin. Code r. 335-14-5-.06(12). Corrective measures may address releases to air, soils, surface water, or groundwater. The sum of all individual corrective measures is known as corrective action.

"Extent of contamination," for the purposes of this permit, is defined as the horizontal and vertical areas in which the concentrations of hazardous constituents in the environmental media being investigated are above detection limits or background concentrations indicative of the region, whichever is appropriate as determined by the Department.

"Groundwater Protection Standard", for the purposes of this permit, refers to a groundwater concentration limit which is established pursuant to ADEM Admin. Code r. 335-14-5-.06(3).

"Hazardous constituents," for the purposes of this permit, are those substances listed in ADEM Admin. Code r. 335-14-2-Appendix VIII and/or ADEM Admin. Code r. 335-14-5-Appendix IX and include hazardous constituents released from solid waste, hazardous waste, and hazardous waste constituents that are reaction by-products.

"Interim measures", for the purposes of this permit, are actions necessary to minimize or prevent the further migration of contaminants and limit actual or potential human and environmental

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exposure to contaminants while long term corrective action remedies are evaluated and, if necessary, implemented.

"Landfill", for the purposes of this permit, includes any disposal facility or part of a facility where hazardous waste is placed in or on the land and which is not a pile, a land treatment facility, a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground mine, a cave, or a corrective action management unit.

"Land Use Controls," for the purposes of this permit, is as defined by ADEM Admin. Code r. 335-5-1-.03.

"Method detection limit" (MDL), for the purposes of this permit, means the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

"Operating day," for the purposes of this permit, means any day on which hazardous waste is treated, stored, or disposed of in a unit. For example, each day that a hazardous waste storage unit contains hazardous waste is an operating day; as is each day that a disposal unit contains or receives hazardous waste, or each day that hazardous waste is treated in a treatment unit.

"Release," for the purposes of this permit, includes any spilling, leaking, pouring, emitting, emptying, discharging, injecting, escaping, leaching, pumping, or disposing into the environment of any hazardous waste or hazardous constituent.

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

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

"Storm event," for the purposes of this permit, is defined as a 1-year, 24-hour storm event or rainfall that measures 1-inch or greater in 1 hour or less. Rainfall measurements may be taken at the site, or the closest official weather monitoring station may be used.

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I.E. EXPIRATION AND CONTINUATION OF PERMIT

This permit and all conditions herein will remain in effect beyond this permit's expiration date if the Permittee has submitted a new application as required by Permit Condition I.C.2. and, through no fault of the Permittee, the Department has not issued a new permit.

I.F. WASTE MINIMIZATION

1. Certification Requirements

   Pursuant to ADEM Admin. Code r. 335-14-5-.05(4)(b)9., the Permittee must certify, no less often than annually, that:

   a. The Permittee has a program in place to reduce the volume and toxicity of hazardous waste to the degree determined by the Permittee to be economically practicable; and,

   b. The proposed method of treatment, storage or disposal is the most practicable method available to the Permittee and that it minimizes the present and future threat to human health and the environment.

2. Recording Requirements

   The Permittee shall maintain copies of this certification in the facility operating record as required by ADEM Admin. Code r. 335-14-5-.05(4).

I.G. COST ESTIMATES

1. The Permittee shall maintain detailed written cost estimates, in current dollars, at the location specified in Permit Condition I.C.10.e. and on file with ADEM in accordance with ADEM Admin. Code r. 335-14-5-.08(3), 335-14-5-.08(5), and 335-14-5-.08(10).

2. All cost estimates must be updated annually as required by ADEM Admin. Code r. 335-14-5-.08(3)(b), 335-14-5-.08(5)(b), and 335-14-5-.08(10)(b).

3. The cost estimate shall be maintained and submitted in the form designated by the Department.

4. The Permittee must update the cost estimate no later than 30 calendar days after the Department has approved a modification to the Closure Plan, Post-Closure Plan, or Corrective Action Plan, or any other plan required or referenced by this permit, if the change in the plan results in an increase in the amount of the cost estimate.

I.H. FINANCIAL ASSURANCE

1. The Permittee shall demonstrate continuous compliance with ADEM Admin. Code r. 335-14-5-.08 by providing documentation of financial assurance in at least the amount

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that equals or exceeds the cost estimate. Changes in financial assurance mechanisms must be approved by the Department.

2. The Permittee shall submit itemized statements for all capital expenditures and a complete, revised post-closure and corrective action cost estimate to the Department when requesting approval for a reduction in the financial assurance mechanism.

I.I. PERMIT MODIFICATIONS

The Permittee shall request a permit modification whenever changes in operating plans or facility design affect any plan (*e.g.,* closure, groundwater monitoring, post-closure, or corrective action) required or referenced by this permit. The Permittee must submit a written request for a permit modification, pursuant to the requirements of ADEM Admin. Code r. 335-14-8-.04(2), at least 60 calendar days prior to the proposed change in the facility design or operation.

I.J. REPORTS, NOTIFICATIONS, AND SUBMISSIONS TO THE DEPARTMENT

One hard copy and one electronic (an optical character recognition or text-searchable) copy of all reports, notifications, or other submissions that are required by this permit should be sent via certified mail or given to:

Chief, Land Division
Alabama Department of Environmental Management
P.O. Box 301463 (Zip 36130-1463)
1400 Coliseum Boulevard (Zip 36110-2059)
Montgomery, Alabama

and

Director, RCRA Division
USEPA Region 4
Atlanta Federal Center
61 Forsyth Street SW
Atlanta, Georgia 30303-3104

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PART II

POST-CLOSURE CARE

II.A. POST-CLOSURE CARE PERIOD

The post-closure care period shall extend for a period of thirty (30) years after the date of issuance of a post-closure permit unless shortened or extended pursuant to ADEM Admin. Code r. 335-14-5-.07(8). The post-closure care period shall automatically extend through the end of the compliance period specified in Part III.B.4 of this permit.

II.B. POST-CLOSURE PROCEDURES AND USE OF PROPERTY

1. Post-Closure Activities

   The Permittee shall conduct post-closure care activities, in accordance with Exhibit 5 of the permit application and as required by ADEM Admin. Code r. 335-14-5-.07 and 335-14-5-.14(11)(d), for each hazardous waste management unit listed in Table II.1. Post-closure care shall commence upon the effective date of this permit and shall continue throughout the post-closure care period.

2. Security

   The Permittee shall comply with the security provisions of ADEM Admin. Code r. 335-14-5-.02(5) and as described in Section 2.4 of the permit application.

3. Disturbance of Closed Unit(s)

   The Permittee shall not allow the disturbance of the integrity of the final cover, liners, any components of the containment system, or the function of the facility's monitoring systems during the post-closure care period for any unit identified in Table II.1.

4. The Permittee shall:

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

   b. Maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of ADEM Admin. Code r. 335-14-5-.06 and Part III of this permit;

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

   d. Protect and maintain surveyed benchmarks used in complying with the surveying and recordkeeping requirements of ADEM Admin. Code r. 335-14-5-.14(10).

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II.C. INSPECTIONS

1. The Permittee shall inspect the components, structures, and equipment at the site in accordance with the inspection schedule as described in Section 2.5 of the permit application, the post-closure care plan as described in Exhibit 5 of the permit application, and as required by ADEM Admin. Code r. 335-14-5-.02(6) and 335-14-5-.07.

2. Monitoring and Inspection

   The Permittee shall inspect the closed hazardous waste management unit listed in Table II.1 at least quarterly and after storms to detect any evidence of deterioration or improper operation as described in Section 2.5 of the permit application and as required under ADEM Admin. Code r. 335-14-5-.02(6), 335-14-5-.07, and 335-14-5-.14. The inspections shall specifically include evaluation of the following items:

   a. Integrity of the final cover (erosion, ponding, subsidence, cracking, *etc.*);

   b. Growth and stabilization of vegetative cover;

   c. Run-on and run-off control system;

   d. Groundwater monitoring wells; and,

   e. Survey benchmarks.

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TABLE II.1

POST-CLOSURE CARE UNITS

UNIT NAME	UNIT DESCRIPTION	CLOSED-IN-PLACE CAPACITY (QUANTITY)	DESCRIPTION OF UNIT*	LOCATION OF UNIT*
SWMU 1	Closed Surface Impoundment	833 Cubic Yards	Section 1.1	Exhibit 2

* Location in permit application containing description (text) and location (figure) of unit.

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PART III

GROUNDWATER MONITORING AND CORRECTIVE ACTION

III.A. REQUIRED PROGRAM(S)

1. Groundwater monitoring shall consist of the General Groundwater Monitoring Program of Permit Condition III.B. and the Corrective Action Monitoring Program contained in Permit Condition III.E.

2. The Permittee shall continue groundwater monitoring as required by this permit not later than 120 calendar days after the effective date of this permit.

III.B. GENERAL GROUNDWATER MONITORING PROGRAM

1. Well Location, Installation and Construction

The Permittee shall install and/or maintain a groundwater monitoring system to comply with the requirements of ADEM Admin. Code r. 335-14-5-.06(8), 335-14-5-.06(9), 335-14-5-.06(10), and 335-14-5-.06(11) as applicable and as specified below:

a. The Permittee shall maintain all groundwater monitoring wells at the facility as identified in Table III.1. of this permit, at the locations specified in Exhibit 2 of the permit application, and any other groundwater monitoring wells specified by Permit Condition III.B.1.d.

i. All groundwater monitoring wells shall be maintained and inspected in accordance with the plans and specifications presented in Exhibit 5 of the permit application and/or CMI Plan, and in accordance with ADEM Admin. Code r. 335-14-5-.06.

ii. A groundwater monitoring well shall not be removed from any monitoring program specified in this permit without an approved permit modification pursuant to Permit Condition I.I.

iii. If a groundwater monitoring well is damaged, the Permittee shall immediately notify the Department in writing, which includes a description of the well repair activities to be conducted. The well repair procedures must be approved by the Department prior to implementation. Within 30 calendar days after the well is repaired, the Permittee shall submit a written notification to the Department that the well repair activities were conducted in accordance with the approved procedures.

iv. If a groundwater monitoring well is deleted from the monitoring program(s) required by this permit in accordance with Permit Conditions III.B.1.a.ii. and I.I., it shall be abandoned within 90 calendar days after deletion using procedures to be approved by the Department. Within 30 calendar days after the well is abandoned, the Permittee shall submit a

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written notification to the Department that the well abandonment activities were conducted in accordance with the approved procedures.

b. Groundwater monitoring wells MW-2A, MW-3A, and MW-4AR shall define the point of compliance for the surface impoundment (SWMU #1) closed as a landfill.

c. The Permittee shall maintain groundwater monitoring well(s) P-5 as the background monitoring well(s) for the entire facility as specified in Exhibit 2 of the permit application.

d. The Permittee shall install and maintain additional groundwater monitoring wells as necessary to assess changes in the rate and extent of any plume of contamination or as otherwise deemed necessary to maintain compliance with ADEM Admin. Code r. 335-14-5-.06(6), 335-14-5-.06(8), 335-14-5-.06(9), 335-14-5-.06(10), and 335-14-5-.06(11), as applicable. A plan in the form of a permit modification request specifying the design, location and installation of any additional monitoring wells should be submitted to the Department at least 90 calendar days prior to installation which, at a minimum, shall include:

i. Well construction techniques including casing depths and proposed total depth of well(s);

ii. Well development method(s);

iii. A complete description of well construction materials;

iv. A schedule of implementation for construction; and,

v. Provisions for determining the lithologic characteristics, hydraulic conductivity, grain size distribution, and porosity for the applicable aquifer unit(s) at the location of the new well(s).

e. The Permittee shall abandon wells P-3, P-4, MW-1A, DNAPL-1, and DNAPL-2, using procedures to be approved by the Department, within 90 calendar days after the effective date of this permit. After the abandonment of these wells is completed, and within 120 calendar days after the effective date of this permit, the Permittee shall submit a report to the Department which includes a detailed description of the well abandonment activities conducted.

2. General Groundwater Monitoring Requirements

a. The Permittee shall determine the groundwater surface elevation from all monitoring wells listed in Table III.1. of this permit at least annually and each time a sampling event is conducted. The results of these determinations should be submitted in accordance with Permit Condition III.B.6. Elevation data should be recorded and reported as mean sea level (MSL) and referenced to an appropriate national geodetic vertical datum (NGVD) benchmark.

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b. The Permittee shall determine the groundwater flow rate and direction in the underlying aquifer(s) at least annually and submit the results in accordance with Permit Condition III.B.6.

c. RESERVED.

3. Groundwater Protection Standard

a. The groundwater protection standard, as required under ADEM Admin. Code r. 335-14-5-.06(3), shall consist of Table III.3 of this permit which lists the hazardous constituents and their respective concentration limits.

b. The groundwater protection standard applies to all hazardous waste or hazardous constituent releases as deemed appropriate by the Department to protect human health and the environment.

4. Compliance Period

a. The compliance period, during which the groundwater protection standard specified in Permit Condition III.B.3. applies, shall begin at the time of the first sampling event of the compliance monitoring program (Permit Condition III.D.), or the corrective action monitoring program (Permit Condition III.E.), whichever is earlier.

b. The compliance period shall continue (after beginning pursuant to Permit Condition III.B.4.a.) until the groundwater protection standard as defined by Permit Condition III.B.3.a. has not been exceeded for a period of three consecutive years.

c. If the Permittee is engaged in a corrective action program pursuant to Permit Condition III.E., then the compliance period shall continue as required by ADEM Admin. Code r. 335-14-5-.06(7)(c) until the groundwater protection standard has not been exceeded for a period of three consecutive years after corrective action has been terminated and this permit has been modified, in accordance with Permit Condition I.I., to implement a compliance monitoring program pursuant to Permit Condition III.D. or a detection monitoring program pursuant to Permit Condition III.C., as required by ADEM Admin. Code r. 335-14-5-.06(11)(f).

5. Sampling and Analysis Procedures

The Permittee shall use the following techniques and procedures when obtaining and analyzing samples from the groundwater monitoring wells described in Permit Condition III.B.1. to provide a reliable indication of the quality of the groundwater as required under ADEM Admin. Code r. 335-14-5-.06(8)(d), 335-14-5-.06(8)(e), and 335-14-5-.06(8)(g):

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a. Samples shall be collected, preserved, and shipped (when shipped off-site for analysis) in accordance with the procedures specified in Exhibit 14 of the permit application.

b. Samples shall be analyzed according to the procedures specified in Exhibit 14 of the permit application, the most recent edition of SW-846 or other appropriate methods approved by the Department. Analytical method detection limits shall be less than or equal to the concentration limits specified in Table III.2 or III.3 for the boundary wells during the corrective action period as proposed in Exhibit 14 and 22 of the permit application, unless otherwise approved in writing by the Department.

c. Samples shall be tracked and controlled using the chain-of-custody procedures specified in Exhibit 14 of the permit application.

d. Statistical analyses used to evaluate the groundwater monitoring data shall be as described in Exhibit 28 of the permit application and ADEM Admin. Code r. 335-14-5-.06(8)(h).

e. All samples collected in accordance with this permit shall not be filtered prior to analysis.

6. Recordkeeping and Reporting

a. The Permittee shall keep and maintain all monitoring, testing, and analytical data obtained in accordance with Permit Conditions III.B., III.C., III.D., and III.E. as required by Permit Condition I.C.10.

b. The Permittee shall submit to the Department a written report to include all analytical sampling data, established background values, statistical evaluations, groundwater elevations, associated potentiometric maps, and the annual groundwater flow rate and direction determinations. The analytical method and the method detection limit (MDL) for each constituent must be integrated into all reports of analysis. The report shall be submitted March 15th, then on an annual basis thereafter. Copies of this report shall be kept at the facility in accordance with Permit Conditions I.C.10.c. and I.C.10.e.

c. The Permittee shall submit progress reports to the Department describing implementation of groundwater monitoring and/or corrective action activities at the site as required by Part III of this permit on a quarterly basis. The first progress report shall be submitted to the Department within 90 calendar days after the effective date of this permit. The progress reports shall continue until such time as the required monitoring and/or corrective action systems and activities required by this permit are fully constructed and operational. In the event that additional monitoring and/or corrective action requirements are imposed through a permit modification, in accordance with Permit Condition I.I. the quarterly reporting requirement shall resume, commencing upon the effective date of the permit modification and continuing until the required monitoring and/or corrective action systems and activities are again fully constructed and operational.

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III.C. DETECTION MONITORING PROGRAM (RESERVED)

III.D. COMPLIANCE MONITORING PROGRAM (RESERVED)

III.E. CORRECTIVE ACTION MONITORING PROGRAM

The requirements of this Condition are applicable to the entire facility. Except as specified otherwise in this permit, the Corrective Action Monitoring Program shall be implemented in accordance with Exhibit 5 and 28 of the permit application and ADEM Admin. Code r. 335-14-5-.06(11).

1. Monitoring Systems

   In addition to the point of compliance and background monitoring well systems identified in Permit Conditions III.B.1.b. and III.B.1.c., the Permittee shall:

   a. Maintain groundwater monitoring wells MW-10, P-1R, P-6, and TP-9 as boundary wells for the entire facility as specified in Table III.1. of this permit and as shown in Exhibit 2 of the permit application.

   b. Maintain groundwater monitoring wells P-2 and MW-8R as effectiveness wells as specified in Table III.1. of this permit and as shown in Exhibit 2 of the permit application.

   c. Maintain wells RW-1, RW-2, RW-3, RW-4, RW-5, RW-6, RW-7, RW-8, RW-9, RW-10, RW-11, RW-12, RW-13, RW-14, RW-15, RW-16, RW-17, RW-18, RW-19, RW-20, RW-21, RW-22, RW-23, and RW-24 as recovery wells as specified in Table III.1. of this permit and as shown in Exhibit 2 of the permit application.

   d. Maintain wells MW-2A, MW-3A, and MW-4AR as point of compliance wells as specified in Table III.1. of this permit and as shown on Exhibit 2 of the permit application.

2. Corrective Action Program

   a. The Permittee shall conduct a Corrective Action Program, as described in Exhibit 28 of the permit application, to remove or treat in place all hazardous constituents that exceed their respective groundwater protection standards as described in Table III.3. of this permit at the point of compliance, between the point of compliance and the down-gradient facility property boundary, and beyond the facility boundary in accordance with ADEM Admin. Code r. 335-14-5-.06(11)(e).

   b. Pursuant to ADEM Admin. Code r. 335-14-5-.06(11)(c) and 335-14-5-.06(11)(e)3., the Permittee shall continue to implement the corrective action program as described in Exhibit 28 of the permit application within 120 calendar days after the effective date of this permit.

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c. The Permittee shall handle or treat groundwater in accordance with Exhibit 28 of the permit application and with the applicable requirements of NPDES and SID permit number(s) AL0059943 and IU330200027, as issued by the Department.

3. Monitoring Requirements

In addition to the general groundwater monitoring requirements specified in Permit Condition III.B.2., the Permittee shall:

a. Sample all point of compliance and effectiveness monitoring wells shown in Table III.1. of this permit and analyze for the constituents listed in Table III.2. of this permit on a semi-annual basis beginning within 120 calendar days of the effective date of this permit and continuing through the end of the compliance period.

b. Sample all point of compliance, effectiveness, and boundary monitoring wells shown in Table III.1. of this permit and analyze for the constituents listed in Table III.3. of this permit on an annual basis beginning within 120 calendar days of the effective date of this permit and continuing through the end of the compliance period.

c. Sample all point of compliance, effectiveness, and boundary monitoring wells shown in Table III.1. of this permit and analyze for temperature (degrees F or C), specific conductance (Mhos/cm), and pH (standard units) each time the well is sampled. The data obtained should be submitted as raw data in the reports required by Permit Condition III.B.6.

d. When evaluating the monitoring results to determine the effectiveness of the corrective measures, in accordance with Permit Condition III.E.4., the Permittee shall:

i. Determine if the corrective action system effectively addresses the entire plume of contamination;

ii. Determine if the concentration of the hazardous constituents are decreasing (pH increasing or decreasing toward neutrality, as applicable) in the effectiveness wells specified in Permit Condition III.E.1.;

iii. Determine if hazardous waste or hazardous constituents are being released into the environment; and,

iv. Determine if hazardous constituents have been detected in the boundary wells specified in Permit Condition III.E.1.

4. Reporting and Response Requirements

In addition to the recordkeeping and reporting requirements specified in Permit Condition III.B.6.:

a. The Permittee shall report the effectiveness of the corrective action program annually, as required under ADEM Admin. Code r. 335-14-5-.06(11)(g). These

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reports shall be submitted to the Department annually on March 15th after corrective action is initiated and continue until corrective action is completed. The Permittee must provide data from groundwater monitoring along with an analysis of that data and any conclusions regarding the effectiveness of the program in accordance with Permit Condition III.E.3.d. If the analysis of the data warrants any change to the corrective action program, the Permittee must include these revisions in the annual report, which will be followed-up within 90 calendar days with an application for permit modification in accordance with Permit Condition I.I.

b. If corrective action is terminated under Permit Condition III.B.4.c., the Permittee must sample all background, point of compliance, effectiveness and boundary sampling locations for the compounds listed in ADEM Admin. Code r. 335-14-5-Appendix IX. Based upon the sampling results, the Permittee may petition the Department, in accordance with Permit Condition I.I., for a permit modification to implement either a detection monitoring program or a compliance monitoring program.

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TABLE III.1

MONITORING WELL DESIGNATIONS

WELL NUMBER	WELL TYPE *	WELL LATITUDE	WELL LONGITUDE	UNIT(S) MONITORED	WELL DEPTH (ft)	GROUND ELEVATION (ft. MSL)	TOP-OF-RISER ELEVATION (ft. MSL)	SCREENED INTERVAL (ft. MSL)	MONITORED ZONE
MW-1	PGM	30°53.435' N	87°45.331' W	Landfill	124	243.60	244.99	Est 121 - 131	Lower
MW-2A	POC	30°53.559' N	87°45.405' W	Landfill	13.5	217.90	219.52	206.02 - 216.02	Upper
MW-3A	POC	30°53.568' N	87°45.354' W	Landfill	13.5	216.60	217.75	204.25 - 214.25	Upper
MW-4AR	POC	30°53.542' N	87°45.346' W	Landfill	19	221.89	224.47	205.47 - 215.47	Upper
MW-5	PGM	30°53.758' N	87°45.274' W	Landfill	10	214.90	217.52	207.52 - 212.52	Upper
MW-6	PGM	30°53.660' N	87°45.250' W	Landfill	15	214.10	216.46	201.46 - 206.46	Upper
MW-7	PGM	30°53.596' N	87°45.220' W	Landfill	15	217.00	219.76	204.76 - 209.76	Upper
MW-8R	EFF	30°53.627' N	87°45.338' W	Landfill	15	206.00	207.90	192.90 - 202.90	Upper
MW-10	BDY	30°53.630' N	87°45.340' W	Landfill	83.5	206.20	209.66	126.16 - 136.16	Lower
MW-11	PGM	30°53.627' N	87°45.373' W	Landfill	63	214.60	216.50	153.50 - 163.05	Lower
MW-12	PGM	30°53.660' N	87°45.250' W	Landfill	58	214.30	215.25	157.25 - 167.25	Lower
P-1R	BDY	30°53.658' N	87°45.355' W	Landfill	9	205.16	207.89	198.89 - 203.89	Upper
P-2	EFF	30°53.678' N	87°45.325' W	Landfill	16.5	200.70	203.34	186.84 - 191.84	Upper
P-5	BKG	30°53.626' N	87°45.374' W	Landfill	8	215.40	216.99	208.99 - 213.99	Upper
P-6	BDY	30°53.619' N	87°45.315' W	Landfill	15.8	205.60	206.45	190.65 - 195.65	Upper
TP-9	BDY	30°53.715' N	87°45.336' W	Landfill	15	197.20	199.92	184.92 - 187.92	Upper
RW-1	REC	30°53.532' N	87°45.343' W	Landfill	22.5	221.97	224.37	201.87 - 211.87	Upper
RW-2	REC	30°53.536' N	87°45.344' W	Landfill	22.5	222.72	225.12	202.62 - 212.62	Upper
RW-3	REC	30°53.538' N	87°45.345' W	Landfill	22.5	223.00	225.40	202.90 - 212.90	Upper
RW-4	REC	30°53.541' N	87°45.346' W	Landfill	22.5	222.42	224.82	202.32 - 212.32	Upper
RW-5	REC	30°53.544' N	87°45.348' W	Landfill	22.5	222.93	225.33	202.83 - 212.83	Upper
RW-6	REC	30°53.547' N	87°45.350' W	Landfill	22.5	222.45	224.85	202.35 - 212.35	Upper
RW-7	REC	30°53.548' N	87°45.351' W	Landfill	22.5	222.32	224.72	202.22 - 212.22	Upper
RW-8	REC	30°53.552' N	87°45.353' W	Landfill	22.5	222.17	224.57	202.07 - 212.07	Upper
RW-9	REC	30°53.554' N	87°45.357' W	Landfill	22.5	222.65	225.05	202.55 - 212.55	Upper
RW-10	REC	30°53.555' N	87°45.358' W	Landfill	22.5	222.19	224.59	202.09 - 212.09	Upper
RW-11	REC	30°53.558' N	87°45.359' W	Landfill	22.5	222.16	224.56	202.06 - 212.06	Upper
RW-12	REC	30°53.560' N	87°45.360' W	Landfill	22.5	222.40	224.80	202.30 - 212.30	Upper
RW-13	REC	30°53.560' N	87°45.362' W	Landfill	22.5	222.18	224.58	202.08 - 212.08	Upper
RW-14	REC	30°53.561' N	87°45.363' W	Landfill	22.5	222.38	224.78	202.28 - 212.28	Upper
RW-15	REC	30°53.562' N	87°45.368' W	Landfill	22.5	222.00	224.40	201.90 - 211.90	Upper
RW-16	REC	30°53.562' N	87°45.373' W	Landfill	22.5	222.08	224.48	201.98 - 211.98	Upper
RW-17	REC	30°53.562' N	87°45.382' W	Landfill	22.5	222.17	224.57	202.07 - 212.07	Upper
RW-18	REC	30°53.561' N	87°45.386' W	Landfill	22.5	221.42	223.82	201.32 - 211.32	Upper
RW-19	REC	30°53.560' N	87°45.389' W	Landfill	22.5	221.84	224.24	201.74 - 211.74	Upper
RW-20	REC	30°53.558' N	87°45.393' W	Landfill	22.5	222.71	225.11	202.61 - 212.61	Upper
RW-21	REC	30°53.557' N	87°45.397' W	Landfill	22.5	222.64	225.04	202.54 - 212.54	Upper
RW-22	REC	30°53.555' N	87°45.400' W	Landfill	22.5	222.08	224.48	201.98 - 211.98	Upper
RW-23	REC	30°53.523' N	87°45.337' W	Landfill	22.5	222.00	224.40	201.90 - 211.90	Upper
RW-24	REC	30°53.672' N	87°45.323' W	Landfill	15	Est 201	Est 203	Est 188 - 198	Upper

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* Well Type:
POC - Point of Compliance Wells
EFF - Effectiveness Monitoring Wells
PGM - Piezometers and/or General Monitoring Wells
BKG - Background Wells
BDY - Boundary Monitoring Wells
UPG - Upgradient Well
REC - Recovery Well
TRN - Trench Well

TABLE III.2

GROUNDWATER QUALITY MONITORING CONSTITUENTS[1]

HAZARDOUS CONSTITUENT
Phenol
2-chlorophenol
2,4-dimethylphenol
p-chloro-m-cresol
Naphthalene
2,4-dinitrophenol
Acenaphthylene
Trichlorophenols
Fluoranthene
Benzo(a)anthracene
Chrysene
Benzo(b)fluoranthene
Tetrachlorophenols
Pentachlorophenol
Benzo(a)pyrene
Indeno(1,2,3-cd)pyrene
Dibenz(a,h)anthracene
Fluorene
Acenaphthene
Carbazole[2]
Phenanthrene[2]

1 The constituents listed herein are the subset of the Groundwater Protection Standard listed in Table III.3 for which monitoring is required.

2 In analyzing Phenanthrene and Carbazole; if these constituents are present between 1.4:1 and 5:1, respectively, it shall be considered that Creosote is present.

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TABLE III.3

GROUNDWATER PROTECTION STANDARD

HAZARDOUS CONSTITUENT	UNIT*	CONCENTRATION LIMIT (µg/L)
Phenol	Landfill	580.0
2-chlorophenol	Landfill	9.1
2,4-dimethylphenol	Landfill	36.0
p-chloro-m-cresol	Landfill	140.0
Naphthalene	Landfill	0.12
2,4-dinitrophenol	Landfill	3.9
Acenaphthylene	Landfill	46.9****
Trichlorophenols	Landfill	1.2
Fluoranthene	Landfill	80.0
Benz(a)anthracene	Landfill	0.03
Chrysene	Landfill	25
Benzo(b)fluoranthene	Landfill	0.25
Tetrachlorophenols	Landfill	24.0
Pentachlorophenol	Landfill	1.0**
Benzo(a)pyrene	Landfill	0.2**
Indeno(1,2,3-cd)pyrene	Landfill	0.25
Dibenz(a,h)anthracene	Landfill	0.025
Fluorene	Landfill	29.0
Acenaphthene	Landfill	53.0
Carbazole***	Landfill	3.4
Phenanthrene***	Landfill	46.9****
Creosote***	Landfill	See ***

* Identifies the unit(s) at which the given constituent must be monitored.
** Maximum Contaminant Level (MCL)
*** In analyzing Phenanthrene and Carbazole; if these constituents are present between 1.4:1 and 5:1, respectively, it shall be considered that Creosote is present.
**** ARBCA Appendix B RM-1 calculated value

Note: Concentration Limits taken from November 2024 EPA Regional Screening Level Master Table unless noted otherwise.

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PART IV

SOLID WASTE MANAGEMENT UNIT IDENTIFICATION AND EVALUATION

IV.A. APPLICABILITY

The Conditions of this Part apply to:

1. The solid waste management units (SWMUs) and areas of concern (AOCs) identified in Table IV.1, which require investigation and/or remediation;

2. The SWMUs identified in Table IV.2, which require no further action under this permit at this time;

3. Any additional SWMUs or AOCs discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means; and,

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

IV.B. NOTIFICATION AND ASSESSMENT REQUIREMENTS FOR NEWLY IDENTIFIED SWMUs AND AOCs

1. The Permittee shall notify the Department in writing, within 15 calendar days of discovery, of any additional AOC(s) as described under Permit Condition IV.A.3. The notification shall include, at a minimum, the location of the AOC(s) and all available information pertaining to the nature of the release (*e.g.,* media affected, hazardous constituents released, magnitude of release, *etc.*). If the Department determines that further investigation of an AOC is required, the permit will be modified in accordance with ADEM Admin. Code r. 335-14-8-.04(2).

2. The Permittee shall notify the Department in writing, within 15 calendar days of discovery, of any additional SWMUs as described under Permit Condition IV.A.3.

3. The Permittee shall prepare and submit to the Department, within 90 calendar days of notification, a SWMU Assessment Report (SAR) for each SWMU identified under Permit Condition IV.B.2. At a minimum, the SAR shall provide the following information:

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a. Location of unit(s) on a topographic map of appropriate scale such as required under ADEM Admin. Code r. 335-14-8-.02(5)(b)19.

b. Designation of type and function of unit(s).

c. General dimensions, capacities and structural description of unit(s) (supply any available plans/drawings).

d. Dates that the unit(s) was operated.

e. Specification of all wastes that have been managed at/in the unit(s) to the extent available. Include any available data on hazardous constituents in the wastes.

f. All available information pertaining to any release of hazardous waste or hazardous constituents from such unit(s) (to include groundwater data, soil analyses, air, and/or surface water data).

4. Based upon the results of the SAR, the Department shall determine the need for further investigations at the SWMUs covered in the SAR. If the Department determines that such investigations are needed, the Permittee shall initiate an investigation as outlined in Permit Condition IV.D.1 immediately upon receiving notification of the Department's determination.

IV.C. NOTIFICATION REQUIREMENTS FOR NEWLY DISCOVERED RELEASES AT PREVIOUSLY IDENTIFIED SWMUs or AOCs

1. The Permittee shall notify the Department in writing of any newly discovered release(s) of hazardous waste or hazardous constituents discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means, within 15 calendar days of discovery. Such newly discovered releases may be from SWMUs or AOCs identified in Permit Condition IV.A.3 or SWMUs or AOCs identified in Permit Condition IV.A.2 for which further investigation was not required.

2. If the Department determines that further investigation of the SWMUs or AOCs is needed, the Permittee shall initiate an investigation as outlined in Permit Condition IV.D. immediately upon receiving notification of the Department's determination.

IV.D. RCRA FACILITY INVESTIGATION (RFI)

1. The Permittee must perform an RFI for any SWMU and AOC identified by the Department in accordance with Permit Conditions IV.A.1, IV.B.4, and IV.C.2.

2. The RFI must completely identify the concentration of hazardous constituents released from each SWMU and AOC and fully delineate the area where such hazardous constituents have come to be located.

3. The RFI must fully characterize the nature and extent of contamination released from each SWMU or AOC under investigation.

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4. The RFI must be performed in a manner consistent with the most recent edition of the Alabama Environmental Investigation and Remediation Guidance (AEIRG).

5. Except as provided by Permit Condition IV.D.6., the RFI must be completed within 180 calendar days from the effective date of this permit or, for SWMUs or AOCs identified pursuant to Permit Condition IV.B. and C., within 180 calendar days from the receipt of notification from the Department that an RFI is required. If, prior to the effective date of this permit, the Department has approved a work plan that includes a schedule for completing the RFI, the RFI shall be completed in accordance with the approved schedule.

6. RFI Schedule of Compliance

    a. For RFIs expected to require greater than 180 calendar days to complete, the Permittee may submit a schedule of compliance subject to Departmental approval and/or modification.

    b. Submittal of an RFI Schedule of Compliance does not delay or otherwise postpone the Permittee's obligation to initiate the RFI.

    c. The Schedule of Compliance must include:

        i. A detailed narrative discussion, which explains why the RFI cannot be completed within 180 days; and,

        ii. A detailed and chronological listing of milestones with estimated durations that provides sufficient information to track the progress of the investigation.

    d. The RFI Schedule of Compliance shall be reviewed by the Department in accordance with Permit Condition IV.G.

    e. The Permittee shall complete the RFI in accordance with the approved RFI Schedule of Compliance.

7. RFI Progress Reports

    a. For an RFI being conducted in accordance with the approved RFI Schedule of Compliance, the Permittee must submit progress reports on a monthly basis.

    b. The RFI Progress Reports must include:

        i. A description of the RFI activities completed during the reporting period;

        ii. Summaries of any problems or potential problems encountered during the reporting period;

        iii. Actions taken to rectify problems;

        iv. Changes in relevant personnel;

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v. Projected work for the next reporting period;

vi. Any proposed revisions to the RFI Schedule of Compliance. Modifications of the RFI Schedule of Compliance are subject to approval by the Department; and,

vii. A summary of any data collected during the reporting period, including:

A. The location of each sampling point identified on a site map; and

B. The concentration of each hazardous constituent detected at each sampling point.

c. Submittal of RFI Progress Reports, work plans, or other documents during the RFI does not alter the approved RFI Schedule of Compliance.

8. RFI Reports

a. The Permittee shall prepare and submit to the Department an RFI Report within 60 calendar days from the completion of investigation activities in accordance with the approved RFI Schedule of Compliance, if applicable.

b. The RFI Report must provide a detailed description of all required elements of the investigation as described in the most recent edition of the AEIRG.

c. The RFI Report shall be reviewed by the Department in accordance with Permit Condition IV.G.

IV.E. SELECTION OF CORRECTIVE MEASURES AND PERMIT MODIFICATION

1. The Permittee shall develop and submit to the Department a Corrective Measures Implementation (CMI) Plan for any areas of the Permittee's site where hazardous constituents have come to be located at concentrations exceeding those appropriate for the protection of human health and the environment. The CMI Plan must include all applicable elements of the proposed remedy pursuant to the most recent edition of the AEIRG.

2. The CMI Plan shall be submitted to the Department within 120 calendar days following the Permittee's submittal of the RFI Report indicating that hazardous constituents have come to be located at any area of the Permittee's facility, or beyond the facility, at concentrations exceeding those appropriate for the protection of human health and the environment, or within 120 calendar days following notification from the Department that a CMI Plan is required, whichever occurs earlier.

3. The CMI Plan shall be submitted along with a request for permit modification pursuant to ADEM Admin. Code r. 335-14-8-.04(2), and shall include any applicable fees pursuant to ADEM Admin. Code Chapter 335-1-6. This modification will serve to incorporate the proposed final remedy, including all procedures necessary to implement and monitor the remedy, into this permit.

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4. Within 60 calendar days after this Permit has been modified in accordance with Permit Condition IV.E.3., the Permittee shall demonstrate financial assurance for completing the approved remedy.

IV.F. INTERIM MEASURES (IM)

1. IM Work Plan(s)

   a. Upon notification by the Department, the Permittee shall prepare and submit an Interim Measures (IM) Work Plan for any SWMU or AOC that the Department determines is necessary. IM are necessary in order to minimize or prevent further migration of contaminants and limit human and environmental exposure to contaminants while long-term corrective measures are evaluated and, if necessary, implemented. The IM Work Plan shall be submitted within 30 calendar days of such notification and shall include the elements listed in Permit Condition IV.F.1.b. Such IM may be conducted concurrently with investigations required under the terms of this permit. The Permittee may initiate IM by submitting an IM Work Plan for approval and reporting in accordance with the requirements under Permit Condition IV.F.

   b. The IM Work Plan shall ensure that the IM are designed to mitigate any current or potential threat(s) to human health or the environment and is consistent with and integrated into any long-term solution at the facility. The IM Work Plan shall include: the IM objectives, procedures for implementation (including any designs, plans, or specifications), and schedules for implementation.

   c. The IM Work Plan must be approved by the Department, in writing, prior to implementation. The Department shall specify the start date of the IM Work Plan schedule in the letter approving the IM Work Plan.

   d. The IM Report shall be reviewed by the Department in accordance with Permit Condition IV.G.

2. IM Implementation

   a. The Permittee shall implement the IM in accordance with the approved IM Work Plan.

   b. The Permittee shall give notice to the Department as soon as possible of any planned changes, reductions or additions to the IM Work Plan.

   c. Final approval of corrective action required under ADEM Admin. Code r. 335-14-5-.06(12), which is achieved through IM, shall be in accordance with ADEM Admin. Code r. 335-14-8-.04(2) and Permit Condition IV.E.

3. IM Reports

   a. If the time required for completion of IM is greater than one year, the Permittee shall provide the Department with Progress Reports at intervals specified in the

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approved work plan. The Progress Reports shall, at a minimum, contain the following information:

i. A description of the portion of the IM completed;

ii. Summaries of any deviations from the IM Work Plan during the reporting period;

iii. Summaries of any problems or potential problems encountered during the reporting period;

iv. Projected work for the next reporting period; and,

v. Copies of laboratory or monitoring data.

b. The Permittee shall prepare and submit the IM Report to the Department within 90 calendar days of completion of IM conducted under Permit Condition IV.F. The IM Report shall, at a minimum, contain the following information:

i. A description of IM implemented;

ii. Summaries of results;

iii. Summaries of all problems encountered;

iv. Summaries of accomplishments and/or effectiveness of IM; and,

v. Copies of all relevant laboratory or monitoring data, *etc.*, in accordance with Permit Condition I.C.10.

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IV.G. SUBMITTALS

1. All work plans, reports, schedules, and other documents ("submittals") required by this permit shall be subject to approval by the Department to assure that such submittals and schedules are consistent with the requirements of this Permit and with applicable regulations and guidance. The Permittee shall revise all submittals and schedules as directed by the Department.

2. The Department will review all submittals in accordance with the conditions of this permit. The Department will notify the Permittee in writing of any submittal that is disapproved, and the basis therefore. If the Department disapproves a submittal, the Department shall: (1) notify the Permittee in writing of the submittal's deficiencies and specify a due date for submission of a revised submittal, (2) revise the submittal and notify the Permittee of the revisions, or (3) conditionally approve the submittal and notify the Permittee of the conditions. Permit Condition IV.H. shall apply only to submittals that have been disapproved and revised by the Department, or that have been disapproved by the Department, then revised and resubmitted by the Permittee, and again disapproved by the Department.

3. All submittals shall be submitted within the time frame specified by the Department and in accordance with the approved schedule of compliance. Extensions of the due date for submittals may be granted by the Department based on the Permittee's demonstration that sufficient justification for the extension exists.

4. All submittals required by this permit shall be signed and certified in accordance with ADEM Admin. Code r. 335-14-8-.02(2).

5. Two (2) copies of all submittals shall be provided by the Permittee to the Department in accordance with Permit Condition I.J.

IV.H. DISPUTE RESOLUTION

Notwithstanding any other provision in this permit, in the event the Permittee disagrees, in whole or in part, with the Department's revision of a submittal or disapproval of any revised submittal required by this Part, the following may, at the Permittee's discretion, apply:

1. In the event that the Permittee chooses to invoke the provisions of this section, the Permittee shall notify the Department in writing within 30 calendar days of receipt of the Department's revision of a submittal or disapproval of a revised submittal. Such notice shall set forth:

    a. The specific matters in dispute;

    b. The position the Permittee asserts should be adopted as consistent with the requirements of this permit;

    c. The basis for the Permittee's position; and,

    d. Any matters considered necessary for the Department's determination.

2. The Department and the Permittee shall have an additional 30 calendar days from the Department's receipt of the notification provided for in Permit Condition IV.H.1. to meet or confer to resolve any disagreement.

3. In the event agreement is reached, the Permittee shall submit and implement the revised submittal in accordance with and within the time frame specified in such agreement.

4. If agreement is not reached within the 30-day period, the Department will notify the Permittee in writing of the decision on the dispute, and the Permittee shall comply with the terms and conditions of the Department's decision in the dispute. For the purposes of this provision in this permit, the responsibility for making this decision shall not be delegated below the Department’s Land Division Chief.

5. With the exception of those conditions under dispute, the Permittee shall proceed to take any action required by those portions of the submission and of this permit that the Department determines are not affected by the dispute.

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Table IV.1

The following Solid Waste Management Unit(s) (SWMU) and/or Area(s) of Concern (AOC) numbers and descriptions correspond with those noted in the RCRA Facility Assessment (RFA) Report. Where discrepancies exist, the permit will take precedence.

List of SWMUs and AOCs requiring a RCRA Facility Investigation (RFI) and/or remediation:

SWMU/AOC NUMBER*	SWMU/AOC NAME	Potentially Affected Media
SWMU 2	Tramways in Concrete	Soil, groundwater
SWMU 3	Creosote Oil/Water Separator	Soil, groundwater
SWMU 4	Treated Pole Storage	Soil, groundwater
SWMU 5	Liquid Loading and Unloading Area	Soil, groundwater
SWMU 6	Buried Debris West of Closed Impoundment	Soil, groundwater
SWMU 7	Disposal Area	Soil, groundwater
SWMU 8 & 9	Oil/Water Separator Tanks	Soil, groundwater
SWMU 10	Sump at North End of Wood Preserving Plant	Soil, groundwater
SWMU 21	Drainage Pond and Swamp	Soil, groundwater, surface water
SWMU 22	Area of Former Direct Discharge of Wastes	Soil, groundwater
SWMU 25	Corrective Action System	Groundwater remediation
AOC A	Raw Creosote Tanks	Soil, groundwater

*See Part V of this permit for the details on Corrective Measures for SWMUs 2-10, 21, 22, 25, and AOC A. There are no RFI activities required at this time.

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Table IV.2

The following Solid Waste Management Unit(s) (SWMU) and/or Area(s) of Concern (AOC) numbers and descriptions correspond with those noted in the RCRA Facility Assessment (RFA) Report. Where discrepancies exist, the permit will take precedence.

List of SWMUs and AOCs requiring no further action at this time:

SWMU/AOC NUMBER	SWMU/AOC NAME	POTENTIALLY AFFECTED MEDIA
SWMU 11	Buried Pipe to Surface Impoundment	Soil, groundwater
SWMU 12 - 20	Wastewater Treatment Plant	Soil, groundwater
SWMU 24	New Liquid Unloading Area	Soil, groundwater
SWMU 26	90 Day Hazardous Waste Storage Area	Soil, groundwater

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Table IV.3

The following Solid Waste Management Unit(s) (SWMU) and/or Area(s) of Concern (AOC) numbers and descriptions correspond with those noted in the RCRA Facility Assessment (RFA) Report. Where discrepancies exist, the permit will take precedence.

List of SWMUs and AOCs regulated by Part II and III of this permit.

SWMU/AOC NUMBER	SWMU/AOC NAME	POTENTIALLY AFFECTED MEDIA
SWMU 1	Surface Impoundment	Soil, groundwater

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PART V

CORRECTIVE MEASURES IMPLEMENTATION

V.A. APPLICABILITY

The conditions of this Part apply to SWMUs and AOCs identified in Table V.1.

V.B. GENERAL CONDITIONS

1. The Permittee is required to perform corrective measures for the SWMUs and AOCs identified in Condition V.A. The approved remedy for these defined units, waterway areas, or land parcels, includes any and all actions set forth in this permit and in the approved Interim Measures Plans, Corrective Measures Studies (CMSs), and Corrective Measures Implementation (CMI) Plans approved by the Department, as noted below:

Applicable SWMU/AOC*	CMS/CMI	Approval Date
SWMU 2-10, 21, 22, 25 and AOC A	Corrective Measures Study revision dated June 15, 2005	July 18, 2005

*Corrective Measures have been constructed and implemented as described in the Corrective Measures Study/Corrective Measures Implementation Plan submitted on October 1, 1999, as modifies by subsequent amendments dated June 15, 2005.

2. Remedial Cleanup Levels

   Upon approval, pursuant to the CMI Plan designating applicable cleanup level(s), the cleanup level(s) for the areas specific to the CMI Plan will be deemed to be a condition of this permit.

3. Groundwater Monitoring and Remediation

   Where required pursuant to Conditions V.B.1. and V.C. of this permit, the Permittee shall comply with the general groundwater monitoring requirements of Part III of this permit.

4. Land Use Controls

   Where required pursuant to Conditions V.B.1. and V.C. of this permit, the Permittee shall establish appropriate land use controls to achieve protection of human health and the environment. The Permittee shall comply with Conditions V.B.5. and V.B.6. of this permit when implementing corrective measures requiring land use controls. In the event an off-site property owner does not allow an environmental covenant to be imposed, the Permittee shall notify the Department within 14 calendar days of receipt of such written notification of the refusal by the off-site property owner. If the property owner does not provide a written refusal of the request to allow an environmental covenant to be imposed, the Permittee shall notify the Department within 14

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days of delivery of the request to the off-site property owner. In such cases, the Department may allow the Permittee to propose an alternate area-specific land use control subject to the Department's review and approval.

5. Survey Plat

For corrective measures where residual concentrations of contaminants will remain in-place at levels greater than those appropriate for unrestricted land use, or for corrective measures that rely on land use controls, the Permittee must:

a. Within 90 calendar days following the effective date of a permit modification addressing remedy selection, submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the Department, a survey plat indicating the location and dimensions of the SWMUs, AOCs, and capped or partially remediated areas with respect to permanently surveyed benchmarks, the locations of sampling points, and the concentrations of hazardous constituents detected. This plat must be prepared and certified by a professional land surveyor registered in the State of Alabama. The plat must be filed with the local zoning authority or the authority with jurisdiction over local land use and must contain a note, prominently displayed, which states the Permittee's obligation to limit the property to the specified restricted uses.

b. Maintain the survey plat as described in Condition V.B.5.a. of this permit and in the CMS Report until the Permittee has demonstrated, to the satisfaction of the Department, that the levels of hazardous constituents in all contaminated media are within limits appropriate for unrestricted land uses.

6. Environmental Covenant

No later than the submission of the survey plat required in Condition V.B.5., the Permittee must:

a. Record in the probate judges office of the county in which the property, or a portion thereof, is located an environmental covenant in accordance with ADEM Admin. Code Division 335-5 that will in perpetuity notify any potential purchaser of the property that:

i. The land is contaminated with hazardous constituents in concentrations that exceed unrestricted use standards;

ii. The use of the property is restricted by this permit for certain residential, municipal, or industrial purposes and may lead to an increased risk of exposure to hazardous constituents depending upon the activities initiated at the site. Such activities may yield an increased level of human health risk to the owner;

iii. The potential purchaser or entity that desires to work in the contaminated area should notify the Permittee before mobilizing to the area covered by the land use control.

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b. Submit to the Department a certification, signed by the Permittee in accordance with Permit Condition I.C.11., that the environmental covenant specified in this part has been performed. This certification must include a copy of the document in which the notation has been placed.

c. Maintain the environmental covenant described in Permit Condition V.B.6. until the Permittee has demonstrated, to the satisfaction of the Department, that the levels of hazardous constituents in all contaminated media are within limits appropriate for unrestricted land uses.

7. Security

Security measures, where required by Conditions V.B.1. and V.C. of this permit, will be conducted in accordance with ADEM Admin. Code r. 335-14-5-.02(5) and as prescribed in the approved CMI Plan.

8. Inspection

Where corrective measures addressed in Conditions V.B.1. include provisions to cap in place or partially remediate properties or land areas, whether owned or not owned by the Permittee, the Permittee shall specify inspection protocols on a scheduled basis to ensure continued integrity of the remedy and to ensure that land use remains appropriately restricted per the environmental covenant established pursuant to Permit Condition V.B.6. Inspection provisions shall be as prescribed in the approved CMI Plan

V.C. AREA SPECIFIC CONDITIONS (RESERVED)

V.D. CORRECTIVE MEASURES IMPLEMENTATION (CMI) REPORTS

1. CMI Progress Reports

If the time required to complete implementation of a specific set of corrective measures, as described in the Department-approved CMI Plan, is greater than 180 calendar days, the Permittee shall provide ADEM with progress reports according to the schedule in the ADEM-approved CMI Plan. If no schedule has been approved as part of the associated plan, progress reports shall be submitted at least quarterly. The progress reports shall, at a minimum, contain the following information:

a. A description of the portion of CMI Plan completed;

b. Summaries of and deviations from the approved CMI Plan during the reporting period;

c. Summaries of current and potential problems, including recommended solutions and alternatives as well as corrective actions undertaken;

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d. Any monitoring data (soil, air, dust, water) collected for any reason during the construction period for the purposes of monitoring potential for human and ecological exposure; and,

e. Projected work for the next period and impacts to the approved schedule.

2. Final CMI Reports

Upon completion of construction of corrective measures systems, implementation of land use controls, interim removal actions, or other short-term activities required by this permit and/or the approved CMI Plan, the Permittee shall submit to the Department a Final CMI Report containing, at a minimum, the following:

a. A description of activities completed;

b. For cap and cover remedies, as-built construction drawings presenting the final in-place three-dimensional location of contaminated material. A plan view of the remediated areas shall be presented in addition to a cross section of the in-place capped areas;

c. Waste manifests indicating the handling of any excavated material that has been shipped off-site to a Department-approved, certified landfill;

d. For remedies involving land use controls, a copy of the survey plat and environmental covenant required by Condition V.B. of this permit;

e. Monitoring data (soil, air, dust, water) collected for any reason during the construction period for the purposes of monitoring potential for human and ecological exposure; and

f. Certification, prepared in accordance with ADEM Admin. Code r. 335-14-8-02 (2)(d) by the Permittee and an independent professional engineer registered in the State of Alabama, that the corrective measures implementation phase (*i.e.,* construction) required by this permit is complete and that the approved system and/or facilities are ready for operation in accordance with the intended design (*i.e.,* CMI Plan).

3. Corrective Measures (CM) Effectiveness Reports

a. For corrective measures that have been fully implemented and where the corrective measures system must operate for a period of time to achieve cleanup goals or levels, the Permittee shall submit CM Effectiveness Reports annually, unless otherwise approved by the Department, beginning 180 calendar days following the Department's approval of the Final CMI Report for the initial Corrective Measures system subject to this permit condition. The overall CM Effectiveness Reports shall include, at a minimum, the following information for each SWMU and/or AOC included in the report:

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i. A detailed narrative presenting an evaluation of the effectiveness of the selected remedy;

ii. Summaries of compliance with and progress toward achieving cleanup goals;

iii. Any significant revisions, adjustments, or proposed modifications to the selected remedy;

iv. Tabulated environmental sampling and monitoring data including, but not limited to, groundwater quality, elevation data, and a graphical representation of all constituents detected during each sampling event from recovery wells, monitoring wells, drinking water wells, and other locations;

v. Chain of custody, field reports, and laboratory data sheets to include the date of collection, the date the sample was extracted, and the date of sample analysis for samples collected during the reporting period;

vi. Any monitoring data (soil, air, dust, water) collected for any reason during the post-construction period for the purposes of monitoring potential for human and ecological exposure;

vii. Isoconcentration maps depicting the distribution of parameters for each sampling event;

viii. Time versus concentration plots for each monitoring parameter for each recovery well and a representative number of effectiveness wells;

ix. Tabulated volumetric data on groundwater pumped and pumping rates (monthly and cumulative) for each recovery well;

x. Records of any groundwater recovery system operation time, including shutdown periods, not including any minor (less than 24 hours) shutdowns for repairs, maintenance, etc.;

xi. Potentiometric surface maps;

xii. Description of land use during the reporting period at the designated area requiring corrective measures; and,

xiii. Findings of the Permittee's investigation into the continued effectiveness of land use controls per Condition V.B.

b. If, at any time, the Permittee determines that any remedy selection specified in Condition V.B or V.C. of this permit no longer satisfies the applicable requirements of ADEM Admin. Code r. 335-14-5-.06(12) or this permit for releases of hazardous waste or hazardous constituents originating from SWMUs or AOCs, the Permittee must, within 90

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calendar days, submit an application for a permit modification, pursuant to Permit Condition I.I, to make any appropriate changes to the CMI Plan.

c. The application for changes in the CMI Plan, including changes in inspection and monitoring provisions of the CMI Plan, shall be submitted as an application for a permit modification pursuant to the requirements of ADEM Admin. Code r. 335-14-8-.04.

4. Final Report of Corrective Measures

Within 90 calendar days following attainment of cleanup levels or goals as outlined in this Permit and the approved CMI Plan, the Permittee shall submit to the Department a Final Report of Corrective Measures (FRCM). The FRCM shall contain a certification by the Permittee and an Alabama-registered independent professional engineer that all remedial measures required by this permit and the approved CMI Plan have been completed. The FRCM shall outline any procedures and schedules for dismantling of corrective measures systems, groundwater monitoring or recovery systems, removal of land use controls, and any other remedial systems or controls required by this permit or the approved CMI Plan.

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Table V.1.

The following Solid Waste Management Unit(s) (SWMUs) and/or Area(s) of Concern (AOCs) numbers and descriptions correspond with those noted in the RCRA Facility Assessment (RFA) Report. Where discrepancies exist, the permit will take precedence.

List of SWMUs and AOCs requiring Corrective Measures.

SWMU/AOC NUMBER	SWMU/AOC NAME	Potentially Affected Media
SWMU 2	Tramways in Concrete	Soil, groundwater
SWMU 3	Creosote Oil/Water Separator	Soil, groundwater
SWMU 4	Treated Pole Storage	Soil, groundwater
SWMU 5	Liquid Loading and Unloading Area	Soil, groundwater
SWMU 6	Buried Debris West of Closed Impoundment	Soil, groundwater
SWMU 7	Disposal Area	Soil, groundwater
SWMU 8 & 9	Oil/Water Separator Tanks	Soil, groundwater
SWMU 10	Sump at North End of Wood Preserving Plant	Soil, groundwater
SWMU 21	Drainage Pond and Swamp	Soil, groundwater, surface water
SWMU 22	Area of Former Direct Discharge of Wastes	Soil, groundwater
SWMU 25	Corrective Action System	Groundwater remediation
AOC A	Raw Creosote Tanks	Soil, groundwater

*Corrective Measures have been constructed and implemented as described in the Corrective Measures Study/Corrective Measures Implementation Plan submitted on October 1, 1999, as modifies by subsequent amendments dated June 15, 2005.

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PART VI

SUMMARY OF DEADLINES

The summary information provided herein is intended only as a guide to the requirements of this permit. It is not intended to be all inclusive, nor is it intended to be used as a substitute for the full text of this permit.

PERMIT CONDITION	ITEM	DUE DATE
I.C.2.	Reapply for a renewal	180 calendar days before the expiration of the current permit.
I.C.12.	Give notice to the Department of any planned physical alterations or additions to the permitted facility and any solid waste management units.	As soon as possible
I.C.12.	Report any noncompliance with this permit that may endanger human health or the environment.	Orally within 24 hours from the time the Permittee becomes aware of the circumstances. Written submission shall also be provided within 5 calendar days of the time that the Permittee becomes aware of the circumstances
I.F.	Waste Minimization Certification	Annually
I.G.	Update cost estimates	Annually, as required by ADEM Admin. Code Rules 335-14-5-.08(3)(b), 335-14-5-.08(5)(b), and 335-14-5-.08(10)(b) and no later than 30 calendar days after the Department has approved a modification to the Closure Plan, Post-Closure Plan, or Corrective Action Plan, or any other plan required or referenced by this permit, if the change in the plan results in an increase in the amount of the cost estimate.
I.I.	Submit a written request for a permit modification pursuant to the requirements of ADEM Admin. Code r. 335-14-8-.04(2).	At least 60 calendar days prior to a proposed change in facility design or operation.
II.C.2	Inspect closed unit(s).	At least quarterly, after storms, and in accordance with the inspection schedule.
III.B.1.a.iii.	Notification of damaged groundwater monitoring wells.	Immediately in writing, which includes a description of the well repair activities to be conducted. The well repair procedures must be approved by the Department prior to implementation. A repair report must be submitted within 30 calendar days of repair.

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PERMIT CONDITION	ITEM	DUE DATE
III.B.1.d.	Install additional groundwater monitoring wells	As necessary to assess changes in the rate and extent of any plume of contamination, or as otherwise deemed necessary. Note: a permit modification request must be submitted at least 90 calendar days prior to installation of additional groundwater monitoring well(s).
III.B.1.e.	Abandon wells, P-3, P-4, MW-1A	Within 90 calendar days after the effective date of this permit. Submit report within 120 calendar days after the effective date of this permit.
III.B.2.a.	Determine groundwater surface elevation.	At least semi-annually and each time a well is sampled.
III.B.2.b.	Determine groundwater flow rate and direction.	At least annually.
III.B.6.b.	Submit groundwater monitoring report	March 15th and annually thereafter.
III.B.6.c.	Submit progress reports.	Within 90 calendar days after the effective date of this permit and quarterly thereafter. See permit condition for start/stop/resume provisions.
III.E.2.b.	Implement corrective action plan	No later than 120 calendar days after the effective date of this permit.
III.E.3.a.	Sample all background, point of compliance and effectiveness wells shown in Table III.1 and analyze for the constituents listed in Table III.2. of this permit.	Semi-annually beginning within 120 calendar days of the effective date of this permit.
III.E.3.b.	Sample all background, point of compliance, effectiveness, and boundary wells shown in Table III.1 and analyze for the constituents listed in Table III.3. of this permit.	Annually beginning within 120 calendar days of the effective date of this permit.
III.E.3.c.	Sample all background, point of compliance, effectiveness, and boundary wells shown in Table III.1 and analyze for temperature (degrees F or C), specific conductance(Mhos/cm), and pH (standard units). The data obtained should be submitted as raw data in the reports required by Permit Condition III.B.6.	Each time the well is sampled.
III.E.4.a.	Submit corrective action effectiveness reports.	Annually on March 15th after corrective action is initiated and until corrective action is completed.

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PERMIT CONDITION	ITEM	DUE DATE
IV.B.1.	Notify the Department, in writing, of the discovery of any additional AOCs	Within 15 calendar days of discovery
IV.B.2.	Notify the Department, in writing, of the discovery of any additional SWMUs	Within 15 calendar days of discovery
IV.B.3.	Submit a SWMU Assessment Report (SAR) for each SWMU identified under IV.B.2.	Within 90 calendar days of notification.
IV.C.1.	Notify the Department, in writing, of any newly discovered release(s) of hazardous waste or hazardous constituents from SWMUs or AOCs discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means.	Within 15 calendar days of discovery
IV.D.7.	Submit RFI Progress Reports.	Monthly beginning in the second month following the initiation of the RFI
IV.D.8.	Submit RFI Report	Within 60 calendar days from the completion of investigation activities.
IV.E.2.	Submit CMI Plan	Within 120 calendar days following the Permittee's submittal of the RFI Report indicating that hazardous constituents have come to be located at any area of the Permittee's facility, or beyond the facility, at concentrations exceeding those appropriate for the protection of human health and the environment, or within 120 calendar days following notification from the Department that a CMI Plan is required, whichever occurs earlier.
IV.E.4.	Demonstrate financial assurance for completing the approved remedy.	Within 60 calendar days after this Permit has been approved.
IV.F.1.	Submit IM Work Plan	Within 30 calendar days upon notification by the Department.
IV.F.3.	Submit IM Report	Within 90 calendar days of completion of IM.
V.B.5.a.	Submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the Department, a survey plat indicating the location and dimensions of the SWMUs, AOCs, and capped or partially remediated areas with respect to permanently surveyed benchmarks, the locations of sampling points, and the concentrations of hazardous constituents detected	Within 90 calendar days following the effective date of a permit modification addressing remedy selection.

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PERMIT CONDITION	ITEM	DUE DATE
V.B.6.a.	Record environmental covenant	No later than the submission of the survey plat required in Condition V.B.5.
V.B.6.b.	Submit to the Department a certification that the environmental covenant has been performed.	No later than the submission of the plat required in Condition V.B.5.
V.D.3.	Submit Corrective Measures Effectiveness Reports	Annually beginning 180 calendar days following the Department's approval of the Final CMI Report
V.D.4.	Submit a Final Report of Corrective Measures	Within 90 calendar days following attainment of cleanup levels or goals

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STELLA-JONES CORPORATION
BAY MINETTE, AL

EPA ID No. ALD 031 490 501

RCRA Post-Closure Permit Renewal Application

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LIST OF ACRONYMS

ADEM	Alabama Department of Environmental Management
AHWMMA	Alabama Hazardous Waste Management and Minimization Act
AOC(s)	Area(s) of Concern
Baldwin Pole	Baldwin Pole & Piling Company, Inc.
CAP	Corrective Action Plan
CAER	Corrective Action Effectiveness Report
CFR	Code of U.S. Federal Regulations
CMS	Corrective Measures Study
DCOI	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one
DMR	Discharge Monitoring Report
DNAPL	dense non-aqueous phase liquid
EPA	U.S. Environmental Protection Agency
GQA	Groundwater Quality Assessment
HSWA	Hazardous & Solid Waste Amendments
LNAPL	light non-aqueous phase liquid
mg/L	milligrams/liter
NAICS	North American Industrial Classification System
NPDES	National Pollutant Discharge Elimination System
POTW	publicly owned treatment works
ppm	parts per million
RCRA	Resource Conservation and Recovery Act
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
SIC	Standard Industrial Classification
SID	State Indirect Discharge
Stella-Jones	Stella-Jones Corporation
SWMU(s)	Solid Waste Management Unit(s)

REFERENCES

1. A.T. Kearney, Inc., and The Earth Technology Corporation, RCRA Facility Assessment Report of the Baldwin Pole & Piling Co., Bay Minette, Alabama, EPA I.D. No. ALD 031 490 501, EPA Contract No. 68-01-7038, Work Assignment No. R04-03-81, May, 1988

2. H. M. Rollins Company, Inc., Baldwin Pole & Piling Company, Inc., Groundwater Quality Assessment, Bay Minette, Alabama, March 22, 1989

3. H. M. Rollins Company, Inc., Baldwin Pole & Piling Company, Inc., Corrective Action Plan, Bay Minette, Alabama, EPA I.D. No. ALD 031 490 501, June 19, 1989

4. H. M. Rollins Company, Inc., Baldwin Pole & Piling Company, Inc., Bay Minette, Alabama, EPI I.D. No. ALD 031 490 501, RCRA Facility Investigation Report, September 1, 1999

5. H. M. Rollins Company, Inc., Baldwin Pole & Piling Company, Inc., Solid Waste Management Units Corrective Measures Study, October 1, 1999 and June 15, 2005

1.0 INTRODUCTION

Baldwin Pole & Piling Co., Inc., (Baldwin Pole) was issued its original Alabama Hazardous Waste Facility Permit, Number ALD 031 490 501, by the Alabama Department of Environmental Management (ADEM) in 1989, with an effective date of December 15, 1989. This permit provided for the post-closure care of the closed hazardous waste impoundment and for remediation of the groundwater contamination that exists at the site. The permit was reissued in 2004 and again in 2014. The present permit expires on September 3, 2024.

In July of 2023, Stella-Jones Corporation (Stella-Jones) acquired the assets of Baldwin Pole & Piling Co., Inc., and the existing permit has been transferred to that entity. A renewal application is required at least 180 days prior to the expiration date, and this application constitutes a timely renewal request.

Much of the information required for the renewal application remains unchanged from the original application submitted by the prior owner. Earlier submittals by the facility such as the Groundwater Quality Assessment, Corrective Action Plan, and RCRA Facility Investigation Report are shown as references for this application. These documents have not been reproduced as part of this application due to the volume of the materials. Where necessary, information contained in these documents is included in the application.

1.1 Facility Background and History

The Stella-Jones facility is located in Bay Minette, Alabama, just north of Highway 31, as shown on the USGS map included in Exhibit 1. The triangular site covers approximately 22 acres, bounded on the south by Highway 31, on the west

by a line of the CSX railroad, and on the east and north by wooded, undeveloped areas. A site layout drawing is found in Exhibit 2. The City of Bay Minette zoning map is found in Exhibit 7. An aerial photograph is found in Exhibit 26.

Wood preserving operations have been conducted on the site since 1958. Creosote was the only preservative in use from 1958 to 1976. Pentachlorophenol was added in 1976, and from 1976 to 1989, both creosote and pentachlorophenol were used. Only pentachlorophenol was used from 1989 until 2022 when the facility transitioned to the use of 4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one (DCOI). DCOI is dissolved in a #2 petroleum oil carrier for the treatment of wood, similar to that used for pentachlorophenol. The facility ceased treatment with pentachlorophenol in 2023. The principal products produced are utility poles. The SIC Code for the facility is 2491, and the NAICS Code is 321114.

The prior owner used a surface impoundment, located on the northern edge of the high ground, for management of its wastewaters. In 1987, the surface impoundment was closed with a small quantity of stabilized K001 waste in place in accordance with an approved closure plan. EPA accepted the certification of closure on June 22, 1987. The initial post-closure permit application was submitted on September 23, 1987.

Groundwater monitoring required by the RCRA regulations identified a plume of groundwater contamination, and as a result of the contamination, the facility completed a Groundwater Quality Assessment which fully defined the nature and extent of contamination. After approval of the Groundwater Quality Assessment, ADEM requested that the prior owner prepare a Corrective Action Plan to address the contamination identified.

A Corrective Action Plan (CAP) was submitted in October of 1988, and it was modified in January and March of 1989, in response to ADEM comments. The plan was approved by ADEM and incorporated into the Hazardous Waste Facility Permit issued to the prior owner in December 1989. The narrative portion of the approved CAP is found in Exhibit 28. Part of the original corrective actions included attempts to recover dense non-aqueous phase liquids (DNAPL) from the aquifer, although no significant quantity of DNAPL was identified in the site investigations conducted. DNAPL recovery efforts have been unproductive, and Stella-Jones is requesting approval to terminate those activities as part of this permit renewal.

The CAP was designed to "capture" and remove the contaminant plume by pumping groundwater from the affected aquifer at a rate calculated to create a hydraulic "capture zone," which would extract the full extent of the contaminant plume and prevent further migration. The corrective action system was installed, and it began operating in April of 1991. Corrective Action Effectiveness Reports have been submitted since the system became operational. In the first 32 years of system operation, approximately 135,000,000 gallons of groundwater was treated and discharged into the local POTW in accordance with a State permit.

The prior owner was also issued a Hazardous and Solid Waste Amendments (HSWA) permit by the U.S. Environmental Protection Agency (EPA) on December 15, 1989, effective January 15, 1990. This permit required investigations of certain Solid Waste Management Units (SWMUs) which were not associated with hazardous waste activities. These investigations were conducted in accordance with an approved plan, and a Report of RCRA Facility

Investigation (Draft) (RFI) was submitted to the EPA and ADEM on June 17, 1994. Revisions to the report were submitted on March 8, 1996.

After approval of the RFI, the prior owner submitted a Corrective Measures Study (CMS), dated October 1, 1999, to address corrective action for the SWMUs. The corrective measures included administrative controls on future use of the entire site and improved site security in the form of fencing. ADEM agreed to the proposed corrective measures and incorporated them into the Post-Closure Permit as Permit Modification 1, dated September 30, 2004. The prior owner completed all of the actions required.

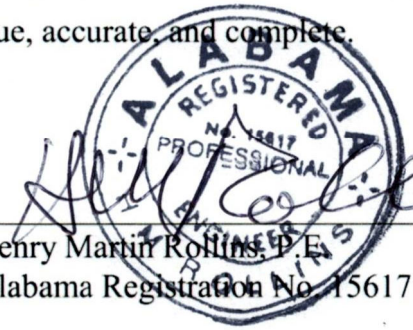
All of the above referenced documents should be considered a part of this application. These documents comprise many volumes, and it would be impractical to physically incorporate them in this application. Where particular information from these documents has direct applicability to specific requirements in the permitting standards, it has been included.

1.2 Known Incompleteness Items

This application is for the renewal of an existing permit concerning the post-closure management of hazardous and solid waste units at this site. Many of the information requirements necessary for operating permits are not applicable to a permit for post-closure care. There are no known items of incompleteness in this permit application. An Information Requirements Checklist is found in Exhibit 3.

1.3 Owner-Operator Certification

I certify that this Request for RCRA Permit Renewal was prepared by myself or under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete.



Henry Martin Rollins, P.E.
Alabama Registration No. 15617

3/1/24
Date

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Ray Long

Ray Long
Plant Manager, Stella-Jones Corporation

3/6/24
Date

2.0 GENERAL PERMITTING REQUIREMENTS

Permitting requirements for hazardous waste management facilities are found in ADEM Code 335-14-8. The general application requirements are listed at 335-14-8-.02. These requirements include the requirement for permitted facilities to submit a new application at least 180 days before the expiration date of the effective permit; the requirement to keep all data used in the permit application for at least three years after the date the application is signed; and the requirement that owners/operators of surface impoundments or landfills submit information regarding the potential for public exposure to hazardous wastes or hazardous constituents through releases related to these units. This application was submitted before the due date of March 7, 2024. An Exposure Information Report is found in Exhibit 20.

The regulations state that the permit application consists of two parts: Part A and Part B. The specific information requirements for Part A are found in 335-14-8-.02(4), and the specific information requirements for Part B are found at 335-14-8-.02(5) through (20). As stated in 335-14-8-.02(19), some of the information requirements for a permit to operate an active hazardous waste facility are clearly not needed or applicable for the renewal of an existing permit to provide post-closure care. The information items considered to be not applicable to this application are so noted.

An amended Part A permit application was submitted as part of the permit transfer process in 2023, and a copy is found in Exhibit 4. The USGS map is located in Exhibit 1. A site drawing is found in Exhibit 2. An aerial photograph is found in Exhibit 26. The specific information requirements for the Part B application are addressed in the following sections.

2.1 General Facility Description - 335-14-8-.02(5)(b)1

A general description of this facility is found in paragraph 1.1 of the application.

2.2 Waste Analysis and Characterization - 335-14-8-.02(5)(b)2

This application is for renewal of a permit to provide post-closure care to a hazardous waste surface impoundment closed as a landfill. At the time of this renewal, 35 years of post-closure care will have been completed since the unit was certified as closed. No additional hazardous waste activities requiring a permit are conducted on the site. The waste disposed of in the landfill was K001, and that waste was characterized in the approved closure plan and there is no need for a continuing waste analysis plan. The chemical and physical properties of K001 are well known and documented in EPA documents such as the Background Document for the K001 waste listing. The K001 constituent list and their chemical and physical properties are found in Exhibit 23.

2.3 Waste Analysis Plan - 335-14-8-.02(5)(b)3

As stated in 2.2 above, this requirement is not applicable to this application. No additional wastes will be treated, stored, or disposed of during the remaining post-closure period.

2.4 Security Measures - 335-14-8-.02(5)(b)4

The security requirements of 335-14-8-.02(5)(b)4 are not applicable to closed surface impoundments unless hazardous wastes remain exposed after completion

of closure or access by the public or domestic livestock may pose a hazard to human health.

The hazardous waste impoundment at this facility has been closed in accordance with the approved closure plan. The closure included a low permeability cap and cover system more than three feet thick. Direct exposure to any wastes is not possible. However, as part of the approved corrective measures for SWMUs, the prior owner constructed a security fence around the entire site. The fence is marked with signs legible from a distance of at least 25 feet with a cautionary warning such as "Danger - Unauthorized Personnel Keep Out". The location of the fence and the lockable gate is shown on the drawing in Exhibit 2.

Normal entry into the plant is on the plant entrance road off of Hwy 31 (See Exhibit 2). Plant personnel are instructed to determine the business of anyone entering the area during normal working hours. On weekends, the facility gate is locked, and security is provided by an employee who lives nearby and inspects the plant once per day.

2.5 General Inspection Schedule - 335-14-8-.02(5)(b)5

Inspections conducted as part of the post-closure care of the closed impoundments are described in the Post-Closure Plan found in Exhibit 5 of this application.

2.6 Preparedness, Prevention and Contingency Plan Requirements - 335-14-8-.02(5)(b)6 and 7

The regulated unit at this site is closed as a landfill, and preparedness and prevention and contingency plans are not applicable to closed units.

2.7 Operating Hazard Prevention Procedures - 335-14-8-.02(5)(b)8

This is not an operating treatment, storage, or disposal facility; therefore, these requirements are not applicable to this facility.

2.8 Procedures for Incompatible, Reactive or Ignitable Wastes - 335-14-8-.02(5)(b)9

This facility is closed, and it did not manage these waste categories during its active life. These requirements are not applicable.

2.9 Traffic Control - 335-14-8-.02(5)(b)10

This is a closed facility which does not receive any quantity of hazardous wastes. Wastes presently generated on-site are shipped within 90 days of generation using a licensed hazardous waste transporter, generally in less-than-truckload quantities. The traffic control provisions are not applicable.

2.10 Location Information - 335-14-8-.02(5)(b)11

This facility is located in Alabama. No political jurisdiction in Alabama is listed in Appendix VI of 40 CFR Part 264. No further information regarding seismic standards is required.

A Flood Hazard Boundary Map is included as Exhibit 6. This facility is not located within the 100-year flood plain.

2.11 Training Programs - 335-14-8-.02(5)(b)12

There are no known training requirements for post-closure care; therefore, this provision is not applicable.

2.12 Closure Plan/Post-Closure Plan - 335-14-8-.02(5)(b)13

There is no requirement for a closure plan for a closed unit. The Post-Closure Plan is found in Exhibit 5. That plan describes the post-closure care, maintenance, and monitoring activities being conducted at this site.

2.13 Documentation of Required Notices - 335-14-8-.02(5)(b)14

Copies of the required post-closure notices are found in Exhibit 9. This includes the additional notices approved as a corrective measure for SWMUs.

2.14 Closure Cost Estimate - 335-14-8-.02(5)(b)15

The hazardous waste unit is closed, and these requirements are not applicable.

2.15 Post-Closure Cost Estimate - 335-14-8-.02(5)(b)16

A revised post-closure cost estimate is found in Exhibit 10. This estimate covers the costs associated with providing post-closure care for the 30 years of the post-closure care period. At the time of this permit renewal, approximately 35 years of post-closure care will have been completed. However, ADEM is requiring the continuance of the post-closure permit until corrective action activities have been completed. Post-closure costs are now known with reasonable certainty. The regulations do not require that the post-closure cost estimate be adjusted for inflation during the post-closure period. Many of the activities included in the Post-Closure Plan are being conducted under terms of the Corrective Action Plan and its associated cost estimate and financial assurance.

Financial assurance for post-closure care and corrective action is guaranteed by a Financial Test/Corporate Guarantee and a trust fund controlled by a standby trust. Copies of the financial assurance documentation for post-closure and corrective action are found in Exhibit 11.

2.16 Insurance Requirements - 335-14-8-.02(5)(b)17

These requirements are not applicable to a closed facility.

2.17 Topographic Map of the Facility - 335-14-8-.02(5)(b)19

A site drawing which includes surface topography and other relevant requirements of the referenced regulation, can be found in Exhibit 2. A wind rose for Bay Minette, Alabama, is included in Exhibit 8.

2.18 Compliance with Other Federal Statutes - 335-14-8-.02(5)(b)20

This application for renewal of the existing post-closure permit does not appear to be in conflict with applicable provisions of:

- Wild and Scenic Rivers Act
- National Historical Preservation Act of 1966
- Endangered Species Act
- Coastal Zone Management Act
- Fish and Wildlife Coordination Act

2.19 Case-by-Case Extension - 335-14-8-.02(5)(b)21

This section is not applicable.

2.20 Additional Information Requirements - 335-14-8-.02(5)(c)

This section will provide the required information regarding groundwater conditions at this facility. The information presented has been extracted from data previously submitted to ADEM and/or the EPA unless otherwise stated.

During the original permitting process, the prior owner performed a detailed assessment of groundwater quality which was reported in the Groundwater Quality Assessment (GQA) Vol. I - II, dated February 15, 1988. A Corrective Action Plan (CAP) dated October 14, 1988, revised January 24 and March 22, 1989, was prepared, and the narrative portion of this document is included as Exhibit 28. Both of these documents were used in the preparation of the existing permit and should be considered as references to this renewal application. Groundwater remediation activities began in April of 1991. Corrective Action Effectiveness Reports (CAER) have been submitted to ADEM semiannually since September of 1991, and annually beginning March 15, 2015, per the terms of the facility's permit.

2.20.1 Summary of Interim Status Monitoring - 335-14-8-.02(5)(c)1

Interim status monitoring identified and delineated a plume of groundwater contamination. The primary source of the contamination was found to be the surface impoundment used for the management of wood preserving wastewaters. The hazardous waste found in the impoundment was K001, bottom sediment sludge from the treatment of wastewaters from wood preserving processes using creosote and/or pentachlorophenol. The constituents of concern were those contaminants listed in 40 CFR Part 261, Appendix VII, as the basis for listing for hazardous waste K001. A copy of that list and certain chemical and physical characteristics of these compounds are located in Exhibit 23.

More than 20 monitoring wells and piezometers were installed during the interim status period. Each of these wells was analyzed at least once for the

K001 list of compounds. The results of these analyses are found in Exhibit 24. A summary of more recent data from the existing 24-well monitoring system is found in Exhibit 16. Several existing wells are not sampled and are not needed for any purpose. Water level measurements may be taken from these wells, but that data is not needed due to data available from other nearby wells and the known historic relationship of water levels between wells. Stella-Jones is proposing to properly abandon three wells: P-3, P-4 and MW-1A. Wells P-3 and P-4 have very difficult access because they are installed in a swampy area. Well MW-1A is in the middle of the storage yard that sees heavy vehicular traffic including large articulated loaders and highway trucks. This well has been damaged several times by vehicular impact.

Monitoring well MW-3A, located immediately downgradient from the closed unit, was selected to represent the most highly contaminated well. Samples were taken from this well and TP-9 and analyzed for the list of contaminants found at Rule 335-14-2-Appendix VIII (subsequently replaced by 335-14-5 Appendix IX), per instructions from ADEM. Summary results of these analyses are found in Exhibit 15.

Groundwater monitoring requirements during the corrective action period call for periodic monitoring of the compliance point wells (MW-2A, MW-3A, and MW-4AR), effectiveness wells, and boundary wells. Samples from these wells are analyzed for the K001 compounds as shown on the chain of custody in Appendix B of Exhibit 14. The results of these analyses are found in the table in Exhibit 16.

All monitoring wells were installed in accordance with approved plans, and the full details of the drilling, installation, and construction have been previously submitted. A table showing monitoring well construction information and the available well logs for the monitoring wells are found in Exhibit 13.

2.20.2 Uppermost Aquifer Information - 335-14-8-.02(5)(c)2

The studies performed at the site indicate the presence of a shallow thin surficial aquifer with a phreatic surface roughly conforming to the pattern of local topography, and a deeper artesian aquifer with its piezometric surface more nearly conforming to southerly regional formation dip. The two aquifers are separated by an effective aquiclude which precludes any significant interchange of water between them. Geologic cross sections for the site are found in Exhibit 17.

The lack of interconnectivity between the first and second aquifers in the area of concern has been well documented. This has been demonstrated through pump tests, mapping of a continuous low permeability aquiclude, and groundwater monitoring of the second aquifer. The details of these activities are found in the Groundwater Quality Assessment.

The uppermost aquifer at this site is in a weathered remnant of the Citronelle formation of Pliocene age. The upper aquifer is an unconfined aquifer. The thickness of the aquifer ranges from 12 feet in the treated product storage yard to four feet in the swamp near the drainage pond. The depth below ground to the phreatic surface ranges from approximately 13

feet in the southern portion of the site to less than one foot at P-2 in the north. The phreatic surface generally follows the surface topography, and measurements of site water levels and land elevations confirm this phenomenon. There is a topographic high immediately west of the plant process area and also one in the area where P-5 and MW-11 are sited. There is a groundwater divide that exists between the plant area and the location of P-5 and MW-11. This groundwater divide ensures that any groundwater leaving the plant areas will ultimately end up in the swamp bottom at the north end of the site, where the existing groundwater corrective action system is operating. Area topography and known groundwater elevations from nearly 35 years of measurements indicate natural flow patterns that prevent any groundwater flows from the plume area at the Stella-Jones site to adjacent properties to the east, west, and north of the site. Groundwater flow in the plume area is to the north, and the natural pond at the north end of the site functions as a groundwater divide such that groundwater flow would become surface water flow that exits the site through the drain that flows west under the railroad tracks. This condition is demonstrated by the equipotential drawing found in Exhibit 18.

The second aquifer is a confined aquifer. The depth to the top of the potentiometric surface ranges from approximately 55 feet at MW-1 to 22 feet at MW-10. The potentiometric surface of this aquifer slopes toward the south.

Groundwater elevations in the first aquifer have shown seasonal changes of over three feet as a result of rainfall and recharge; however, groundwater

flow patterns remain unchanged. Groundwater flow directions and gradients have been analyzed numerous times using measured groundwater elevations and three-point analysis. The groundwater flow direction has consistently followed surface topography, and groundwater flows not captured by the corrective action system follow flow patterns toward the rainfall drainage pond. A recent equipotential drawing and historic groundwater elevation table is found in Exhibit 18.

Hydraulic conductivity of the uppermost aquifer in the region of the closed impoundment was measured, with results ranging from 17.4 ft/day at MW-1A to 1.35 ft/day at MW-2A. Hydraulic conductivity in the vicinity of P-2 was estimated at 3.1 ft/day. Porosity was estimated to be 0.35 at the higher elevations and 0.45 at the lower elevations. Using estimated gradients of 0.0465 in the higher elevations and 0.014 in the lower elevations, linear groundwater velocities were estimated to be 2.2 ft/day and 0.10 ft/day at the higher and lower elevations, respectively (GQA, page 41).

The equipotential pattern in the upper aquifer would indicate that subsurface flow would continue from the site along the intermittent stream to the northwest. However, it appears that in the construction of the railroad fill, the upper aquifer has either been removed by undercutting, or effectively displaced and/or sufficiently consolidated by the weight of the high, steeply-sloped fill to render it practically impervious. This is evidenced by the large groundwater head differential which exists across the railroad right-of-way, the prevalence of K001 contaminants on the upgradient side, and their absence on the downgradient side.

The uppermost aquifer is not used for drinking water in the local area. Information on local wells is included in Exhibit 19.

2.20.3 Topographic Map Requirements - 335-14-8-.02(5)(c)3

The drawing in Exhibit 2 shows the property boundary, the location of the closed impoundment, the SWMUs identified, the "point of compliance" and groundwater monitoring and recovery wells. A groundwater equipotential drawing is presented in Exhibit 18.

2.20.4 Description of Groundwater Contamination Plume - 335-14-8-.02(5)(c)4

Based upon the investigations previously discussed, it is known that the uppermost aquifer at the site has been impacted by the regulated surface impoundment. The estimated areal extent of contamination is shown on the drawing in Exhibit 12. Due to the very thin nature of the surficial aquifer, contamination is found throughout its vertical extent. Monitoring of the second aquifer has detected no contamination.

The groundwater contamination exists as both soluble constituents and a dense non-aqueous phase liquid (DNAPL). The DNAPL exists largely as micelles or discrete droplets of organics resembling creosote distributed through the area of contamination. No large areas of DNAPL were identified in the prior investigations. Efforts to recovery DNAPL from the two locations showing some evidence of DNAPLs has been unproductive. The small quantity of DNAPL recovered during the 30-plus years of

operation has come mostly from the groundwater recovery wells. Due to the presence of DNAPL, the measured concentrations of contaminants in the groundwater at some monitoring wells (MW-8 and MW-3A, in particular) exceed solubility limits. The total K001 contaminant concentrations measured in wells installed within the plume range from less than 1 ppm to over 10 ppm. The concentration of contaminants in the monitored wells has declined significantly over time. A summary of analytical results from the groundwater monitoring wells is found in Exhibit 16, as well as graphs depicting the change in total monitored organics concentration over time for the compliance point and effectiveness wells.

The groundwater contamination plume terminates at the drainage pond at the north end of the site. The corrective action system is designed and operated to capture the contaminated groundwater plume, and routine monitoring of the discharge from the drainage pond confirms no measurable impact on surface waters. At the present time, all potential exposure pathways are being effectively controlled by the corrective action system.

2.20.5 Groundwater Monitoring Requirements - 335-14-8-.02(5)(c)5,6,7

Stella-Jones and the prior owner have been monitoring the groundwater quality as required by the Post-Closure Permit. The site is in a corrective action monitoring mode, and is expected to remain in this mode throughout the next permit cycle. These monitoring requirements include analyses of samples from “boundary” wells, “effectiveness” wells, and “compliance point” wells.

The post-closure permit originally required semiannual sampling and analyses of all wells. After satisfying permit constraints regarding the demonstration of plume stability, the frequency for sampling for the boundary wells was changed to annually, beginning in 1996.

Stella-Jones proposes to continue the present monitoring frequency of semiannually for compliance and effectiveness wells, and annually for the boundary wells.

A groundwater sampling and analysis plan is presented in Exhibit 14. A commercial laboratory will perform all analytical tests. No statistical comparison or procedures are proposed since the background values for the contaminants of concern are less than the method detection limits for the procedures used.

The results of the groundwater monitoring program, including groundwater elevations, flow rate, and direction, will be reported in the required corrective action effectiveness reports.

2.20.6 Corrective Action - 335-14-8-.02(5)(c)8

The prior owner initiated corrective action in accordance with the approved corrective action plan in April of 1991. Based upon the findings of the earlier investigations, a pump and treat corrective action system was designed and installed. This system presently consists of 24 groundwater recovery wells and two DNAPL recovery wells.

Twenty-three of the groundwater recovery wells are located immediately downgradient of the closed impoundment, forming an arc which runs approximately east-west on the northern side of the impoundment. These 23 wells are interconnected and the groundwater is extracted by using the vacuum created through the use of a liquid-liquid jet eductor, which uses recovered groundwater as the motive fluid. The remaining groundwater recovery well is located near the leading edge of the plume. This well, and the two DNAPL recovery wells, use electric pumps which operate on timers in an attempt to maximize recovery in these very low-yield areas.

The location of the recovery wells can be seen on the site drawing found in Exhibit 2. This drawing also shows the location of the physical treatment system and the biological treatment system.

All recovered liquids are first routed to the physical treatment plant, where they are subjected to oil/water separation. The waters leaving the oil/water separator are pumped to a biological wastewater treatment unit, and then discharged under the terms of a State Indirect Discharge (SID) permit to the City of Bay Minette POTW.

Semi-analytical methods (fully explained and documented in the CAP submitted as part of the original post-closure permit application) were used to evaluate well locations and pumping rates to ensure capture of the plume at these two locations. The computer simulations used as an aid in designing the corrective action system are found in Exhibit 25.

Type curves are plots of "the equation of the dividing streamlines which separate the capture zone of this well from the rest of the aquifer" for various values of the function Q/BU, where: Q is a pumping rate (L^3/T); B is the aquifer thickness (L); and U is the conductivity, K, (L/T), times the groundwater gradient, i, (L/L) ("Capture-Zone Type Curves: A Tool for Aquifer Cleanup," Javandel & Tsang, Ground Water, Vol. 24, No. 5, 1986). For this site, a line of recovery wells was chosen as the most effective way to contain the plume near the impoundment. The aquifer characteristics required that a number of closely spaced wells be used to capture the width of the plume. Well spacing and pumping rate were the critical factors in capturing the full width of the plume at this location. The semi-analytical methods mentioned above determined that a line of 22 wells at 20-foot spacing should capture the plume width. Based on physical site conditions at the time of system installation, 23 wells were installed immediately downgradient of the closed impoundment.

The long-term effectiveness of the corrective action system has been demonstrated through more than 32 years of successful operation. No further migration of the plume has been detected. The measured concentration of groundwater contamination has declined substantially. Corrective Action Effectiveness Reports have been submitted semiannually since September 1991. The requirement was changed to annual reporting in the present permit, and Stella-Jones requests that the annual requirement be continued in the new permit. The total volume of groundwater recovered by the corrective action system through the end of 2023 was approximately 135,000,000 gallons. The concentrations of contaminants in the discharged waters have remained within permit limits throughout the 32 years of

operation. A table of the analytical results of samples from this discharge is found in Exhibit 21. These analytical results are routinely submitted to ADEM on Discharge Monitoring Reports. The corrective action system appears to be effectively controlling the contaminant plume, and there is no indication of a need to modify the system at this time.

The attempt to recover DNAPL from the aquifer has been unproductive. Very little DNAPL has been recovered in the 30-plus years of operation, which was expected given that no significant DNAPL accumulation was found during the site investigations. Most of the DNAPL recovered has come from the recovery wells near the closed impoundment, and most of that was in the first few years of operation. Stella-Jones is requesting that the two wells designated DNAPL recovery wells cease operation as part of this permit renewal.

The costs to perform corrective action at this site are reasonably well known after 32 years of operation of the system. A new corrective action cost estimate was prepared as part of this renewal application. That estimate is found in Exhibit 22. This estimate is very close to the prior inflation-adjusted estimate.

The prior owner used a trust fund and standby trust to provide financial assurance, and the required balance in the trust fund had to be 15 years of corrective action costs. Based on the new cost estimate of $56,877/year, the required balance is $853,155. This estimate will be adjusted for inflation annually. After Stella-Jones acquired the assets of Baldwin Pole, the financial assurance mechanism was changed to reflect Stella-Jones

Corporation as the Granter of the trust. Copies of the trust agreement and financial assurance documents are found in Exhibit 11.

2.21 Information Requirements for Solid Waste Management Units - 335-14-8-.02(6)

The original RCRA Facility Assessment (RFA) identifying solid waste management units (SWMU) and areas of concern (AOC) was conducted by EPA contractors in 1988. During the first permit cycle a complete RCRA Facility Investigation (RFI) was conducted regarding those SWMUs and AOCs previously identified. The original RFI was submitted on June 17, 1994, and revised on March 8, 1996.

After acceptance of the RFI, ADEM requested that the prior owner submit a Corrective Measures Study (CMS) for the SWMUs investigated. The prior owner submitted a CMS dated October 1, 1999. ADEM approved the corrective measures and incorporated them into Modification 1 to the Post-Closure Permit dated September 30, 2004. The corrective measures for SWMUs include administrative controls of future site use and fencing of the entire site. Copies of the administrative control documents are found in Exhibit 9. The narrative portion of the CMS is included in Exhibit 29.

A new RFA was conducted by ADEM personnel in 2015. That RFA identified one additional SWMU that was assigned the designation SWMU 26. This SWMU was the area of concrete in the process area designated as the 90-day hazardous waste storage area. The RFA identified no releases in this area and recommended

no further actions other than continued operation in accordance with the ADEM Division 14 Regulations.

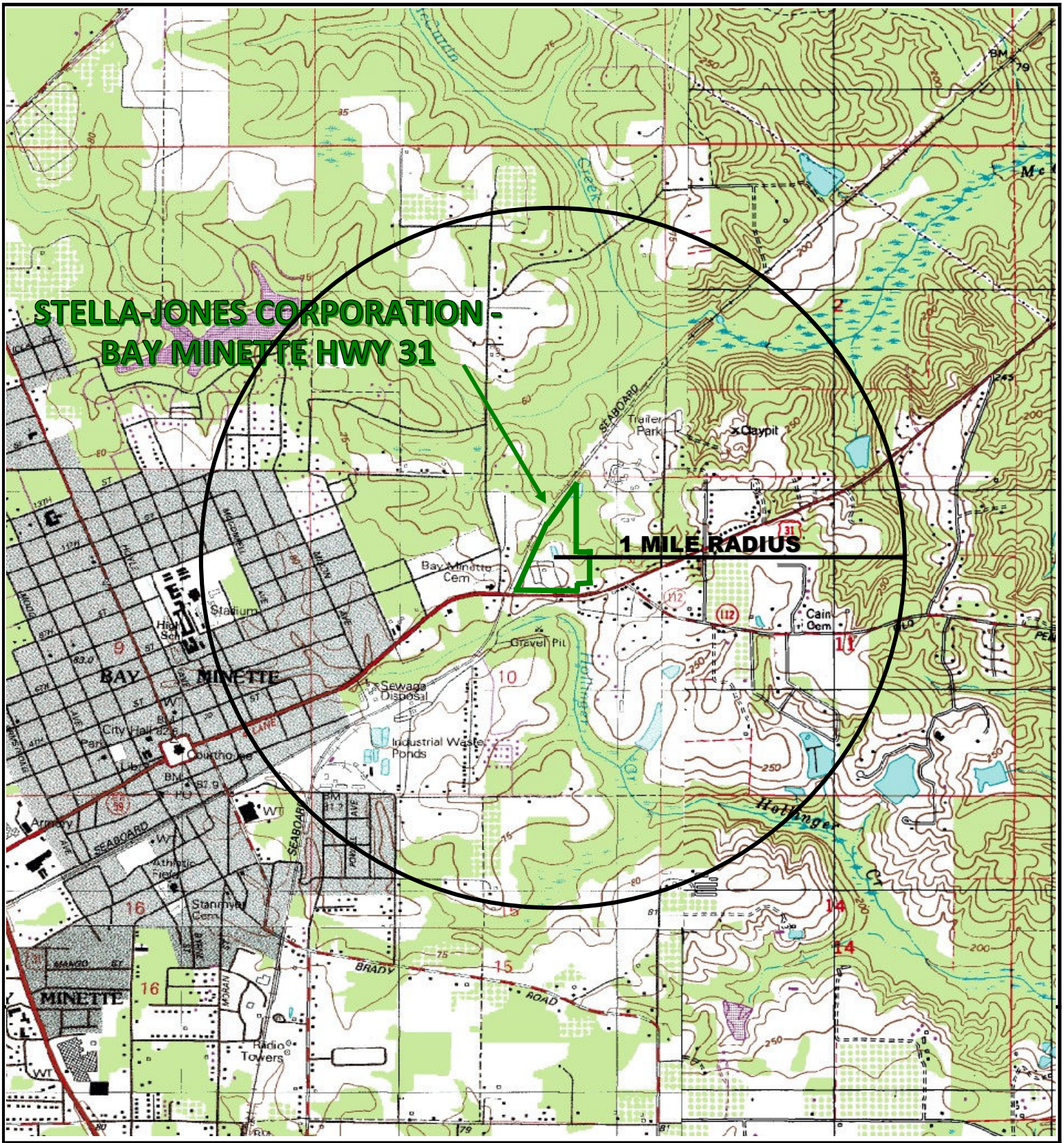
ADEM has begun the process of preparing a new RFA. The visual site inspection was conducted in the fall of 2023, and Stella-Jones has provided all of the information requested. It is anticipated that the new RFA, when completed, will not result in any new compliance requirements.

Natural degradation will continue to mitigate the remaining surface contamination, and continuation of the existing corrective actions, monitoring, and reporting will ensure that no off-site impact occurs in the future.

2.22 Additional Not Applicable Requirements - 335-14-8-.02(7) through (18)

The information requirements in these paragraphs are specific to certain operating hazardous waste management units, and they are not applicable to this post-closure permit application.

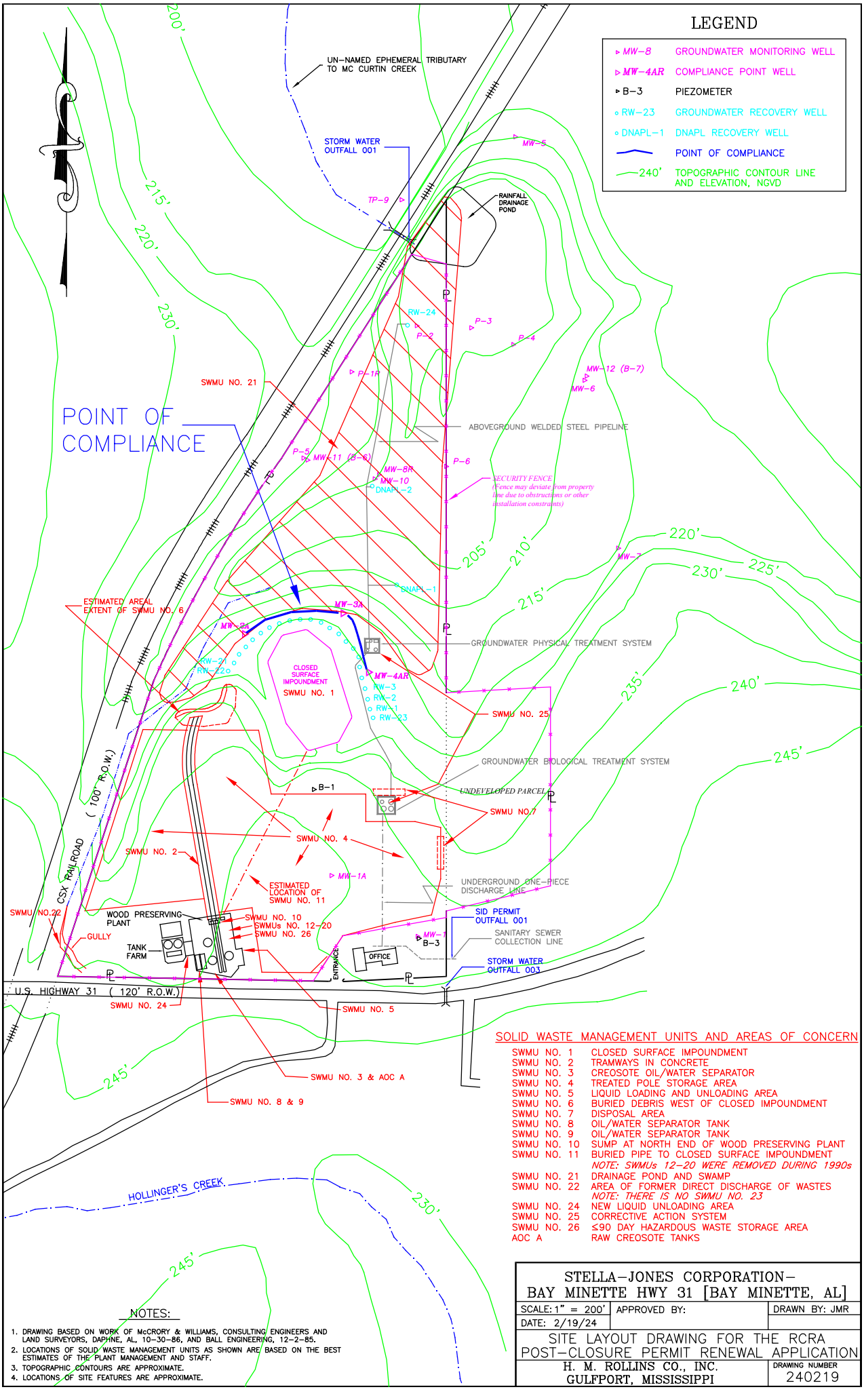
EXHIBIT 1



STELLA-JONES CORPORATION - BAY MINETTE HWY 31	U.S.G.S. TOPOGRAPHIC MAP QUAD: BAY MINETTE NORTH	SCALE: 1" ≈ 2035'	H.M. ROLLINS CO., INC. GULFPORT, MS

FILENAME: SJCUSGS1\2

EXHIBIT 2



SOLID WASTE MANAGEMENT UNITS AND AREAS OF CONCERN

SWMU NO. 1	CLOSED SURFACE IMPOUNDMENT
SWMU NO. 2	TRAMWAYS IN CONCRETE
SWMU NO. 3	CREOSOTE OIL/WATER SEPARATOR
SWMU NO. 4	TREATED POLE STORAGE AREA
SWMU NO. 5	LIQUID LOADING AND UNLOADING AREA
SWMU NO. 6	BURIED DEBRIS WEST OF CLOSED IMPOUNDMENT
SWMU NO. 7	DISPOSAL AREA
SWMU NO. 8	OIL/WATER SEPARATOR TANK
SWMU NO. 9	OIL/WATER SEPARATOR TANK
SWMU NO. 10	SUMP AT NORTH END OF WOOD PRESERVING PLANT
SWMU NO. 11	BURIED PIPE TO CLOSED SURFACE IMPOUNDMENT *NOTE: SWMUs 12-20 WERE REMOVED DURING 1990s*
SWMU NO. 21	DRAINAGE POND AND SWAMP
SWMU NO. 22	AREA OF FORMER DIRECT DISCHARGE OF WASTES *NOTE: THERE IS NO SWMU NO. 23*
SWMU NO. 24	NEW LIQUID UNLOADING AREA
SWMU NO. 25	CORRECTIVE ACTION SYSTEM
SWMU NO. 26	≤90 DAY HAZARDOUS WASTE STORAGE AREA
AOC A	RAW CREOSOTE TANKS

NOTES:

1. DRAWING BASED ON WORK OF McCRORY & WILLIAMS, CONSULTING ENGINEERS AND LAND SURVEYORS, DAPHNE, AL, 10-30-86, AND BALL ENGINEERING, 12-2-85.
2. LOCATIONS OF SOLID WASTE MANAGEMENT UNITS AS SHOWN ARE BASED ON THE BEST ESTIMATES OF THE PLANT MANAGEMENT AND STAFF.
3. TOPOGRAPHIC CONTOURS ARE APPROXIMATE.
4. LOCATIONS OF SITE FEATURES ARE APPROXIMATE.

STELLA-JONES CORPORATION-
BAY MINETTE HWY 31 [BAY MINETTE, AL]

SCALE: 1" = 200'	APPROVED BY:	DRAWN BY: JMR
DATE: 2/19/24		

SITE LAYOUT DRAWING FOR THE RCRA POST-CLOSURE PERMIT RENEWAL APPLICATION

H. M. ROLLINS CO., INC.
GULFPORT, MISSISSIPPI

DRAWING NUMBER 240219

EXHIBIT 3

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
AHWMMA POST-CLOSURE PERMIT APPLICATION
CHECKLIST

Facility Name: Stella-Jones Corporation
Facility Identification Number: EPA ID No. ALD 031 490 501
Facility Address: 1101 Hwy 31 N, Bay Minette, AL 36507
Facility Phone Number: 251-937-2141
Application Revision Number: ____ Rev. 10/9/24 (p.3, p.6 ,p.9)

Facility Contact: _____
Permit Writer(s) : _____
Date Application Received: _____
Date Review Completed: _____

REQUIREMENT	ADEM ADMIN. CODE RULE	LOCATION IN APPLICATION (SECTION/PAGE #)	COMMENTS/DEFICIENCIES
Signature	335-14-8-.02(2)(a)	Page 5	
Certification Statement	335-14-8-.02(2)(d)	Page 5	
Part A Application	335-14-8-.02(4)		
Must meet all the requirements of the given rule	335-14-8-.02(4)(a)-(n)	Exhibit 4	
General Facility Description	335-14-8-.02(5)(b)1.		
Over all description of the facility and each hazardous waste producing process.	335-14-8-.02(5)(b)1.	Paragraph 1.1	
Description, including code number, of each hazardous waste generated at the facility	335-14-8-.02(19)(a)	Paragraph 2.2	
Security Procedures	335-14-8-.02(5)(b)4.		
24 Hour surveillance system (e.g. continuous television monitoring or patrolling guards/facility personnel) that continuously controls or monitors entry onto the closed hazardous waste management unit, or	335-14-5-.02(5)(b)1.	Exhibit 2 Paragraph 2.4	

REQUIREMENT	ADEM ADMIN. CODE RULE	LOCATION IN APPLICATION (SECTION/PAGE #)	COMMENTS/DEFICIENCIES
Physical barrier (e.g. fence or fence combined with a cliff) which completely encompasses the closed hazardous waste management unit and prevents unauthorized access	335-14-5-.02(5)(b)2.	Exhibit 2 Paragraph 2.4	
Inspection Schedule	335-14-8-.02(5)(b)5.		
Written schedule for inspection monitoring equipment, safety and emergency equipment, security equipment, and each closed hazardous waste unit	335-14-5-.02(6)(b)1.	Post-Closure Plan - Exhibit 5	
Justification of Any Request for a Waiver(s) of the Preparedness and Prevention Requirements of ADEM Admin. Code R. 335-14-5-.03	335-14-8-.02(5)(b)5.	N/A - Post-Closure	
Location Information	335-14-8-.02(5)(b)11.		
Documentation of the political jurisdiction in which the facility is located	335-14-8-.02(5)(b)11.(i)	Paragraph 2.10	
Documentation of whether the facility is located in a 100-year floodplain	335-14-8-.02(5)(b)11.(iii)	Paragraph 2.10	
Post-Closure Plan	335-14-8-.02(5)(b)13.		
Description of appropriate monitoring/maintenance activities and frequencies, including:	335-14-5-.07(9)(b)	Exhibit 5	

REQUIREMENT	ADEM ADMIN. CODE RULE	LOCATION IN APPLICATION (SECTION/PAGE #)	COMMENTS/DEFICIENCIES
Procedures for maintaining the integrity and the effective of the final cover system, and repairing the final cover system to correct the effects of subsistence, erosion, settling, or other events	335-14-5-.14(11)(d)1.	Exhibit 5	
Procedures for the monitoring, maintenance, and operation of any leak detection, collection, and/or removal systems	335-14-5-.14(11)(d)2-3.	N/A	
Procedures for maintaining the groundwater monitoring systems to ensure compliance with ADEM Admin. Code Rule 335-14-5-.06(8)(c)	335-14-5-.14(11)(d)4.	Exhibit 14	
Maintenance of the run-on/run-off control systems	335-14-5-.14(11)(d)5.	Exhibit 5	
Protection of maintenance of surveyed bench marks	335-14-5-.14(11)(d)6.	Exhibit 5	
Documentation that the landfill and associated monitoring equipment will be visually inspected every seven days, and that such inspections will be documented on an inspection log.	335-14-5-.14(11)(d)7.	Quarterly Inspection Exhibit 5	
Inclusion of the above items on the facility inspection schedule.	335-14-8-.02(5)(b)5.	Exhibit 5	
Post-Closure Notices	335-14-8-.02(5)(b)14.		
Documentation demonstrating that a survey plat indicating the locations of all hazardous waste units have been filed with the local land-use authority.	335-14-5-.07(7)	Exhibit 9	

REQUIREMENT	ADEM ADMIN. CODE RULE	LOCATION IN APPLICATION (SECTION/PAGE #)	COMMENTS/DEFICIENCIES
Documentation demonstrating that the Permittee has provided to the local land-use authority and the Department a record of the type, location, and quantity of hazardous wastes or waste residues remaining in each hazardous waste unit at the facility	335-14-5-.07(10)(a)	Exhibit 9	
Documentation demonstrating that a notation on the deed to the property that will in perpetuity notify any potential purchaser that: • the land was used to manage hazardous waste, • its use is restricted, and • the survey plat and record required by ADEM Admin. Code Rule 335-14-5-.07(7) has been filed with the local land-use authority and ADEM.	335-14-5-.07(10)(b)1.	Exhibit 9	
Post-Closure Cost Estimate and Financial Assurance	335-14-8-.02(5)(b)16.		
Post Closure Costs should be based on: • third party costs • fully loaded labor rate • no salvage values • no operational credits (gas, crops, etc.) • most costly extent of operations and should address all costs associated with post-closure care, including: • inspection costs • administrative costs • maintenance and repair costs • transportation costs	335-14-5-.08(5)	Exhibit 10	
Post-Closure Financial Assurance should be one of the approved methods and use standard wording	335-14-5-.08(6)	Exhibit 11	

REQUIREMENT	ADEM ADMIN. CODE RULE	LOCATION IN APPLICATION (SECTION/PAGE #)	COMMENTS/DEFICIENCIES
Topographic Map	335-14-8-.02(5)(b)19.		
The map must show a distance of 1000 feet beyond the facility boundary to a scale of not more than 1"=200', and clearly show, on multiple maps if necessary: • map scale and date • 100-year floodplain area • surface waters including intermittent streams • surrounding land uses • wind rose • map orientation • legal boundaries • access controls • injection and withdrawal wells (include off-site) • all facility structures • drainage and flood protection barriers • all hazardous waste units • proposed point of compliance • proposed groundwater monitoring wells • identification of uppermost aquifer • extent of any plume of contamination • locations of all solid waste management units	335-14-8-.02(5)(b)19. 335-14-8-.02(5)(c)3. 335-14-8-.02(5)(c)4.(i)-(ii) 335-14-8-.02(5)(d)1.(i)	Exhibit 1 Exhibit 2 Exhibit 7 Exhibit 8 Exhibit 12	
Groundwater Assessment Information	335-14-8-.02(5)(c)1.-2.		
Summary of data obtained during interim status or the groundwater quality assessment (new applications) and/or during the previous permit period (renewals). One hardcopy and one electronic spreadsheet copy (if possible) of all individual constituent data of all wells and all sampling events should be provided.	335-14-8-.02(5)(c)1.	Exhibit 24 Exhibit 16	

REQUIREMENT	ADEM ADMIN. CODE RULE	LOCATION IN APPLICATION (SECTION/PAGE #)	COMMENTS/DEFICIENCIES
Identification of the uppermost aquifer and aquifers hydraulically interconnected beneath the facility, including: • Groundwater flow direction and rate • Basis for identification • Supporting data and calculations If possible, a graphical representation of the following items should be included with a thorough discussion in the application text: • Groundwater flow direction and rate • Uppermost aquifer boundaries • Uppermost aquifer Lithology • Hydraulic interconnections (if any)	335-14-8-.02(5)(c)2.	Paragraph 2.20.2 Exhibit 18	
A description of any existing plume(s) of contamination, including: • 3-dimensional extent of the plume. • Concentrations of each Appendix IX constituent throughout the plume.	335-14-8-.02(5)(c)4. 335-14-8-.02(5)(c)4.(i) 335-14-8-.02(5)(c)4.(ii)	Paragraph 2.20.4 Exhibit 12	
Groundwater Monitoring System	335-14-8-.02(5)(c)5.		
Detailed plans and engineering report describing the monitoring well system: • Number of wells • Well locations • Well Design Specifications and Construction Diagrams • Boring Logs • Assurance of unaffected groundwater measurements	335-14-5-.06(8)	Paragraph 2.20.1 Exhibit 13	
Proposed Point of Compliance	335-14-5-.06(6)	Exhibit 2	

REQUIREMENT	ADEM ADMIN. CODE RULE	LOCATION IN APPLICATION (SECTION/PAGE #)	COMMENTS/DEFICIENCIES
Detection Monitoring Plan (if no hazardous constituents have been detected in groundwater)	335-14-8-.02(5)(c)6.	NA	
Proposed list of indicator parameters. List should include, at a minimum: • All Appendix VII constituents for each hazardous waste handled at the facility • Temperature, Specific Conductance, and pH	335-14-8-.02(5)(c)6.(i)	NA	
Proposed sampling frequencies for each individual well and indicator parameter. (Optional: ADEM will specify frequency in the permit if no proposal is presented)		NA	
Background concentrations or procedures to calculated them	335-14-8-.02(5)(c)6.(iii)	NA	
Sampling and Analysis Plan; should included detailed discussion of methods/procedures for: • Sample collection • Groundwater surface elevation measurement • Sampling equipment decontamination • Sample preservation and shipment • Chain-of-Custody control • Field QA/QC • Field documentation of proper sampling procedures • Analytical methods • Laboratory QA/QC	335-14-8-.02(5)(c)6.(iv) 335-14-5-.06(8)(d)	NA	
Statistical comparison procedures	335-14-8-.02(5)(c)6.(iv) 335-14-5-.06(8)(h)	NA	

REQUIREMENT	ADEM ADMIN. CODE RULE	LOCATION IN APPLICATION (SECTION/PAGE #)	COMMENTS/DEFICIENCIES
Compliance Monitoring Plan (if hazardous constituents have been detected in groundwater)	335-14-8-.02(5)(c)7.		
Proposed list of hazardous constituents to be monitored for. List should include, at a minimum: • All Appendix VII constituents for each hazardous waste handled at the facility • Temperature, Specific Conductance, and pH • Any Appendix IX constituents which have been detected in the groundwater	335-14-8-.02(5)(c)7.(iii)	Exhibits 14 & 23	
Proposed concentration limits for each hazardous constituent to be monitored for	335-14-8-.02(5)(c)7.(iii) 335-14-5-.06(5)(a)	Non-Detect Paragraph 2.20.5	
Proposed sampling frequencies for each individual well and indicator parameter. (Optional: ADEM will specify frequency in the permit if no proposal is presented)		Paragraph 2.20.5 Exhibit 14	
Sampling and Analysis Plan; should included detailed discussion of methods/procedures for: • Sample collection • Groundwater surface elevation measurement • Sampling equipment decontamination • Sample preservation and shipment • Chain-of-Custody control • Field QA/QC • Field documentation of proper sampling procedures • Analytical methods • Laboratory QA/QC	335-14-8-.02(5)(c)7.(vi) 335-14-5-.06(8)(d)	Paragraph 2.20.5 Exhibit 14	
Statistical comparison procedures	335-14-8-.02(5)(c)7.(vi) 335-14-5-.06(8)(h)	N/A Paragraph 2.20.5	

REQUIREMENT	ADEM ADMIN. CODE RULE	LOCATION IN APPLICATION (SECTION/PAGE #)	COMMENTS/DEFICIENCIES
Corrective Action Plan (if hazardous constituents have been detected in groundwater above regulatory limits)	335-14-8-.02(5)(c)8. 335-14-5-.06(11)		
Detailed plans and an engineering report describing the corrective action system	335-14-8-.02(5)(c)8.(iii)	Paragraph 2.20.6 Exhibit 28	
Detailed description of a groundwater monitoring program for the purposes of evaluating the corrective action effort. This program should contain all the components of a compliance monitoring program	335-14-8-.02(5)(c)8.(iv)	Paragraph 2.20.5 Exhibit 14 Exhibit 28	
Solid Waste Management Information	335-14-8-.02(5)(d)		
Description of each unit: • Type of unit • Unit's designation • General dimensions and structural description (engineering drawing, if available) • Time period of operation • All types of wastes handled in the unit	335-14-8-.02(5)(d)1.(i)-(v)	Paragraph 2.21 Exhibit 27	
Any available information concerning releases from any solid waste management unit	335-14-8-.02(5)(d)2.	Exhibit 27	
Results of all sampling and analysis conducted for each unit	335-14-8-.02(5)(d)3.	Exhibit 27	

EXHIBIT 4

United States Environmental Protection Agency
RCRA SUBTITLE C SITE IDENTIFICATION FORM

1. Reason for Submittal (Select only one.)

☐	Obtaining or updating an EPA ID number for on-going regulated activities (Items 10-17 below) that will continue for a period of time.
☐	Submitting as a component of the Hazardous Waste Report for _____ (Reporting Year)
	☐ Site was a TSD facility, a reverse distributor, and/or generator of ≥ 1,000 kg of non-acute hazardous waste, > 1 kg of acute hazardous waste, or > 100 kg of acute hazardous waste spill cleanup in **one or more months of the reporting year** (or State equivalent LQG regulations)
☐	Notifying that regulated activity is no longer occurring at this Site
☐	Obtaining or updating an EPA ID number for conducting Electronic Manifest Broker activities
☑	Submitting a new or revised Part A (permit) Form

2. Site EPA ID Number

A	L	D	0	3	1	4	9	0	5	0	1

3. Site Name

Stella-Jones Corporation - Bay Minette HWY 31

4. Site Location Address

Street Address: 1101 Highway 31 North		
City, Town, or Village: Bay Minette		County: Baldwin
State: AL	Country: USA	Zip Code: 36507
Latitude: 30°53'30"	Longitude: 87°45'15"	☐ Use Lat/Long as Primary Address

5. Site Mailing Address ☑ Same as Location Street Address

Street Address		
City, Town, or Village		
State	Country	Zip Code

6. Site Land Type

☑ Private ☐ County ☐ District ☐ Federal ☐ Tribal ☐ Municipal ☐ State ☐ Other

7. North American Industry Classification System (NAICS) Code(s) for the Site (at least 5-digit codes)

A. (Primary) 321114	C.
B.	D.

8. Site Contact Information

☑ Same as Location Address

First Name Ray	MI	Last Name Long
Title Plant Manager		
Street Address		
City, Town, or Village		
State	Country	Zip Code
Email rlong@stella-jones.com		
Phone 251-370-8144	Ext	Fax

9. Legal Owner and Operator of the Site

A. Name of Site's Legal Owner

☑ Same as Location Address

Full Name Stella-Jones Corporation	Date Became Owner (mm/dd/yyyy) 7/14/2023
Owner Type ☑ Private ☐ County ☐ District ☐ Federal ☐ Tribal ☐ Municipal ☐ State ☐ Other	
Street Address	
City, Town, or Village	
State / Country / Zip Code	
Email	
Phone / Ext / Fax	
Comments	

B. Name of Site's Legal Operator

☑ Same as Location Address

Full Name Stella-Jones Corporation	Date Became Operator (mm/dd/yyyy) 7/14/2023
Operator Type ☑ Private ☐ County ☐ District ☐ Federal ☐ Tribal ☐ Municipal ☐ State ☐ Other	
Street Address	
City, Town, or Village	
State / Country / Zip Code	
Email	
Phone / Ext / Fax	
Comments	

10. Type of Regulated Waste Activity (at your site)

Mark "Yes" or "No" for all current activities (as of the date submitting the form); complete any additional boxes as instructed.

A. Hazardous Waste Activities

☑ Y ☐ N	1. Generator of Hazardous Waste—If "Yes", mark only one of the following—a, b, c		
	☑	a. LQG	-Generates, in any calendar month, 1,000 kg/mo (2,200 lb/mo) or more of non-acute hazardous waste (includes quantities imported by importer site); or - Generates, in any calendar month, or accumulates at any time, more than 1 kg/mo (2.2 lb/mo) of acute hazardous waste; or - Generates, in any calendar month or accumulates at any time, more than 100 kg/mo (220 lb/mo) of acute hazardous spill cleanup material.
	☐	b. SQG	100 to 1,000 kg/mo (220-2,200 lb/mo) of non-acute hazardous waste and no more than 1 kg (2.2 lb) of acute hazardous waste and no more than 100 kg (220 lb) of any acute hazardous spill cleanup material.
	☐	c. VSQG	Less than or equal to 100 kg/mo (220 lb/mo) of non-acute hazardous waste.
☐ Y ☑ N	2. Short-Term Generator (generates from a short-term or one-time event and not from on-going processes). If "Yes", provide an explanation in the Comments section. *Note: If "Yes", you MUST indicate that you are a Generator of Hazardous Waste in Item 10.A.1 above.*		
☐ Y ☑ N	3. Treater, Storer or Disposer of Hazardous Waste—Note: Part B of a hazardous waste permit is required for these activities.		
☐ Y ☑ N	4. Receives Hazardous Waste from Off-site		
☐ Y ☑ N	5 Recycler of Hazardous Waste		
	☐	a. Recycler who stores prior to recycling	
	☐	b. Recycler who does not store prior to recycling	
☐ Y ☑ N	6. Exempt Boiler and/or Industrial Furnace—If "Yes", mark all that apply.		
	☐	a. Small Quantity On-site Burner Exemption	
	☐	b. Smelting, Melting, and Refining Furnace Exemption	

B. Waste Codes for Federally Regulated Hazardous Wastes. Please list the waste codes of the Federal hazardous wastes handled at your site. List them in the order they are presented in the regulations (e.g. D001, D003, F007, U112). Use an additional page if more spaces are needed.

F032						
K001						

C. Waste Codes for State Regulated (non-Federal) Hazardous Wastes. Please list the waste codes of the State hazardous wastes handled at your site. List them in the order they are presented in the regulations. Use an additional page if more spaces are needed.

11. Additional Regulated Waste Activities (NOTE: Refer to your State regulations to determine if a separate permit is required.)

A. Other Waste Activities

☐ Y ☑ N	1. Transporter of Hazardous Waste—If "Yes", mark all that apply.
☐	a. Transporter
☐	b. Transfer Facility (at your site)
☐ Y ☑ N	2. Underground Injection Control
☐ Y ☑ N	3. United States Importer of Hazardous Waste
☐ Y ☑ N	4. Recognized Trader—If "Yes", mark all that apply.
☐	a. Importer
☐	b. Exporter
☐ Y ☑ N	5. Importer/Exporter of Spent Lead-Acid Batteries (SLABs) under 40 CFR 266 Subpart G—If "Yes", mark all that apply.
☐	a. Importer
☐	b. Exporter

B. Universal Waste Activities

☐ Y ☑ N	1. Large Quantity Handler of Universal Waste (you accumulate 5,000 kg or more) - If "Yes" mark all that apply. Note: Refer to your State regulations to determine what is regulated.
☐	a. Batteries
☐	b. Pesticides
☐	c. Mercury containing equipment
☐	d. Lamps
☐	e. Aerosol Cans
☐	f. Other (specify) _____
☐	g. Other (specify) _____
☐ Y ☑ N	2. Destination Facility for Universal Waste Note: A hazardous waste permit may be required for this activity.

C. Used Oil Activities

☐ Y ☑ N	1. Used Oil Transporter—If "Yes", mark all that apply.
☐	a. Transporter
☐	b. Transfer Facility (at your site)
☐ Y ☑ N	2. Used Oil Processor and/or Re-refiner—If "Yes", mark all that apply.
☐	a. Processor
☐	b. Re-refiner
☐ Y ☑ N	3. Off-Specification Used Oil Burner
☐ Y ☑ N	4. Used Oil Fuel Marketer—If "Yes", mark all that apply.
☐	a. Marketer Who Directs Shipment of Off-Specification Used Oil to Off-Specification Used Oil Burner
☐	b. Marketer Who First Claims the Used Oil Meets the Specifications

D. Pharmaceutical Activities

☐ Y ☑ N	1. Operating under 40 CFR Part 266, Subpart P for the management of hazardous waste pharmaceuticals—if "Yes", mark only one. Note: See the item-by-item instructions for definitions of healthcare facility and reverse distributor.
☐	a. Healthcare Facility
☐	b. Reverse Distributor
☐ Y ☑ N	2. Withdrawing from operating under 40 CFR Part 266, Subpart P for the management of hazardous waste pharmaceuticals. Note: You may only withdraw if you are a healthcare facility that is a VSQG for all of your hazardous waste, including hazardous waste pharmaceuticals.

12. Eligible Academic Entities with Laboratories—Notification for opting into or withdrawing from managing laboratory hazardous wastes pursuant to 40 CFR Part 262, Subpart K.

☐ Y ☑ N	A. Opting into or currently operating under 40 CFR Part 262, Subpart K for the management of hazardous wastes in laboratories— If "Yes", mark all that apply. Note: See the item-by-item instructions for definitions of types of eligible academic entities.
☐	1. College or University
☐	2. Teaching Hospital that is owned by or has a formal written affiliation with a college or university
☐	3. Non-profit Institute that is owned by or has a formal written affiliation with a college or university
☐ Y ☑ N	B. Withdrawing from 40 CFR Part 262, Subpart K for the management of hazardous wastes in laboratories.

13. Episodic Generation

☐ Y ☑ N	Are you an SQG or VSQG generating hazardous waste from a planned or unplanned episodic event, lasting no more than 60 days, that moves you to a higher generator category. If "Yes", you must fill out the Addendum for Episodic Generator.

14. LQG Consolidation of VSQG Hazardous Waste

☐ Y ☑ N	Are you an LQG notifying of consolidating VSQG Hazardous Waste Under the Control of the Same Person pursuant to 40 CFR 262.17(f)? If "Yes", you must fill out the Addendum for LQG Consolidation of VSQG hazardous waste.

15. Notification of LQG Site Closure for a Central Accumulation Area (CAA) (optional) OR Entire Facility (required)

☐ Y ☑ N LQG Site Closure of a Central Accumulation Area (CAA) or Entire Facility.
A. ☐ Central Accumulation Area (CAA) or ☐ Entire Facility
B. Expected closure date: _____ mm/dd/yyyy
C. Requesting new closure date: _____ mm/dd/yyyy
D. Date closed : _____ mm/dd/yyyy ☐ 1. In compliance with the closure performance standards 40 CFR 262.17(a)(8) ☐ 2. Not in compliance with the closure performance standards 40 CFR 262.17(a)(8)

16. Notification of Hazardous Secondary Material (HSM) Activity

☐ Y ☑ N	Are you notifying under 40 CFR 260.42 that you will begin managing, are managing, or will stop managing hazardous secondary material under 40 CFR 260.30, 40 CFR 261.4(a)(23), (24), (25), or (27)? If "Yes", you must fill out the Addendum to the Site Identification Form for Managing Hazardous Secondary Material.

17. Electronic Manifest Broker

☐ Y ☑ N	Are you notifying as a person, as defined in 40 CFR 260.10, electing to use the EPA electronic manifest system to obtain, complete, and transmit an electronic manifest under a contractual relationship with a hazardous waste generator?

18. Comments (include item number for each comment)

This Revised Part A application is intended to support the permit transfer of Hazardous Waste Facility Permit Number ALD 031 490 501 due to a facility ownership change. The facility's prior owner, Baldwin Pole & Piling Company, Inc., was purchased by Stella-Jones Corporation on 7/14/2023.

19. Certification I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations. **Note: For the RCRA Hazardous Waste Part A permit Application, all owners and operators must sign (see 40 CFR 270.10(b) and 270.11).**

Signature of legal owner, operator or authorized representative	Date (mm/dd/yyyy)
	9/24/23
Printed Name (First, Middle Initial Last) **Glynn Pittman**	Title **Vice President of SYP Operations**
Email **gpittman@stella-jones.com**	

Signature of legal owner, operator or authorized representative	Date (mm/dd/yyyy)
Printed Name (First, Middle Initial Last)	Title
Email	

United States Environmental Protection Agency

HAZARDOUS WASTE PERMIT PART A FORM

1. Facility Permit Contact

First Name	Ray	MI		Last Name	Long
Title	Plant Manager				
Email	rlong@stella-jones.com				
Phone	251-370-8144	Ext		Fax	

2. Facility Permit Contact Mailing Address

Street Address	1101 Highway 31 North		
City, Town, or Village	Bay Minette		
State AL	Country USA	Zip Code 36507	

3. Facility Existence Date (mm/dd/yyyy)

6/1/1958

4. Other Environmental Permits

A. Permit Type	B. Permit Number	C. Description
R	ALD031490501	Alabama Hazardous Waste Permit
N	IU330200007	State Indirect Discharge Permit
N	AL0059943	NPDES Storm Water Permit

5. Nature of Business

Manufacturer of treated utility poles.

No hazardous waste treatment, storage, or disposal requiring a pemit is performed at this site.

From historical operations, the facility utilized a surface impoundment which has now been closed as a hazardous waste landfill, and this unit requires post closure care.

6. Process Codes and Design Capacities

Line Number		A. Process Code			B. Process Design Capacity (1) Amount	B. Process Design Capacity (2) Unit of Measure	C. Process Total Number of Units	D. Unit Name
0	1	D	8	0	833	Y	001	ONE IMPOUNDMENT
								CLOSED AS LANDFILL.
								AMOUNT OF WASTE
								REMAINING IN UNIT.

7. Description of Hazardous Wastes (Enter codes for Items 7.A, 7.C and 7.D(1))

Line No.		A. EPA Hazardous Waste No.				B. Estimated Annual Qty of Waste	C. Unit of Measure	D. Processes (1) Process Codes								D. Processes (2) Process Description (if code is not entered in 7.D1))
0	1	K	0	0	1	0	Y	D	8	0						UNIT IS CLOSED

8. Map

Attach to this application a topographical map, or other equivalent map, of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all spring, rivers, and other surface water bodies in this map area. See instructions for precise requirements.

9. Facility Drawing

All existing facilities must include a scale drawing of the facility. See instructions for more detail.

10. Photographs

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment, and disposal areas; and sites of future storage, treatment, or disposal areas. See instructions for more detail.

11. Comments

This Revised Part A application is intended to support the permit transfer of Hazardous Waste Facility Permit Number ALD 031 490 501 due to a facility ownership change. The facility's prior owner, Baldwin Pole & Piling Company, Inc., was purchased by Stella-Jones Corporation on 7/14/2023. Note: The regulated unit was closed in 1987. Design capacity per closure report of estimated waste remaining in place.

EXHIBIT 5

STELLA-JONES CORPORATION
BAY MINETTE, AL

EPA ID No. ALD 031 490 501

POST-CLOSURE PLAN

Prepared By:
H. M. Rollins Company, Inc.
P. O. Box 3471
Gulfport, Mississippi 39505
(228) 832-1738

March 1, 2024
Revised October 9, 2024

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LIST OF APPENDICES

APPENDIX A Post-Closure Inspection and Maintenance Checklist

1.0 GENERAL INFORMATION

Stella-Jones Corporation (Stella-Jones) acquired Baldwin Pole & Piling Co., Inc. (Baldwin Pole) in July of 2023. Stella-Jones will be providing the required activities in the facility RCRA Post-Closure Permit.

This plan describes the activities that will be performed at this site during the post-closure care period. These activities will include: routine care and maintenance of the closed regulated unit and groundwater monitoring system; groundwater monitoring activities; and reporting and other activities required during the post-closure period.

Baldwin Pole certified closure of a surface impoundment in 1987. The required 30-year post-closure care period began when the units were certified as closed on May 20, 1987; however, Baldwin Pole considered the post-closure period to run from the effective date of the initial RCRA permit, December 15, 1989, until December 15, 2019, unless extended or shortened by the Alabama Department of Environmental Management (ADEM). At the time of permit renewal, the facility will have completed more than 30 years of post-closure care. ADEM has indicated that the post-closure period will be extended until corrective action is complete.

2.0 SELECTION OF MAINTENANCE ACTIVITIES

The selection of maintenance activities is influenced by the type of the closed hazardous waste management unit (HWMU) and the method of closure. For preparation of this Post-Closure Plan, guidance was obtained from Alabama Administrative Code, Division 14, and EPA SW-968, “Permit Applicant’s Guidance Manual for the General Facility Standards of 40 CFR 264.”

The HWMU at this site was closed in accordance with an approved closure plan. The closure incorporated a low permeability cap (consisting of two feet of 10^{-7} cm/sec permeability clay), a geomembrane placed over the clay cap, a graded drainage layer, a protective top-soil layer, and a vegetative cover. The site was graded and drained to minimize surface infiltration of rainfall, to eliminate rainfall run-on, to control surface erosion, and to maximize evapotranspiration of infiltrated rainfall.

The following items were considered for inclusion as required maintenance activities:

Maintenance Item	Action/Discussion
Erosion Damage	Included.
Final Containment Structures	Not included; there are no structures.
Facility Monitoring Equipment	Not included; there is no facility monitoring equipment as this term is used. Groundwater monitoring equipment is discussed separately.
Security Devices	Not included, as there are no wastes exposed and no physical security should be required. The facility has security fences on the property lines to restrict access.
Vegetative Cover	Included.
Run-on, Run-off Control System	Included; under erosion control.
Leachate Collection, Detection, and Removal System	Not included; this was an unlined surface impoundment, therefore there is no leachate collection, detection, and removal system.

Maintenance Item	Action/Discussion
Gas Venting System	Not included; there is no gas venting system needed. The small quantity of waste remaining is not subject to rapid biological breakdown or chemical degradation resulting in significant gaseous product.
Groundwater Monitoring System	Included.
Fugitive Dust Control	Not included; due to the method of closure and use of the closed site, there is no need for a fugitive dust control system.
Crop Prohibitions	Not included; no crops will be grown on this site.
pH Control	Not included; there will be no pH control at this site.
Benchmark Integrity	Inspections included. The benchmarks used in the survey of this site were set by the Coast and Geodetic Survey. In the event of their destruction, sufficient additional benchmarks are available to re-establish locations as necessary.

The additional requirements listed below, applicable to owners/operators of surface impoundments closed with wastes in place, have also been investigated for inclusion in the maintenance checklist:

Maintenance Item	Action/Discussion
Procedures for Maintenance & Repair of Final Cover	Included.

Maintenance Item	Action/Discussion
Procedures for Maintenance & Monitoring of Leak Detection System	Not included; there is no leak detection system.
Procedures for Maintenance & Monitoring of Groundwater Monitoring System	Included.
Procedures for Sampling, Analysis, & Quality Control	Included.
Procedures for Preventing Run-on/Run-off and Final Cover Damage	Included.

3.0 FREQUENCY OF ACTIVITIES

The site will be inspected on a quarterly basis for items requiring maintenance or care, as detailed in the Post-Closure Care Instructions and Checklist presented later in this plan. Maintenance and care will be provided on an as-needed basis, based on observations made during the inspections.

Groundwater monitoring activities will be conducted on a frequency as specified in paragraph 7.0 of this section, Groundwater Monitoring, or as specified in the Part B Post-Closure Permit.

4.0 POST-CLOSURE PLAN CUSTODY AND CONTROL

Stella-Jones Corporation, P. O. Box 768, Bay Minette, Alabama 36507, will maintain one copy of this plan at its office on Hwy. 31 North, Bay Minette, Alabama. The Plant

Manager will be responsible for maintaining and updating this Post-Closure Plan during the post-closure care period. The facility phone number is (251) 937-2141. The Plant Manager will also ensure that any and all changes to this plan will be submitted to the Chief, Hazardous Waste Branch, Land Division, Alabama Department of Environmental Management, P. O. Box 301463, Montgomery, Alabama 36130-1463. These changes will be forwarded via U.S. Postal Service, Certified Mail, Return Receipt Requested, or by other means which allow for documentation of delivery.

5.0 NOTICES REQUIRED FOR DISPOSAL FACILITIES

The required notices for disposal facilities have been filed. Copies of notices and plats are found in Exhibit 9 of the Renewal Application for the Post-Closure Permit.

6.0 POST-CLOSURE INSTRUCTIONS AND CHECKLIST

6.1 General

These instructions are to provide guidance for the post-closure care and maintenance of the closed surface impoundment and groundwater monitoring system. Care and maintenance of these items is essential to ensure proper functioning of these systems. A checklist for recording inspection and maintenance activities during the post-closure period is found in Appendix A of this plan.

6.2 Care and Maintenance Instructions

The area of the closed surface impoundment will be inspected quarterly, and following any storms that may have resulted in significant erosion. The checklist will be used to record all findings of the inspection and to record corrective actions taken.

The design of the closure system of these impoundments incorporated the placement of a highly impervious clay cap over the impoundment, the placement of a geomembrane and drainage layer with a cover layer of soil, graded and drained to minimize surface infiltration of rainfall, to eliminate rainfall run-on, and to control surface erosion. The vegetative cover of native grasses was established to maximize evapotranspiration of infiltrated rainfall and to control erosion. The more than 30 years of successful post-closure care has demonstrated that the natural grasses do not require the application of fertilizer.

The following activities associated with the proper care of the facility will be performed at the frequency shown:

1. Bimonthly (May through October): The grass within the security fence around the site will be mowed.

2. Quarterly: The site will be inspected in each quarter for items requiring maintenance or further care. The following is a list of areas or items to be inspected and a list of proper corrective actions to be taken if deficiencies are found:

A. Final Cover and Cap

If the final cover shows signs of erosion, the area will be brought back to grade using topsoil. The affected area will be reseeded, fertilized, and covered with hay to prevent short term erosion.

If erosion or subsidence has affected the cap, it will be refilled with soil of the same type and will be recompacted using pneumatic tamping equipment. With this type of waste, subsidence is not likely. The final cover and vegetation will be restored as above.

If the vegetation is not dense enough to provide runoff protection, the affected area will be disked to a 3" depth, fertilized, and reseeded.

The many years of post-closure care already completed has shown that subsidence, erosion of the cap, or loss of vegetative cover is not an issue. Mowing is the only maintenance that has been required since the vegetative cover became well established.

The drainage system, consisting of ditches around the closed impoundment, will be checked to ensure that free flow of rainfall off of the site will occur. Cap elevation ensures that run-on is prevented.

B. Monitoring Wells

The quarterly inspection of the monitoring wells will consist of inspection of the condition of the outer protective casing or cover, lock, concrete surface collar and the well casing.

Locks will be lightly lubricated as needed. Protective outer covers or casings will be painted if rusted. Care must be taken to ensure that these activities do not contaminate the wells.

The concrete surface collar will be repaired or replaced if broken or badly cracked.

The well casing will be inspected for cracks or other damage. Other internal deterioration such as silting, incrustation, and plugging may become apparent during sampling events. In the event that these problems progress to a point that interferes with the functioning of the monitoring well, appropriate well maintenance and rehabilitation activities will be carried out. In the event that maintenance and rehabilitation procedures do not return the well to a functioning condition, the well will be abandoned. If any well must be abandoned, a new well will be installed.

If the measurement of the total depth of a well indicates that more than 12 inches of sediment is in the bottom of a well, a surface pump with a suction pipe capable of reaching the bottom of the well will be used to remove the silt accumulation. Smaller amounts of silt are acceptable provided that reasonably clear samples are produced. If silt removal doesn't eliminate

problems of sample turbidity, then the well will be scheduled for redevelopment prior to the next sampling event. Siltation has not been a problem in the many years of post-closure care already completed, so it is not anticipated in the future.

C. Benchmark

The Coast and Geodetic Survey benchmark in the right-of-way will be inspected quarterly for any evidence of erosion, subsidence, or other damage. This benchmark is not owned or controlled by SJC. ADEM will be contacted if any significant issues are discovered.

7.0 GROUNDWATER MONITORING

This section describes the groundwater monitoring activities to be conducted at this site during the post-closure care period. The site presently remains in a corrective action monitoring mode, with analyses being performed for site-specific constituents for which the background values are below the present method detection limits.

Post-closure care groundwater monitoring activities during the corrective action period will consist of sampling the three (3) compliance point wells, consisting of wells MW-2A, MW-3A, and MW-4AR; two (2) effectiveness wells, P-2 and MW-8R; and four (4) boundary wells, MW-10, P-1R, P-6, and TP-9. The location of these wells is shown on the site drawing found in Exhibit 2 of the Renewal Application for the Post-Closure Permit.

If the site was not in a corrective action mode, only the three compliance point wells and a background well would be required to be monitored. However, the site anticipates being in the corrective action mode for an extended period of time. The costs for conducting groundwater monitoring during the corrective action period are included in the Corrective Action Cost Estimate. Although the cost for monitoring is discussed in the Post-Closure Cost Estimate, all of the costs are included in the Corrective Action Cost Estimate and associated financial assurance.

7.1 Sampling and Analysis Procedures

The groundwater monitoring to be conducted will be performed in accordance with the facility Groundwater Sampling and Analysis Plan. A copy of the plan is found in Exhibit 14 of the Renewal Application for the Post-Closure Permit.

7.2 Wells to be Sampled

The compliance point wells and the effectiveness wells will be sampled on a semiannual basis, with the boundary wells on an annual basis.

7.3 Monitoring Parameters

The field parameters and laboratory analytes are described in the separate Groundwater Sampling and Analysis Plan and the issued Post-Closure Permit.

7.4 Background Determination

Monitoring conducted during the many years of already completed post-closure care confirms that background values for the site-specific monitoring parameters are below present method detection limits. Any quantifiable levels of the monitored parameters will be considered as evidence of contamination.

7.5 Evaluation of Sampling Results

Stella-Jones anticipates remaining in a corrective action monitoring mode during the next post-closure permit cycle. Since the background concentration of the constituents of concern is below the method detection limits, statistical comparisons of monitoring results to background values are not possible, or necessary. Any positive finding is considered to be an indication of contamination.

A positive finding in a boundary well will result in a resampling within 30 days of receipt of the initial results. The resampling will consist of two separate and discrete samples (i.e., second sample taken after repurging the well). If the resampling does not confirm the presence of contamination, detection monitoring of the monitoring wells will be resumed. If the resampling confirms the presence of contamination, Stella-Jones will notify ADEM in writing within seven days.

Within 30 days of notification to ADEM, Stella-Jones will develop a plan to determine if the horizontal extent of the plume has actually migrated to the location of the boundary well. This may include: additional monitoring with

sample splits going to different labs; well integrity testing; investigation of malicious tampering; and installation of a new well.

If a release is ultimately confirmed, Stella-Jones will install a new boundary well at a location further removed from the extent of the plume. At that time, the corrective action system will be reevaluated to determine its effectiveness in containing the contaminant plume. During the more than three decades of post-closure care, there have been no indications of plume expansion, and natural hydrogeology ensures that the plume is stable.

Constituent concentrations in all of the compliance point wells have declined substantially. Groundwater sampling at the compliance point wells will be continued for the remainder of the post-closure period, or until such time as cessation of activities is approved by ADEM.

8.0 DETERMINATION OF GROUNDWATER FLOW RATE AND DIRECTION

Annually, the flow rate and direction of groundwater flow will be determined from static water level measurements and estimated permeabilities, porosities, and conductivities. This information will be presented to ADEM in the Corrective Action Effectiveness Report submitted annually as specified in the Post-Closure Permit.

9.0 POST-CLOSURE COMPLETION ACTIVITIES

In accordance with ADEM Rule 335-14-5-.07(11), once ADEM concludes that the post-closure period has been completed, Stella-Jones will submit a certification that the post-

closure care period was performed in accordance with this Post-Closure Plan. This certification will be signed by the Plant Manager of Stella-Jones and by an independent registered professional engineer.

The certification, and any documentation supporting it, will be submitted to the Director of the Alabama Department of Environmental Management within 60 days after completion of the post-closure care period.

STELLA-JONES CORPORATION
BAY MINETTE, ALABAMA

HAZARDOUS WASTE FACILITY
POST-CLOSURE INSPECTION CHECKLIST

Inspector: _____ Date: _____

Time: _____

Monitoring Well System: Inspect surface slabs for cracking. Check protective standpipe, covers and locks for rust and serviceability. Inspect well casing for cracks or other defects. Correct any deficiencies found and note type of corrective action and date below.

Well Number	Condition	Corrective Action
MW-1		
MW-2A		
MW-3A		
MW-4AR		
B-1		
B-3		
MW-5		
MW-6 & MW-12		
MW-7		
MW-8R & MW-10		
MW-11 & P-5		
P-1R		
P-2		
P-6		
TP-9		

Cap and Cover System: Look for evidence of erosion, cracking, subsidence, ponding, or run-on. Inspect grass cover for dead spots or poor coverage. Check drainage channels for erosion, sedimentation, or blockage. Correct any deficiencies found and note type of corrective action and date below.

Item	Condition	Corrective Action
Cap		
Drainage Channels		

Benchmark: Look for evidence of erosion, subsidence, or other damage. This benchmark is not owned by SJC and is in the right-of-way. Contact ADEM if significant issues are discovered.

Item	Condition	Corrective Action
Benchmark		

NOTES

EXHIBIT 6

National Flood Hazard Layer FIRMette

FEMA

87°45'42"W 30°53'43"N



87°45'5"W 30°53'13"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN — Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 — Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 2/15/2024 at 10:20 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

EXHIBIT 7

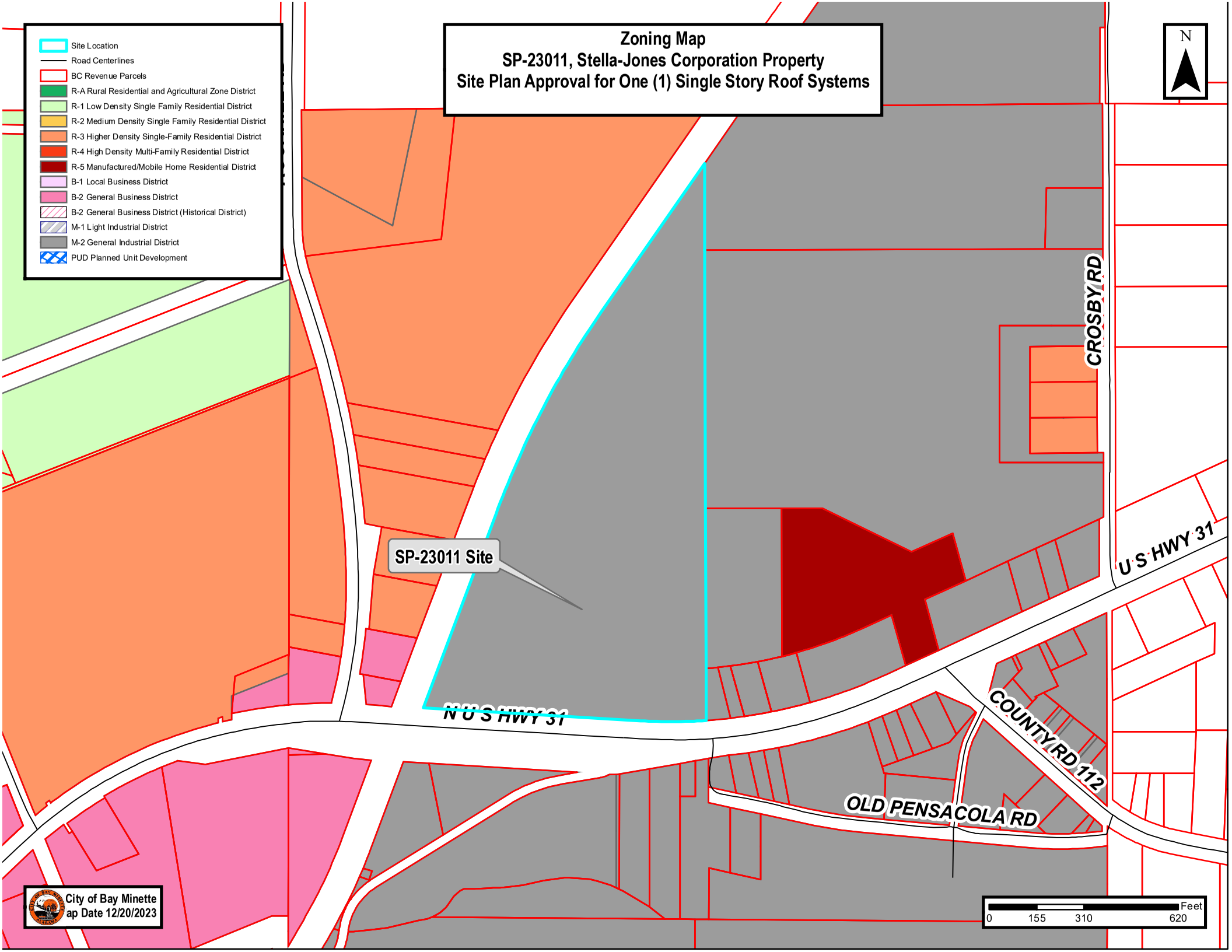
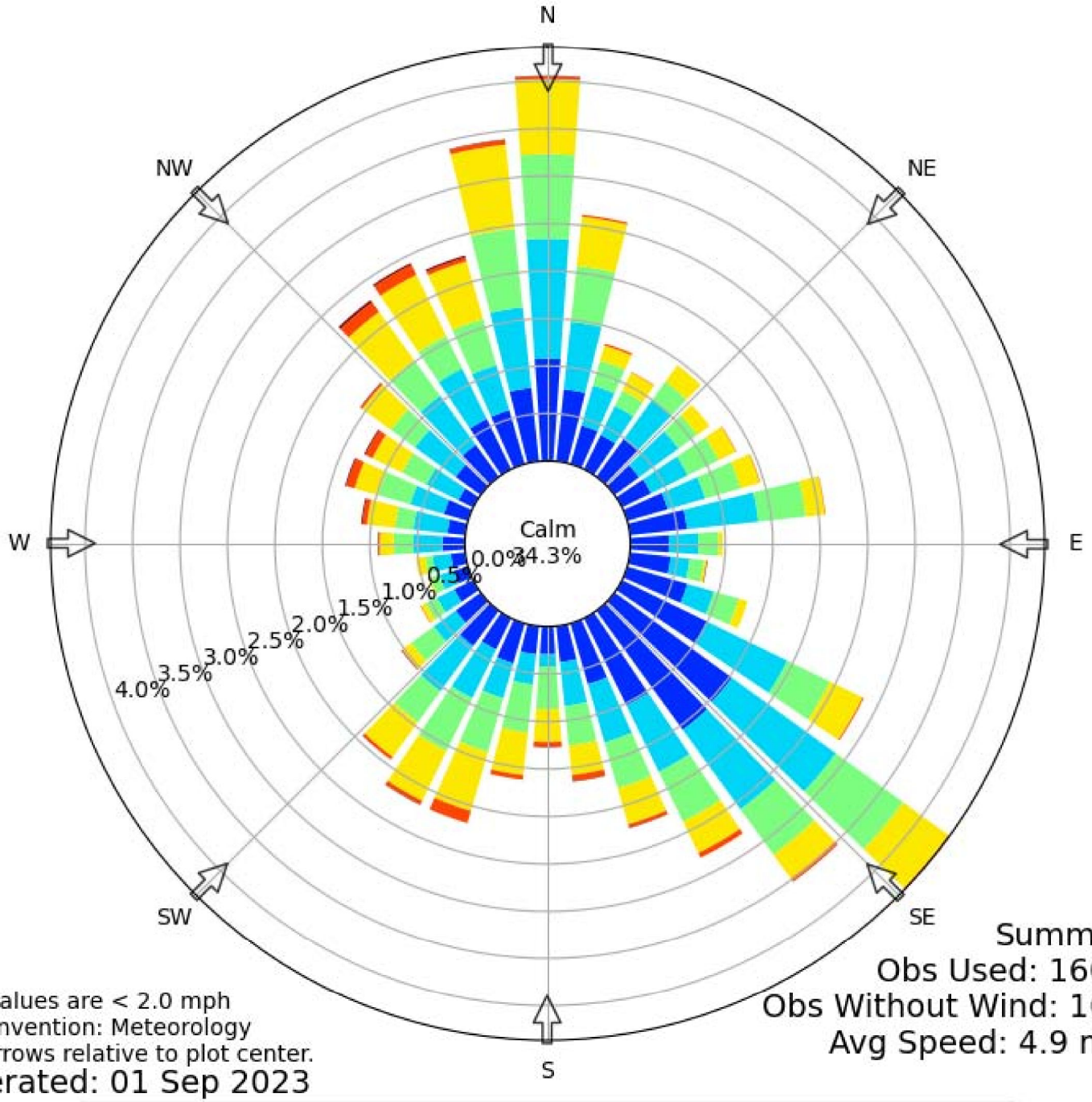

Zoning Map
SP-23011, Stella-Jones Corporation Property
Site Plan Approval for One (1) Single Story Roof Systems
Site Location
Road Centerlines
BC Revenue Parcels
R-A Rural Residential and Agricultural Zone District
R-1 Low Density Single Family Residential District
R-2 Medium Density Single Family Residential District
R-3 Higher Density Single-Family Residential District
R-4 High Density Multi-Family Residential District
R-5 Manufactured/Mobile Home Residential District
B-1 Local Business District
B-2 General Business District
B-2 General Business District (Historical District)
M-1 Light Industrial District
M-2 General Industrial District
PUD Planned Unit Development
N
SP-23011 Site
CROSBY RD
U S HWY 31
N U S HWY 31
COUNTY RD 112
OLD PENSACOLA RD
City of Bay Minette
ap Date 12/20/2023
Feet
0
155
310
620

EXHIBIT 8

Windrose Plot for [1R8] Bay Minette
Obs Between: 14 Oct 2021 08:55 AM - 01 Sep 2023 01:55 AM America/Chicago



Summary
Obs Used: 16066
Obs Without Wind: 1670
Avg Speed: 4.9 mph

Calm values are < 2.0 mph
Bar Convention: Meteorology
Flow arrows relative to plot center.
Generated: 01 Sep 2023

Wind Speed [mph]
2 - 4.9 | 5 - 6.9 | 7 - 9.9 | 10 - 14.9 | 15 - 19.9 | 20+

EXHIBIT 9

Stella-Jones Corporation

Survey Plat and Administrative Controls

Exhibit 9

Post-Closure Permit Renewal Application

March 1, 2024

Stella-Jones Corporation (Stella-Jones) acquired the Baldwin Pole & Piling Co., Inc., facility in July of 2023. The documents included in this Exhibit continue to apply to the property under Stella-Jones ownership.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

JUN 22 1987

4WD-RM

Mr. Thomas A. McMillan, President
Baldwin Pole and Piling Company, Inc.
P. O. Box 768
Bay Minette, Alabama 36507

RE: Certification of Closure
Baldwin Pole and Piling Company, Inc.
EPA I.D. No. ALD 031 490 501

Dear Mr. McMillan:

The Environmental Protection Agency (EPA) is in receipt of your May 28, 1987, Certification of Closure and the letter of May 26, 1987, from your consultant, H. M. Rollins Company, certifying that the facility has been closed in accordance with the approved closure plan. Upon examination of these certifications, EPA has determined that the units have been closed in accordance with the approved closure plan and with 40 CFR 265 Subpart G. Since the facility has been closed as a landfill, post-closure care must be conducted in accordance with 40 CFR 265 Subpart G until a permit for these activities has been issued.

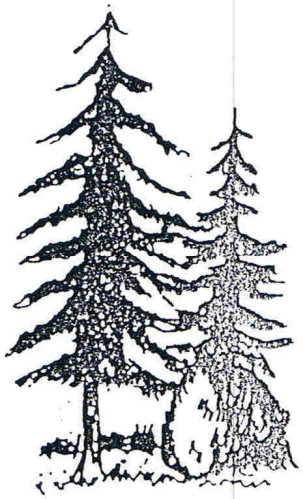
If you have any questions in this matter, please contact Mr. Patrick Abell, of my staff at (404)347-3433.

Sincerely yours,

James H. Scarbrough

James H. Scarbrough, P.E., Chief
Residuals Management Branch
Waste Management Division

cc: Daniel E. Cooper, Alabama Department of Environmental Management
James W. Neal, Alabama Department of Environmental Management



HMR
H.M. Rollins Company

P.O. Box 3471
Gulfport, MS 39505
601/832-1738

CERTIFIED MAIL RETURN RECEIPT REQUESTED - P 292 702 999

May 26, 1987

Mr. Daniel E. Cooper, Chief
Land Division
Alabama Department of Environmental Management
1751 Federal Drive
Montgomery, Alabama 36130

RE: Closure Certification for
Baldwin Pole and Piling Company, Inc.
ALD 031 490 501

Dear Sir:

The following is to certify that the hazardous waste management surface impoundment at the above referenced facility has been closed in accordance with the specifications of the closure plan approved on October 2, 1986.

Attached for your information are:

1. A narrative description of closure activities after sludge removal to completion.

2. Laboratory tests of the clay used for the cap material and sand used for the drainage layer material.

3. Permeability results of four undisturbed samples taken from the completed cap.

CERTIFIED MAIL RETURN RECEIPT REQUESTED - P 292 702 999
Mr. Daniel E. Cooper, Chief
Land Division
Alabama Department of Environmental Management
RE: Closure Certification for
Baldwin Pole and Piling Company, Inc.
ALD 031 490 501

4. As built contour and cross section drawings including drainage and anchor trench system.

5. Laboratory analysis of the stabilized sludge and impoundment bottom soils.

6. Deed notice.

7. Surveyed plat of impoundment location.

Closure was completed by the approved extension deadline of May 20, 1987. Our certification has been delayed awaiting the written laboratory results of the final cap permeabilities that were requested by the State and EPA.

If you have any questions please let me know.

Baldwin Pole and Piling Company, Inc., requests release of the funds from their closure trust fund as soon as possible. These funds are needed to pay for the completed closure activities.

Sincerely,

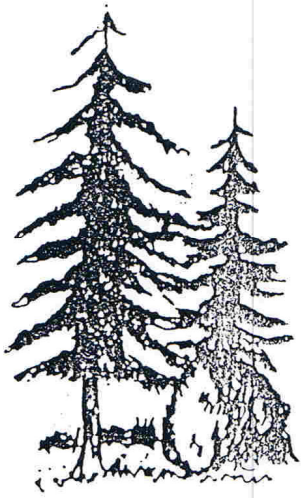
H. M. Rollins, P.E.
Alabama Registration Number 15617

HMR/sl

Enclosures

cc: Mr. Thomas A. McMillan, President
Baldwin Pole & Piling Company, Inc.

Mr. James H. Scarbrough, P.E., Chief
Residuals Management Branch
Waste Management Division
U.S. EPA Region IV
CERTIFIED MAIL RETURN RECEIPT REQUESTED - P 292 703 000



HMR
H.M. Rollins Company

P.O. Box 3471
Gulfport, MS 39505
601/832-1738

CERTIFIED MAIL RETURN RECEIPT REQUESTED - P 292 703 000

May 26, 1987

Mr. James H. Scarbrough, P.E., Chief
Residuals Management Branch
Waste Management Division
U. S. EPA Region IV
345 Courtland Street, N.E.
Atlanta, Georgia 30365

RE: Closure Certification for
Baldwin Pole and Piling Company, Inc.
ALD 031 490 501

Dear Sir:

The following is to certify that the hazardous waste management surface impoundment at the above referenced facility has been closed in accordance with the specifications of the closure plan approved on October 2, 1986.

Attached for your information are:

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3. Permeability results of four undisturbed samples taken from the completed cap.

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Mr. James H. Scarbrough, P.E., Chief
Residuals Management Branch
Waste Management Division
U. S. EPA Region IV
RE: Closure Certification for
Baldwin Pole and Piling Company, Inc.
ALD 031 490 501

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H. M. Rollins, P.E.
Alabama Registration Number 15617

HMR/sl

Enclosures

cc: Mr. Thomas A. McMillan, President
Baldwin Pole & Piling Company, Inc.

Mr. Daniel E. Cooper, Chief
Land Division
Alabama Department of Environmental Management
CERTIFIED MAIL RETURN RECEIPT REQUESTED - P 292 702 999

ATTORNEYS AT LAW
P. O. BOX 1140
BAY MINETTE, ALABAMA 36507

STATE OF ALABAMA

COUNTY OF BALDWIN

NOTICE OF USE OF LAND FOR HAZARDOUS WASTE MANAGEMENT

Notice is hereby given that Baldwin Pole and Piling Company, Inc., is the owner of the land described in Exhibit "A", attached hereto and made a part hereof; that a disposal facility is located on said land; that the land has been used to manage hazardous waste; and that its use is restricted under the provisions of Resource Conversation and Recovery Act, as amended, 42 U.S.C., 6901, et seq., and the Regulations promulgated thereunder.

DATED this 16 day of SEPT, 1985.

BALDWIN POLE & PILING COMPANY, INC.

BY: D. A. McMillan
Its President

ATTEST:

M. D. Easley Jr.
Its Secretary

STATE OF ALABAMA
BALDWIN COUNTY
I certify that this instrument was filed on
SEP 16 1985 2:30 PM
and that no tax was collected. Recorded in RP
Book 226
Page 1001-1002
Judge of Probate
R.P. $1.00 Index & By

REAL 226 PAGE 1001

STATE OF ALABAMA

COUNTY OF BALDWIN

I, the undersigned authority, a Notary Public in and for said County and State, do hereby certify that D. A. McMillan and M. D. Easley, Jr., whose names as President and Secretary, respectively, of Baldwin Pole & Piling Company, Inc., are signed to the foregoing instrument, and who are known to me, acknowledged before me on this day that, being informed of the contents of said instrument, they executed the same voluntarily for and as the act of said corporation on the day the same bears date.

GIVEN under my hand and seal this the 16th day of September, 1985.

Sue H. McDowell
Notary Public

NOTARY PUBLIC STATE AT LARGE

THIS PAGE MAY NOT MICROFILM LEGIBLY

THIS INDENTURE, Made and entered into by and between A. K. EASLEY and LULA LEE EASLEY, His Wife, hereinafter referred to as parties of the first part, and the BALDWIN POLE AND PILING COMPANY, a partnership composed of A. K. EASLEY, A. T. EASLEY and M. T. EASLEY, hereinafter referred to as party of the second part, WITNESSETH:

That for and in consideration of the sum of One Dollar ($1.00) and other good and valuable consideration this day cash in hand paid to parties of the first part by party of the second part, receipt whereof is hereby acknowledged, parties of the first part have granted, bargained, sold and conveyed and by these presents do hereby GRANT, BARGAIN, SELL AND CONVEY unto the party of the second part, the following described real estate situated in Baldwin County, Alabama, to-wit:

Commence at the Northeast corner of the West Half of the Northeast Quarter of Section 10, Township 2 South, Range 3 East, and thence South along the East line of said West Half of Northeast Quarter a distance of 208.11 feet to a point in the Easterly right of way line of the L. & N. Railroad for a point of beginning; thence continue South along the said East line of West Half of Northeast Quarter 1850 feet to a point in the Northerly right of way line of State Road Number 31; thence South 87 16 minutes West and with said Northerly right of way line of State Road, 252 feet to a concrete right of way marker; thence North 86 56 minutes West and with said Northerly right of way line of State Road, 671.11 feet to a concrete right of way marker in the Easterly right of way line of the L. & N. Railroad; thence North 16 0 minutes East and with said Easterly right of way line of Railroad, 749 feet to a point; thence by a curve to the right (the radius of the curve being 2865 feet) and with said right of way line of Railroad, 727 feet to a point; thence North 32 33 minutes East and with said right of way line of Railroad, 561 feet to the point of beginning; containing an area of 22.2 acres, more or less, in the West Half of the Northeast Quarter of Section 10, Township 2 South, Range 3 East.

Together with all and singular, the rights, hereditaments, tenements, improvements, easements, hereditaments and appurtenances to the same belonging or in any wise appertaining.

TO HAVE AND TO HOLD unto the said party of the second part, its successors and assigns, FOREVER. And the said parties of the first part, for themselves and their heirs, executors and administrators, hereby covenant and warrant with and unto the said party of the second part, its successors and assigns, that they are seized of an indefeasible estate in fee simple in and to all of the property hereinabove conveyed; that the same is free from all liens and encumbrances; that they have a good right to sell and convey the same as aforesaid; that they will guarantee the peaceable possession thereof; and that they will and their heirs, executors and administrators shall forever warrant and defend the same unto the said party of the second part, its successors and assigns, against the lawful claims of all persons whomsoever.

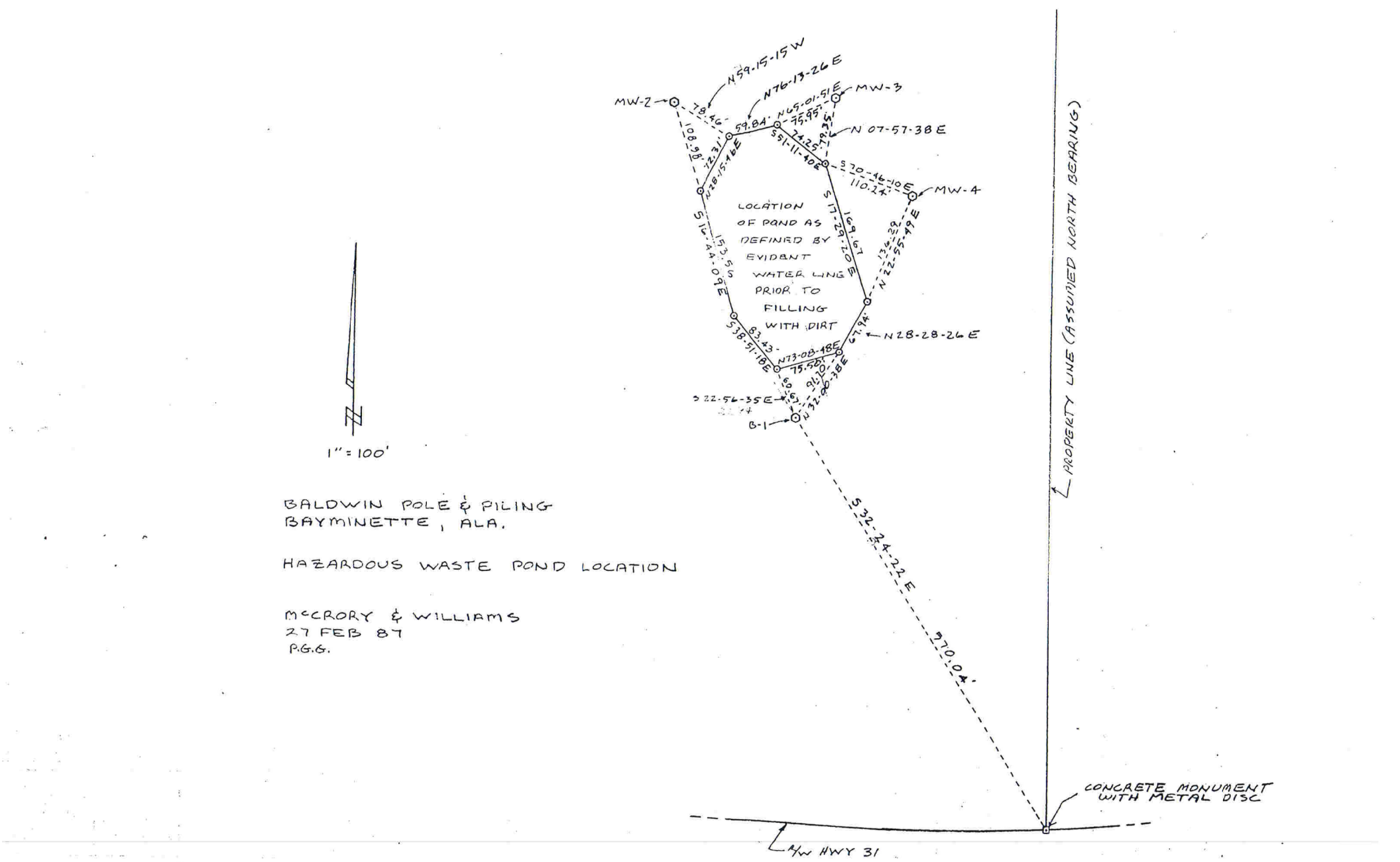
IN WITNESS WHEREOF, the parties of the first part hereunto set their hands and seals on this the 20th day of December, 1956.

A. K. Easley (SEAL)

Lula Lee Easley (SEAL)

THIS PAGE MAY NOT MICROFILM LEGIBLY

226 PAGE 1002



BALDWIN POLE & PILING
BAYMINETTE, ALA.

HAZARDOUS WASTE POND LOCATION

McCRORY & WILLIAMS
27 FEB 87
P.G.G.

120.020.019

ADEM

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
POST OFFICE BOX 301463 36130-1463 ♦ 1400 COLISEUM BLVD. 36110-2059
MONTGOMERY, ALABAMA
WWW.ADEM.STATE.AL.US
(334) 271-7700

JAMES W. WARR
DIRECTOR
(Acting)

BOB RILEY
GOVERNOR

Facsimiles: (334)
Administration: 271-7950
General Counsel: 394-4332
Air: 279-3044
Land: 279-3050
Water: 279-3051
Groundwater: 270-5631
Field Operations: 272-8131
Laboratory: 277-6718
Mining: 394-4326
Education/Outreach: 394-4383

January 10, 2005

CERTIFIED MAIL # 7003 3110 0004 0269 3124
RETURN RECEIPT REQUESTED

Mr. T.A. McMillan
Baldwin Pole & Piling Co., Inc.
P.O. Drawer 758
Bay Minette, Alabama 36507

RE: Survey Plat and Deed Notification
Baldwin Pole & Piling Co., Inc.
Bay Minette, Baldwin County
EPA I.D. No. ALD 031 490 501

Dear Mr. McMillan:

The Alabama Department of Environmental Management (ADEM) has completed its review of the aforementioned documents, dated December 27, 2004. Based upon this review, the referenced survey plat and deed notification appear to be in accordance with conditions V.B.5 and V.B.6 of Modification No. 1 of Baldwin Pole & Piling Co., Inc.'s AHWMMA Post-Closure Permit. Within 180 days following the effective date of Modification No.1, the facility shall institute security measures as described in condition V.B. 7 of the permit.

If there are any questions regarding this matter please contact Casey Cooper, Industrial Hazardous Waste Branch, at (334) 394-4330.

Sincerely,

Vernon H. Crockett

Vernon H. Crockett, Chief
Engineering Services Section
Industrial Hazardous Waste Branch
Land Division

VHC/cc/set:Z:

File: Baldwin Pole & Piling Company, Inc./ALD 031 490 501/Baldwin County/H

STATE OF ALABAMA

COUNTY OF BALDWIN

NOTICE OF USE OF LAND FOR HAZARDOUS WASTE MANAGEMENT

Notice is hereby given that Baldwin Pole and Piling Company, Inc., is the owner of the land described in Exhibit "A", attached hereto and made a part hereof; that a disposal facility is located on said land; that the land has been used to manage hazardous waste; and that its use is restricted under the provisions of Resource Conversation and Recovery Act, as amended, 42 U.S.C., 6901, et seq., and the Regulations promulgated thereunder.

DATED this 16 day of SEPT, 1985.

BALDWIN POLE & PILING COMPANY, INC.

BY: T A McMillan
Its President

ATTEST:

M S Easley Jr
Its Secretary

STATE OF ALABAMA,
BALDWIN COUNTY
I certify that this instrument was filed on
SEP 16 1985 2:30 PM
and that no tax was collected. Recorded in RP
Book 226
Page 1001-1002
Judge of Probate
By

REAL 226 PAGE 1001

STATE OF ALABAMA

COUNTY OF BALDWIN

I, the undersigned authority, a Notary Public in and for said County and State, do hereby certify that D. A. McMillan and M. S. Easley, Jr., whose names as President and Secretary, respectively, of Baldwin Pole & Piling Company, Inc., are signed to the foregoing instrument, and who are known to me, acknowledged before me on this day that, being informed of the contents of said instrument, they executed the same voluntarily for and as the act of said corporation on the day the same bears date.

GIVEN under my hand and seal this the 16th day of September, 1985.

Sue H. McDowell
Notary Public

NOTARY PUBLIC
STATE OF ALABAMA AT LARGE

THIS INDENTURE, made and entered into by and between A. K. EASLEY and LULA LEE EASLEY, his wife, hereinafter referred to as parties of the first part, and the BALDWIN POLE AND PILING COMPANY, a partnership composed of A. K. EASLEY, A. T. EASLEY and M. T. EASLEY, hereinafter referred to as party of the second part, WITNESSETH:

That for and in consideration of the sum of One Dollar ($1.00) and other good and valuable consideration this day cash in hand paid to parties of the first part by party of the second part, receipt whereof is hereby acknowledged, parties of the first part have granted, bargained, sold and conveyed and by these presents do hereby GRANT, BARGAIN, SELL AND CONVEY unto the party of the second part, the following described real estate situated in Baldwin County Alabama, to-wit:

Commence at the Northeast Corner of the West Half of the Northeast Quarter of Section 10, Township 2 South, Range 3 East, and measure South along the East line of said West Half of Northeast Quarter a distance of 208.4 feet to a point in the Easterly right of way line of the L. & N. Railroad for a point of beginning, thence continue South along the said East line of West Half of Northeast Quarter 1850 feet to a point in the Northerly right of way line of State Road Number 31. Thence South 87° 16 minutes West and with said Northerly right of way line of State Road, 252 feet to a concrete right of way marker. Thence North 88° 56 minutes West and with said Northerly right of way line of State Road, 674.4 feet to a concrete right of way marker in the Easterly right of way line of the L. & N. Railroad, thence North 18° 0 minutes East and with said Easterly right of way line of Railroad, 739 feet to a point. Thence by a curve to the right, (The radius of the curve being 2865 feet) and with said right of way line of Railroad, 727 feet to a point, thence North 32° 33 minutes East and with said right of way line of railroad, 581 feet to the point of beginning, containing an area of 22.2 acres, more or less, in the West Half of the Northeast Quarter of Section 10, Township 2 South, of Range 3 East.

Together with, all and singular, the rights, benefits, privileges, improvements, tenements, hereditaments and appurtenances unto the same belonging or in any wise appertaining.

TO HAVE AND TO HOLD unto the said party of the second part, its successors and assigns, FOREVER. And the said parties of the first part, for themselves and their heirs, executors and administrators, hereby covenant and warrant with and unto the said party of the second part, its successors and assigns, that they are seized of an indefeasible estate in fee simple in and to all of the property hereinabove conveyed; that the same is free from all liens and encumbrances; that they have a good right to sell and convey the same as herein conveyed; that they will guarantee the peaceable possession thereof and that they will and their heirs, executors and administrators shall forever warrant and defend the same unto the said party of the second part, its successors and assigns, against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF, the parties of the first part hereunto set their hands and seals on this the 30th day of December, 1956.

A. K. Easley (SEAL)

Lula Lee Easley (SEAL)

THIS PAGE MAY NOT MICROFILM LEGIBLY

226 PAGE 1002

THIS PAGE MAY NOT MICROFILM LEGIBLY

Baldwin Pole & Piling Co., Inc.

"FROM THE FOREST TO THE LINE SINCE 1945"

P. O. Drawer 758
Bay Minette, Alabama 36507
Telephone 251-937-2141
Fax 251-937-1033

Penta & C.C.A.
Pressure Treated
Poles and Piling

December 27, 2004

CERTIFIED MAIL, RETURN RECEIPT REQUESTED-7004 1160 0001 0739 1240

Mr. Wm. Gerald Hardy, Chief
Land Division
Alabama Department of Environmental Management
P. O. Box 301463
Montgomery, AL 36130-1463

Re: AHWMMA Post-Closure Permit Modification
Baldwin Pole & Piling Co., Inc.
EPA ID No. ALD 031 490 501

Dear Mr. Hardy:

In accordance with conditions V.B.5 and V.B.6 of Modification 1 of our permit, effective September 30, 2004, we have prepared the required survey plat and deed notice. A copy of the survey plat and deed notice are enclosed. A copy of the plat was provided to the City of Bay Minette Planning and Zoning Board as indicated on the enclosed correspondence. A copy of this letter and all enclosures have been provided to EPA Region 4 as directed by our permit.

Our environmental consultants provided a draft of the language contained in the required note on the survey plat for approval by representatives of ADEM, and it was approved. Therefore, we believe that the enclosed materials satisfy the permit conditions referenced above.

In accordance with the requirements of ADEM Administrative Code 335-14-8-.02(2) and 335-14-8-.03(1)(k), we provide the following certification:

> "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed

to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

If you have any questions, please let me know.

Sincerely,

Thomas A. McMillan
President

HMR/nb

Enclosures

cc: EPA Region 4 (w/encl.)
H. M. Rollins Company, Inc. (w/o encl.)

File No. 040.010.005, Copy in 120.020.019

STATE OF ALABAMA

COUNTY OF BALDWIN

NOTICE OF LAND USE FOR HAZARDOUS WASTE MANAGEMENT

Notice is hereby given that Baldwin Pole & Piling Company, Inc., is the owner of the land described in Exhibit A attached hereto and made a part hereof; that the property is contaminated with hazard constituents of wood preservatives at concentrations that exceed residential guidelines; that future use of this property is restricted to industrial uses unless other uses are approved by the Alabama Department of Environmental Management; and that a survey plat indicating that the property is contaminated has been filed with the City of Bay Minette Planning and Zoning Department.

Dated this the 27 day of Dec., 2004.

BALDWIN POLE & PILING COMPANY, INC.

By: T Amcmillan
Its President

010 098

STATE OF ALABAMA

COUNTY OF BALDWIN

I, the undersigned authority, a Notary Public in and for said County and State, do hereby certify that Thomas A. McMillan, whose name as President of Baldwin Pole & Piling Company, Inc., is signed to the foregoing instrument, and who is known to me, acknowledged before me on this day that, being informed of the contents of said instrument, he executed the same voluntarily for and as the act of said corporation on the day the same bears date.

Given under my hand and seal this the 27 day of December, 2004.

NOTARY PUBLIC

Rachael W. Dolly
Notary Public
My Commission Expires:

State of Alabama, Baldwin County
I certify this instrument was filed and taxes collected on:

2004 December -28 8:16AM

Instrument Number 658018 Pages 3
Recording 9.00 Mortgage
Deed Min Tax
Index DP 5.00
Archive 5.00
Adrian T. Johns, Judge of Probate

THIS INSTRUMENT PREPARED BY:

TAYLOR D. WILKINS, JR. of
WILKINS, BANKESTER, BILES & WYNNE, P.A.
Attorneys at Law
Post Office Box 400
Bay Minette, Alabama 36507
251-937-7024

Instrument 859018 Page 2of 3

THIS INDENTURE, made and entered into by and between A. E. EASLEY and LULA LEE EASLEY, his wife, hereinafter referred to as parties of the first part, and the BALDWIN POLE AND PILING COMPANY, a partnership composed of A. E. EASLEY, A. T. EASLEY and M. T. EASLEY, hereinafter referred to as party of the second part, WITNESSETH:

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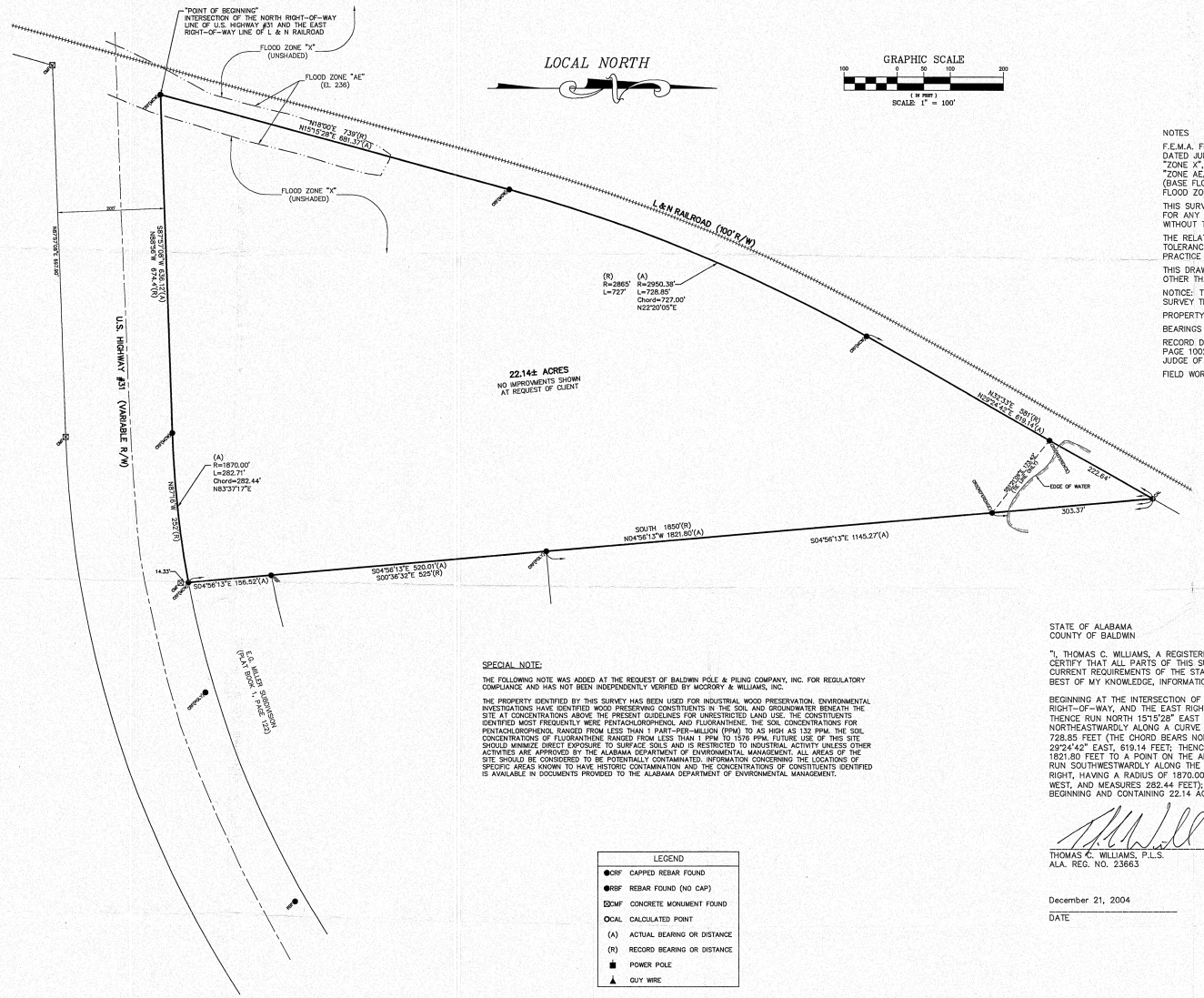
A. E. Easley (SEAL)

Lula Lee Easley (SEAL)

THIS PAGE MAY NOT BE LEGIBLY REPRODUCED

EXHIBIT A



NOTES

F.E.M.A. FLOOD INSURANCE RATE MAP NO. 01003C0244 K, COMMUNITY NO. 010004, DATED JUNE 17, 2002 INDICATES THAT THIS PROPERTY IS LOCATED IN: "ZONE X", (UNSHADED) AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOODPLAIN. "ZONE AE, (EL. 236) SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD. (BASE FLOOD ELEVATIONS DETERMINED). FLOOD ZONE(S) SCALED FROM THE AFOREMENTIONED FLOOD INSURANCE RATE MAP.

THIS SURVEY WAS PREPARED FOR THE CLIENT'S USE AND PURPOSE AS SHOWN. USAGE FOR ANY OTHER PURPOSE, REPRODUCTIONS (IN WHOLE OR IN PART) SHALL NOT BE MADE WITHOUT THE EXPLICIT WRITTEN PERMISSION OF THE SURVEYOR.

THE RELATIVE ERROR OF CLOSURE OF THIS SURVEY & PLAT IS WITHIN THE ALLOWABLE TOLERANCE FOR COMMERCIAL SURVEYS (1' IN 10,000') ACCORDING TO THE STANDARDS OF PRACTICE SET FORTH BY THE BOARD OF LICENSURE OF THE STATE OF ALABAMA.

THIS DRAWING DOES NOT REFLECT ANY TITLE, EASEMENT OR RIGHT-OF-WAY RESEARCH OTHER THAN WHAT IS READILY VISIBLE ON THE SURFACE OR PROVIDED BY THE CLIENT.

NOTICE: THERE MAY BE ADDITIONAL RESTRICTIONS THAT ARE NOT RECORDED ON THIS SURVEY THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THE COUNTY.

PROPERTY IS SUBJECT TO ZONING SETBACKS AND RESTRICTIONS OF RECORD.

BEARINGS BASED ON ALDOT PROJECT #7700-59

RECORD DIMENSIONS TAKEN FROM DEEDS RECORDED IN REAL PROPERTY BOOK 226, PAGE 1002 AND REAL PROPERTY BOOK 503, PAGE 1842 IN THE OFFICE OF THE JUDGE OF PROABTE, BALDWIN COUNTY, ALABAMA

FIELD WORK COMPLETED ON 11-15-2004.

SPECIAL NOTE:

THE FOLLOWING NOTE WAS ADDED AT THE REQUEST OF BALDWIN POLE & PILING COMPANY, INC. FOR REGULATORY COMPLIANCE AND HAS NOT BEEN INDEPENDENTLY VERIFIED BY MCCRORY & WILLIAMS, INC.

THE PROPERTY IDENTIFIED BY THIS SURVEY HAS BEEN USED FOR INDUSTRIAL WOOD PRESERVATION. ENVIRONMENTAL INVESTIGATIONS HAVE IDENTIFIED WOOD PRESERVING CONSTITUENTS IN THE SOIL AND GROUNDWATER BENEATH THE SITE AT CONCENTRATIONS ABOVE THE PRESENT GUIDELINES FOR UNRESTRICTED LAND USE. THE CONSTITUENTS IDENTIFIED MOST FREQUENTLY WERE PENTACHLOROPHENOL AND FLUORANTHENE. THE SOIL CONCENTRATIONS FOR PENTACHLOROPHENOL RANGED FROM LESS THAN 1 PART-PER-MILLION (PPM) TO AS HIGH AS 132 PPM. THE SOIL CONCENTRATIONS OF FLUORANTHENE RANGED FROM LESS THAN 1 PPM TO 1576 PPM. FUTURE USE OF THIS SITE SHOULD MINIMIZE DIRECT EXPOSURE TO SURFACE SOILS AND IS RESTRICTED TO INDUSTRIAL ACTIVITY UNLESS OTHER ACTIVITIES ARE APPROVED BY THE ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT. ALL AREAS OF THE SITE SHOULD BE CONSIDERED TO BE POTENTIALLY CONTAMINATED. INFORMATION CONCERNING THE LOCATIONS OF SPECIFIC AREAS KNOWN TO HAVE HISTORIC CONTAMINATION AND THE CONCENTRATIONS OF CONSTITUENTS IDENTIFIED IS AVAILABLE IN DOCUMENTS PROVIDED TO THE ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT.

LEGEND	
●CRF	CAPPED REBAR FOUND
●RBF	REBAR FOUND (NO CAP)
⊠CMF	CONCRETE MONUMENT FOUND
○CAL	CALCULATED POINT
(A)	ACTUAL BEARING OR DISTANCE
(R)	RECORD BEARING OR DISTANCE
■	POWER POLE
▲	GUY WIRE

STATE OF ALABAMA
COUNTY OF BALDWIN

"I, THOMAS C. WILLIAMS, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF ALABAMA, HEREBY CERTIFY THAT ALL PARTS OF THIS SURVEY AND DRAWING HAVE BEEN COMPLETED IN ACCORDANCE WITH THE CURRENT REQUIREMENTS OF THE STANDARDS OF PRACTICE FOR SURVEYING IN THE STATE OF ALABAMA TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF."

BEGINNING AT THE INTERSECTION OF THE NORTH RIGHT-OF-WAY LINE OF U.S. HIGHWAY #31, HAVING A VARIABLE RIGHT-OF-WAY, AND THE EAST RIGHT-OF-WAY LINE OF L & N RAILROAD, HAVING A 100 FOOT RIGHT-OF-WAY; THENCE RUN NORTH 15°15'28" EAST ALONG THE SAID EAST RIGHT-OF-WAY LINE, 681.37 FEET; THENCE RUN NORTHEASTWARDLY ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 2950.38 FEET, AN ARC LENGTH OF 728.85 FEET (THE CHORD BEARS NORTH 22°20'05" EAST, AND MEASURES 727.00 FEET); THENCE RUN NORTH 29°24'42" EAST, 619.14 FEET; THENCE DEPARTING THE SAID EAST RIGHT-OF-WAY LINE, RUN SOUTH 4°56'13" EAST, 1821.80 FEET TO A POINT ON THE AFOREMENTIONED NORTH RIGHT-OF-WAY LINE OF U.S. HIGHWAY #31; THENCE RUN SOUTHWESTWARDLY ALONG THE SAID NORTH RIGHT-OF-WAY LINE, AND ALONG THE ARC OF A CURVE TO THE RIGHT, HAVING A RADIUS OF 1870.00 FEET, AN ARC LENGTH OF 282.71 FEET (THE CHORD BEARS SOUTH 83°37'17" WEST, AND MEASURES 282.44 FEET); THENCE RUN SOUTH 87°57'08" WEST, 636.12 FEET TO THE POINT OF BEGINNING AND CONTAINING 22.14 ACRES, MORE OR LESS.

THOMAS C. WILLIAMS, P.L.S.
ALA. REG. NO. 23663

December 21, 2004
DATE

THIS SURVEY INVALID WITHOUT ORIGINAL SIGNATURE IN EMBOSSED SEAL

REVISED FROM DECEMBER 14, 2004 TO ADD SPECIAL NOTE.
REVISION

McCrory Williams
INCORPORATED
Engineers Surveyors

1024-B STANTON ROAD
DAPHNE, ALABAMA
36526
PHONE: (251) 625-2072
FAX: (251) 621-4040
EMAIL: daphne@mcwinc.com

Baldwin_Pole_Pile_A.dwg
R2504-1001

"BOUNDARY SURVEY"
FOR
BALDWIN POLE & PILING CO., INC.

SECTION 10, TOWNSHIP 2 SOUTH, RANGE 3 EAST, BALDWIN COUNTY, ALABAMA

SCALE: 1"=100'	DATE: Dec. 21, 2004	DRAWN BY: NAR	APPROVED BY:	SHEET 1 OF 1

EXHIBIT 10

STELLA-JONES CORPORATION
BAY MINETTE, ALABAMA

EPA ID NO. ALD 031 490 501

Post-Closure Cost Estimate

Prepared By:
H. M. Rollins Company, Inc.
P. O. Box 3471
Gulfport, Mississippi 39505
(228) 832-1738

March 1, 2024

Stella-Jones Corporation (Stella-Jones) is providing post-closure care for a surface impoundment closed as a RCRA landfill in accordance with the provisions of a RCRA Post-Closure Permit issued by the Alabama Department of Environmental Management (ADEM). The permit requires actions by the facility concerning both corrective actions and post-closure care. Regulations require the performance of post-closure care for a period of 30 years from the date the facility certifies closure in accordance with the approved closure plan. At the time of the preparation of this cost estimate, more than 30 years of post-closure care have been completed, but ADEM has required that the post-closure period be extended until corrective action is complete.

This revised post-closure cost estimate was prepared as part of the application for the third renewal of the facility post-closure permit. In addition to post-closure activities at the site, there are corrective actions ongoing which are associated with the remedial activities addressing the groundwater contamination present at the site. These corrective action activities, and costs, are in a separate Corrective Action Cost Estimate.

The post-closure care activities on this site include quarterly inspections of the closed impoundment, maintenance of the final cover on the impoundment (erosion control and repair, mowing of grass), and maintenance of site fencing. If the facility was not performing groundwater monitoring as part of corrective action activities, some limited groundwater monitoring would be required as part of post-closure care. Since the post-closure care period is linked to the completion of corrective action, all groundwater monitoring costs are included in the Corrective Action Cost Estimate. After corrective action and post-closure care is completed, a one-time expense for the certification of completion of these activities will be required.

The major costs associated with the post-closure activities are:

1. Quarterly inspections of the closed impoundment
2. Long-term monitoring
3. Final cover maintenance
4. Fence maintenance
5. Miscellaneous maintenance

The cost estimates for these categories are detailed below:

Quarterly Inspections - The closed impoundments and the monitoring well system will be inspected on a quarterly basis. An estimate of ½ of a technician man-day @ $65/hr, will be used for each inspection. Two of the quarterly inspections are covered in the labor cost associated with the semiannual groundwater monitoring being performed as part of corrective action, so only two inspections are included in post-closure care.

2 inspections/year X 4 hrs/inspection X $65/hr	=	$ 520

Long-term monitoring - Groundwater sampling of the monitoring well network is included in the Corrective Action Cost Estimate, so no costs are included in this estimate.

Final Cover Maintenance - After more than 30 years of post-closure care, the impoundment cap system has been demonstrated to be stable. Subsidence or erosion is not occurring. The native grass does not require fertilizing or other care. The only physical activity required is mowing of the grass. The cap will be mowed 10 times per year at a cost of $300 per cut.

Mowing: 10 cuts X $300/cut	=	$	3,000

Fencing Maintenance - Although no fencing is required around the closed impoundment, fencing was installed around the entire site as part of solid waste management unit corrective measures. The fence has required minimal maintenance since its installation. An estimate of maintenance expenses for this fence is included in this cost estimate. An estimate of 8 hours per year is used for the labor and a lump sum of $100 per year will be used for supplies.

8 hours X $25/man-hour	=	$	200
Supplies - lump sum: $100/year	=	$	100
Total Fencing Maintenance Costs		$	300

Miscellaneous Maintenance - It is estimated that 8 hours per year will be expended in miscellaneous maintenance activities, at an estimated rate of $25/hour including overhead. A lump sum estimate of $100/year is included for maintenance supplies. This maintenance includes minor repairs to the monitoring well covers, replacement of warning signs, and removal of any encroaching vegetation.

8 hours X $25/hour	=	$	200
Supplies - lump sum: $100/year	=	$	100
Total Miscellaneous Maintenance Costs		$	300

Site Closeout: Certification of Completion of Corrective Action and Post-Closure Care - At the conclusion of corrective action and the agreement by ADEM that Post-Closure Care can be terminated, a certification will be provided by Stella-Jones and an independent registered professional engineer that the post-closure and corrective action activities were conducted in accordance with the approved plans. It is anticipated that 24 hours of professional time at $150/hr will be required in this effort, or $3,750. To be conservative, a lump sum estimate of $5,000 will be used.

Certification of Completion of Post-Closure Care - lump sum	=	$	5,000

POST-CLOSURE COST SUMMARY

1. Quarterly inspections	$	520
2. Long-term Monitoring (included in Corrective Action)	$	0
3. Final Cover Maintenance	$	3,000
4. Fencing Maintenance	$	300
5. Miscellaneous Maintenance	$	300
6. Contingencies @ 10%	$	412
TOTAL ANNUAL POST-CLOSURE COST	$	4,532
30-YEAR POST-CLOSURE COST	**$**	**135,960**
SITE CLOSEOUT	**$**	**5,000**
GRAND TOTAL	**$**	**140,960**

EXHIBIT 11

Stella-Jones Corporation

Financial Assurance Mechanism

Exhibit 11

Post-Closure Permit Renewal Application

October 9, 2024

Stella-Jones Corporation (SJC) acquired the Baldwin Pole & Piling Co., Inc., facility in July of 2023. Two mechanisms are now used for financial assurance at the site. Post Closure care is guaranteed by the Financial Test. This amount is $140,960, as shown in Exhibit 10. The approved Financial Test for this amount is included in this exhibit. Corrective Action is guaranteed by a Standby Trust. This trust has been legally modified to change the grantor from Baldwin Pole & Piling Co., Inc. to SJC. This approved legal document and the original trust agreement are included in this exhibit. Finally, the balance sheet of the trust as of December 31, 2023 is included in this exhibit showing a balance of $926,356.47. This amount is greater than the required balance of $853,155 for the 15-year pay-in period as shown in Exhibit 22.

LANCE R. LEFLEUR
DIRECTOR

KAY IVEY
GOVERNOR

Alabama Department of Environmental Management
adem.alabama.gov

1400 Coliseum Blvd. 36110-2400 • Post Office Box 301463
Montgomery, Alabama 36130-1463
(334) 271-7700 • FAX (334) 271-7950

April 17, 2024

TRANSMITTED ELECTRONICALLY

Ms. Heather Gawne
Director of Environmental Compliance
Stella- Jones Corporation
1000 Cliff Mine Road
Pittsburgh, PA 15275

Re: Financial Test
Stella-Jones Corporation
Montevallo, Shelby County & Bay Minette, Baldwin County
USEPA I. D. Number ALD034046730 & ALD031490501

Dear Ms. Gawne:

The Department has reviewed the Financial Test, dated March 21, 2024, submitted by Stella-Jones Corporation, and has determined that the instrument appears to be adequate and in compliance with the facility's Permit and ADEM Admin. Code Rule 335-14-5-.08.

If questions should arise concerning this matter, please contact Marwa Sabeeh or Amber Hicks of the Engineering Services Section at (334) 274-4168/ (334) 271-5608 or marwa.sabeeh@adem.alabama.gov or amber.hicks@adem.alabama.gov.

Sincerely,

Austin R. Pierce

Austin R. Pierce, Chief
Engineering Services Section
Industrial Hazardous Waste Branch
Land Division

ARP/MS/AH

cc/ via email: ADEM: Jennifer McCord, Ricky Minor, Ben King

Stella-JoneS Inc.

SIÈGE SOCIAL
3100, boul. de la Côte-Vertu, bureau 300
Saint-Laurent (Québec) H4R 2J8
Téléphone: (514) 934-8666
Télécopieur: (514) 934-5327

HEAD OFFICE
3100 de la Côte-Vertu Boulevard, Suite 300
Saint-Laurent, Québec H4R 2J8
Telephone: (514) 934-8666
Fax: (514) 934-5327

March 21, 2024

Director, Alabama Department of Environmental Management
P.O. Box 301463 (Zip 36130-1463)
1400 Coliseum Boulevard (Zip 36110-2059)
Montgomery, Alabama

Dear Director,

I am the Chief Financial Officer of Stella-Jones Inc. (hereafter the "Parent"), 3100 de la Cote-Vertu Boulevard, Suite 300, Saint-Laurent, Quebec, Canada H4R 2J8, the parent company of Stella-Jones Corporation (hereafter the "Firm"). This letter is in support of this Firm's use of the financial test to demonstrate financial assurance, as specified in ADEM Admin. Code r. 335-14-5-.08 and 335-14-6-.08.

1. This Firm is the owner/operator of the following facilities for which financial assurance for post-closure care is demonstrated through the financial test specified in ADEM Admin. Code r. 335-14-5-.08 and 335-14-6-.08. The current post-closure cost estimates covered by the test are shown for each facility:

   Stella-Jones Corporation
   1051 Highway 25 South
   Montevallo, Alabama 35115
   EPA ID No. ALD034046730
   $US 3,437,798

   Stella-Jones Corporation
   1101 Highway 31 North
   Bay Minette, Baldwin County, Alabama 36507
   EPA ID No. ALD031490501
   $US 140,960

2. This Firm guarantees, through the corporate guarantee specified in Admin. Code r. 335-14-5-.08 and 335-14-6-.08, the post-closure costs at the following facilities owned or operated by subsidiaries of this Firm. The current cost estimates for the care so guaranteed are shown for each facility:

   Stella-Jones Corporation
   1051 Highway 25 South
   Montevallo, Alabama 35115
   EPA ID No. ALD034046730
   $US 3,437,798

Stella-Jones Corporation
1640 Marc Avenue
PO Box 1496
Tacoma, Washington 98401
EPA ID No. WAD008958357
$US 2,733,609

Stella-Jones Corporation
1101 Highway 31 North
Bay Minette, Baldwin County, Alabama 36507
EPA ID No. ALD031490501
$US 140,960

The Firm identified above is the direct or higher-tier Parent corporation of the owner or operator.

3. In states outside of Alabama, where U.S. EPA or some designated authority is administering financial responsibility requirements, this Firm, as owner or operator or guarantor, is demonstrating financial assurance for post-closure costs of the following facilities through the use of financial test and/or corporate guarantee substantially equivalent to the financial test specified in ADEM Admin. Code r. 335-14-5-.08 and 335-14-6-.08. The current cost estimates covered by such a test or guarantee are shown for each facility:

Stella-Jones Corporation
1640 Marc Avenue
PO Box 1496
Tacoma, Washington 98401
EPA ID No. WAD008958357
$US 2,733,609

4. This Firm is the owner/operator of the following hazardous waste management facilities for which financial assurance for post-closure costs is not demonstrated to the state through the financial test or any other financial assurance mechanism specified in ADEM Admin. Code r. 335-14-5-.08 and 335-14-6-.08 or equivalent or substantially equivalent Federal or State mechanisms. The current cost estimates not covered by such financial assurance are shown for each facility: **None.**

5. This Firm is the owner or operator of the following UIC facilities for which financial assurance for plugging and abandonment is required under part 144. The current closure cost estimates as required by 40 CFR 144.62 are shown for each facility: **None.**

This Firm and the Parent are not required to file a Form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this Firm and the Parent ends on December 31. The figures for the following items marked with an asterisk are derived from this Firm's independently audited, year-end financial statement for the latest completed fiscal year, ended December 31, 2023.

ALTERNATIVE I		2023 In CAD		2023 In USD	
	Foreign Exchange rate (note 1):				**1.3226**
1	Sum of current closure and post-closure cost estimates (total of all cost estimates shown in the five paragraphs above)	CAD	8,348,738	USD	6,312,368
	Alabama - Montevallo	*CAD*	*4,546,832*	*USD*	*3,437,798*
	Tacoma	*CAD*	*3,615,472*	*USD*	*2,733,609*
	Alabama - Bay Minette	*CAD*	*186,434*	*USD*	*140,960*
* 2.	Total liabilities (if any portion of the closure or post-closure cost estimates is included in total liabilities, you may deduct the amount of that portion from this line and add that amount to lines 3 and 4)	CAD	2,056,000,000	USD	1,554,513,836
* 3.	Tangible net worth	CAD	1,108,000,000	USD	837,743,838
* 4.	Net worth	CAD	1,652,000,000	USD	1,249,054,892
* 5.	Current assets	CAD	1,947,000,000	USD	1,472,100,408
* 6.	Current liabilities	CAD	384,000,000	USD	290,337,215
7	Net working capital (line 5 minus line 6)	CAD	1,563,000,000	USD	1,181,763,194
* 8.	The sum of net income plus depreciation, depletion and amortization	CAD	435,000,000	USD	328,897,626
* 9.	Total assets in U.S. (required only if less than 90% of firm's assets are located in the U.S.)	CAD	2,762,000,000	USD	2,088,310,903
	Total assets of the group	CAD	3,708,000,000	USD	2,803,568,728
	ANSWER YES OR NO:				
10	Is line 3 at least $10 million?		Yes		Yes
11	Is line 3 at least 6 times line 1?		Yes		Yes
12	Is line 7 at least 6 times line 1?		Yes		Yes
*13.	Are at least 90% of firm's assets located in the U.S.? If not, complete line 14.		No		No
14	Is line 9 at least 6 times line 1?		Yes		Yes
15	Is line 2 divided by line 4 less than 2.0?		Yes		Yes
16	Is line 8 divided by line 2 greater than 0.1?		Yes		Yes
17	Is line 5 divided by line 6 greater than 1.5?		Yes		Yes

3. Tangible net worth:

total assets	CAD	3,708,000,000	USD	2,803,568,728
minus: intangible assets	CAD	(169,000,000)	USD	(127,778,618)
minus: goodwill	CAD	(375,000,000)	USD	(283,532,436)
	CAD	3,164,000,000	USD	2,392,257,674
minus: total liabilities	CAD	(2,056,000,000)	USD	(1,554,513,836)
	CAD	1,108,000,000	USD	837,743,838

4. Net worth:

shareholders' equity	CAD	1,652,000,000	USD	1,249,054,892

8. The sum of net income plus depreciation, depletion and amortization:

net income	CAD	326,000,000	USD	246,484,198
plus depreciation + amortization	CAD	109,000,000	USD	82,413,428
	CAD	435,000,000	USD	328,897,626

9. Total assets in U.S. (required only if less than 90% of firm's assets are located in the U.S.):

Total assets of the located in the U.S.	CAD	2,762,000,000	USD	2,088,310,903
Total assets of the group	CAD	3,708,000,000	USD	2,803,568,728
% of assets located in the U.S.		74.5%		74.5%

Note 1: The closing exchange rate of 1.3226 is based on the daily exchange rate publised by the Bank of Canada once each business day by 16:30 ET. This Exchange Rate is expressed as 1 unit of the foreign currency (in this table US dollar) converted into Canadian Dollars. On December 31, 2023, 1 USD = 1.3226 CAD (https://www.bankofcanada.ca/rates/exchange/daily-exchange-rates/)

I hereby certify that the wording of this letter is identical to the wording specified in ADEM Admin. Code r. 335-14-5-.08(12)(f) as such rules were constituted on the date shown immediately below.

Silvana Travaglini, CPA
Senior Vice-President and Chief Financial Officer
March 21, 2024

Signed before me by Silvana Travaglini,
in Montreal, Québec on March 21, 2024

Lylia Bourouf
239521
COMMISSAIRE À L'ASSERMENTATION
Pour le Québec
Québec

Lylia Bourouf
Commissioner of Oaths for Québec.
Number 171 166
Expiry: October 3, 2025

LANCE R. LEFLEUR
DIRECTOR

KAY IVEY
GOVERNOR

Alabama Department of Environmental Management
adem.alabama.gov

1400 Coliseum Blvd. 36110-2400 • Post Office Box 301463
Montgomery, Alabama 36130-1463
(334) 271-7700 • FAX (334) 271-7950

March 25, 2024

CERTIFIED MAIL # 9489 0090 0027 6308 3042 66

Stella-Jones Corporation
Attn: Heather Gawne
1000 Cliff Mine Road
Park West One, Suite 500
Pittsburgh, PA

Re: Financial Assurance – Amendment to Trust Agreement
Stella-Jones Corporation (Former Baldwin Pole & Piling Facility)
1101 Hwy 31 N
Bay Minette, AL
USEPA I.D. Number ALD 031 490 501

The Department has completed its review of the *Amendment to Trust Agreement*, received on March 5, 2024, for Stella-Jones Corporation. Based upon the review, the updated instrument appears to be adequate and in compliance with the facility's Permit and ADEM Admin. Code Rule 335-14-5-.08.

If questions should arise concerning this matter, please contact Amber Hicks of the Engineering Services Section at (334) 270-5608.

Sincerely,

Stephen A. Cobb, Chief
Land Division

SAC/anh/md

Enclosures

cc/via email: ADEM: Ben King
Baldwin Pole and Piling Company, Inc.: Thomas McMillian, Jr.
Stella-Jones Corporation: James Kenner, Heather Gawne
Hancock Whitney Bank: Jennifer Kemp

Birmingham Branch
110 Vulcan Road
Birmingham, AL 35209-4702
(205) 942-6168
(205) 941-1603 (Fax)

Decatur Branch
2715 Sandlin Road, S.W.
Decatur, AL 35603-1333
(256) 353-1713
(256) 340-9359 (Fax)

Mobile Branch
2204 Perimeter Road
Mobile, AL 36615-1131
(251) 450-3400
(251) 479-2593 (Fax)

Mobile - Coastal
4171 Commanders Drive
Mobile, AL 36615-1421
(251) 432-6533
(251) 432-6598 (Fax)

March 14, 2024

Hancock Whitney Bank
[701 Poydras, Suite 1300
New Orleans, LA 70139]
Attn:

Alabama Department of Environmental Management
1400 Coliseum Blvd.
Montgomery, Alabama 36130
Attn:

Stella-Jones Corporation
15700 College Blvd., Suite 300
Lenexa, KS 66219
Attn: James P. Kenner

Baldwin Pole & Piling
13100 Hampton Rd
Bay Minette, AL 36507
Attention: Archie McMillan

RE: Trust Agreement, dated November 4, 1988, by and between Baldwin Pole and Piling Company, Inc. ("Baldwin") and Hancock Whitney Bank (the "Bank"), as successor trustee (the "Trust Agreement)

Ladies and Gentlemen:

Stella-Jones Corporation ("**SJC**") and Baldwin are parties to that certain Asset Purchase Agreement, dated July 14, 2023, among SJC, Baldwin and certain other parties thereto (the "**Purchase Agreement**"), pursuant to which SJC purchased substantially all of the assets of Baldwin. The Trust Agreement provides part of the financial assurances required by Hazardous Waste Facility Permit Number ALD 031490501 (the "**Permit**") with respect to the facility located at Highway 31 North, Bay Minette, Alabama 36507. In connection with the transactions contemplated by the Purchase Agreement, the parties have initiated the process to renew the Permit and transfer the Permit to SJC. In connection with the Permit renewal and transfer, Baldwin desires to amend the Trust Agreement in order to assign its rights and obligations thereunder to SJC, and SJC desires to assume such the rights and obligations under the Trust Agreement. Section 16 of the Trust Agreement requires that each of Baldwin, the Bank and the Alabama Department of Environmental Management execute any amendment to the Trust Agreement. Baldwin hereby conveys, transfers, assigns and delivers to SJC all of Baldwin's rights, title and interest in and to the Trust Agreement, effective as and when provided below. Baldwin acknowledges that such conveyance, transfer and assignment is made for good and valuable consideration, the receipt and sufficiency of which are acknowledged, and is coupled with an interest and therefore, the conveyance, transfer, assignment and delivery by Baldwin, and the acceptance and assumption by SJC, contained herein is irrevocable and shall be binding upon the successors and permitted assigns of Baldwin and shall inure to the benefit of SJC's successors and permitted assigns.

The parties hereby agree and consent to the amendment of the Trust Agreement and pursuant to such amendment, SJC is substituted for Baldwin as the "Grantor" under the Trust Agreement with such changes being reflected on Schedule A attached hereto, effective immediately (and without any further action by the parties) upon the renewal and transfer of the Permit to SJC. The Trust Agreement, as amended, shall remain in full force and effect until amended or modified as permitted there under, provided that Baldwin shall have no further rights in or obligations under the Trust Agreement from and after the effective date of the transfer to SJC.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

Therefore, the parties have executed and delivered this letter agreement as of the date first written above with the intent to be legally bound.

BALDWIN POLE AND PILING COMPANY, INC.

By: _____
Name: Thomas A. McMillan, Jr.
Title: President

HANCOCK WHITNEY BANK

By: _____
Name: Jennifer Kemp
Title: Vice President - Trust Advisor

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

By: _____
Name: Stephen A. Cobb
Title: Chief, Land Division

STELLA-JONES CORPORATION

By: _____
Name: James P. Kenner
Title: Vice President and General Counsel

SCHEDULE A

The following changes are required to the existing Trust Agreement*

Existing:	**Change to:**
Grantor: Baldwin Pole and Piling Company, Inc.	Grantor: Stella-Jones Corporation

*Substitution to be made in each and every applicable place in the Trust Agreement.

Hancock Bank.
WEALTH MANAGEMENT

ACKNOWLEDGEMENT, APPOINTMENT AND ACCEPTANCE OF SUCCESSOR TRUSTEE

Baldwin Pole and Piling, Inc. Grantor of The Baldwin Pole and Piling Irrevocable Trust dated 11/04/1988, Wells Fargo Bank, N.A. Corporate Trustee, acting in accordance with the power so given under Section 13: Successor Trustee. "The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment."

Baldwin Pole and Piling, Inc., Grantor hereby appoints Hancock Bank as Successor Corporate Trustee under same Section 13. In appointing Hancock Bank as Successor Corporate Trustee, Hancock Bank assumes all of the title, power, duties, and discretion herein given the original Corporate Trustee, Wells Fargo Bank, N.A. Upon acceptance of this appointment, Wells Fargo Bank, N.A. shall assign, transfer, and pay over to the newly appointed Successor Corporate Trustee all assets currently held within account number 5119893423 constituting the Trust Fund. Hancock Bank as Successor Corporate Trustee shall notify the Grantor, the original Corporate Trustee, and The Alabama Department of Environmental Management by certified mail within 10 days prior to such change becoming effective.

Michelle Cox — 12/5/12

Michelle Cox, Controller
Baldwin Pole and Piling, Inc., Grantor — Date

T. A. McMillan, Jr. — 12/5/12

T. A. McMillan, Jr.
Baldwin Pole and Piling, President — Date

Wells Fargo Bank, N.A. hereby acknowledges and accepts the Grantor's request for resignation as Corporate Trustee under Section 13 of the Baldwin Pole & Piling Inc. Irrevocable Trust, Dated 11/04/1988 as noted above.

_____ — _____

Wells Fargo Bank
Original Corporate Trustee — Date

Hancock Bank hereby acknowledges and accepts the Grantor's request for appointment as Successor Corporate Trustee under Section 13 of the Baldwin Pole & Piling Inc. Irrevocable Trust, Dated 11/04/1988 as noted above.

Stephanie Mitchell — 12/5/12

Stephanie Mitchell, AVP & Trust Officer
Hancock Bank Successor Corporate Trustee
Post Office Box 4019
Gulfport, MS 39502 — Date

State of: Mississippi

County of: Harrison

On this 5th day of December 2012, before me personally came Michelle Cox to me known, who is being by me duly sworn, did depose and say that she resides at Bay Minette, AL and that she is the Controller of Baldwin Pole and Piling, Inc., the Corporation described in and which executed the above instrument.

Notary Signature

STATE OF MISSISSIPPI NOTARY PUBLIC ID # 62422 STEPHANIE L. MITCHELL Commission Expires 03/19/2013 HARRISON COUNTY

State of: Mississippi

County of: Harrison

On this 5th day of December 2012, before me personally came T. A. McMillan, Jr. to me known, who is being by me duly sworn, did depose and say that he resides at Bay Minette, AL and that he is the President of Baldwin Pole and Piling, Inc., the Corporation described in and which executed the above instrument.

Notary Signature

STATE OF MISSISSIPPI NOTARY PUBLIC ID # 62422 STEPHANIE L. MITCHELL Commission Expires 03/19/2013 HARRISON COUNTY

State of: Mississippi

County of: Harrison

On this 5th day of December 2012, before me personally came Stephanie Mitchell to me known, who is being by me duly sworn, did depose and say that she resides at Gulfport, MS and that she is the AVP / Trust Relationship Manager for Hancock Bank, the Corporation described in and which executed the above instrument.

Notary Signature

STATE OF MISSISSIPPI NOTARY PUBLIC ID # 91986 NATALIE KROHN MORYKWAS Commission Expires 01/04/2013 HARRISON COUNTY

EXTRACT OF THE MINUTES OF THE MEETING
OF THE HANCOCK BANK
BOARD OF DIRECTORS
Held Thursday, July 26, 2012

RESOLVED, that any Executive Vice President, Senior Vice President, Vice President, Assistant Vice President or Trust Officer of the Trust Division, or any one of them, be and he is hereby authorized to sign, execute, acknowledge, verify and deliver any instrument or document in connection with the exercise of any of the fiduciary powers of the Bank, including the signature, execution, acknowledgement, verification and delivery of all agreements, indentures, mortgages, deeds, conveyances, powers of attorney, transfers, certificates of stock as Transfer Agency or as Registrar, certificates, discharges, releases, satisfactions, settlements, bonds, undertakings, proxies or other instruments and to attach and affix the seal of the Bank, if necessary or desired.

* * * * * * * *

I, Patricia K. Loupe, Sr. Assistant Corporate Secretary of Hancock Bank, do hereby certify that the above and foregoing is a true and correct copy of the resolution unanimously adopted by the Board of Directors of Hancock Bank at its meeting held on July 26, 2012, a quorum being present and voting, and that such resolution is in full force and effect, without revocation, amendment or change as of the date of this certification.

I further certify that Stephanie Mitchell is a Trust Officer/Assistant Vice President of this Bank and that I have been duly authorized to make this certificate on behalf of the Bank.

This certification dated and signed this 12th day of December, 2012.

Patricia K Loupe

Sr. Assistant Corporate Secretary

TRUST AGREEMENT

Trust Agreement, the "Agreement, " entered into as of November 4, 1988, by and between BALDWIN POLE AND PILING COMPANY, INC., an Alabama "corporation," the "Grantor," and SOUTHTRUST BANK OF MOBILE, "incorporated in the State of Alabama", the "Trustee."

Whereas, the Alabama Department of Environmental Management (the "Department") an agency of the State of Alabama, has established certain regulations applicable to the Grantor, requiring that an owner or operator of a hazardous waste management facility shall provide assurance that funds will be available when needed for closure and/or post-closure care of the facility,

Whereas, the Grantor has elected to establish a trust to provide all or part of such financial assurance for the facilities identified herein,

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this agreement, and the Trustee is willing to act as trustee,

Now, Therefore, the Grantor and the Trustee agree as follows:

Section 1. Definitions. As used in this Agreement:

(a) The term "Grantor" means the owner or operator who enters into this Agreement and any successors or assigns of the Grantor.

(b) The term "Trustee" means the Trustee who enters into this Agreement and any successor Trustee.

Section 2. Identification of Facilities and Cost Estimates. This Agreement pertains to the facilities and cost estimates identified on attached Schedule A.

Section 3. Establishment of Fund. The Grantor and the Trustee hereby establish a trust fund, the "Fund," for the benefit of the Department. The Grantor and the Trustee intend that no third party have access to the Fund except as herein provided. The Fund is established initially as consisting of the property, which is acceptable to the Trustee, described in Schedule B attached hereto. Such property and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy

of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by the Department.

Section 4. Payment for Closure and Post-Closure Care. The Trustee shall make payments from the Fund as the Department shall direct, in writing, to provide for the payment of the costs of closure and/or post-closure care of the facilities covered by this Agreement. The Trustee shall reimburse the Grantor or other persons as specified by the Department from the Fund for closure and post-closure expenditures in such amounts as the Department shall direct in writing. In addition, the Trustee shall refund to the Grantor such amounts as the Department specifies in writing. Upon refund, such funds shall no longer constitute part of the Fund as defined herein.

Section 5. Payments Comprising the Fund. Payments made to the Trustee for the Fund shall consist of cash or securities acceptable to the Trustee.

Section 6. Trustee Management. The Trustee shall invest and reinvest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this Section. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his duties with respect to the trust fund solely in the interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:

(i) Securities or other obligations of the Grantor, or any other owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2.(a), shall not be acquired or held, unless they are securities or other obligations of the Federal or a State government;

(ii) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or State government; and

(iii) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Section 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:

(a) To transfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

(b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 8. Express Powers of Trustee. Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depositary even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depositary with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;

(d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal or State government; and

(e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees or legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.

Section 10. Annual Valuation. The Trustee shall annually, at least 30 days prior to the anniversary date of establishment of the Fund, furnish to the Grantor and to the Department a statement confirming the value of the Trust. Any securities in the Fund shall be valued at market value as of no more than 60 days prior to the anniversary date of establishment of the Fund. The failure of the Grantor to object in writing to the Trustee within 90 days after the statement has been furnished to the Grantor and the Department shall constitute a conclusively binding assent by the Grantor, barring the Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the statement.

Section 11. Advice of Counsel. The Trustee may from time to time consult with the counsel, who may be counsel to the Grantor, with respect to any question arising as to the construction of this Agreement or any action to be hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 12. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 13. Successor Trustee. The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in writing sent to the Grantor, the Department, and the present Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 9.

Section 14. Instructions to the Trustee. All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated to the attached Exhibit A or such other designees as the Grantor may designate by amendment to Exhibit A. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and instructions. All orders, request, and instructions by the Department to the Trustee shall be in writing, signed by the Director of the Department of his designee, and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or the Department hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or the Department, except as provided for herein.

Section 15. Notice of Nonpayment. The Trustee shall notify the Grantor and the Department by certified mail within 10 days following the expiration of the 30-day period after the anniversary of the establishment of the Trust, if no payment is received from the Grantor during that period. After the pay-in period is completed, the Trustee shall not be required to send a notice of nonpayment.

Section 16. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee, and the Director of the Department or his designee, or by the Trustee and the Director of the Department or his designee, if the Grantor ceases to exist.

Section 17. Irrevocability and Termination. Subject to the right of parties to amend this Agreement as provided in Section 16, this Trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, and the Department, or by the Trustee and the Department, if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor.

Section 18. Immunity and Indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, the administration of this Trust, or in carrying out any directions by the Grantor or the Department, issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 19. Choice of Law. This Agreement shall be administered, construed, and enforced according to the laws of the State of Alabama.

Section 20. Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each Section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

In Witness Whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first above written: The parties below certify that the wording of this Agreement is identical to the wording specified in subparagraph (12)(a)1. of Rule 14-5-.08 of the Department's Administrative Code as such rules were constituted on the date first above written.

Thomas A. McMillan

THOMAS A. MCMILLAN
PRESIDENT

Attest:

Mabrey J. Easley, Jr.

MABREY J. EASLEY, JR.
VICE PRESIDENT/SEC.-TREAS.

(SEAL)

SOUTHTRUST BANK OF MOBILE

BY: William T. Haynie, Jr.

WILLIAM T. HAYNIE, JR.
POSITION: Vice President and Trust Officer

Attest:

Vice President and Trust Officer

(SEAL)

STATE OF ALABAMA

COUNTY OF MOBILE

On this 4th day of November, 1988, before me personally came Thomas A. McMillan to me known, who, being by me duly sworn, did depose and say that he resides at Route 3, Box 360-A, Bay Minette, Alabama, that he is President of Baldwin Pole and Piling Company, Inc., the corporation described in and which executed the above instrument; that he knows the seal of said corporation; that it was so affixed by order of the Board of Directors of said corporation, and that he signed his name thereto by like order.

Doris L. Wiggins
NOTARY PUBLIC
STATE OF ALABAMA
My commission expires 3-17-90

SCHEDULE A

Baldwin Pole and Piling Company, Inc.
1051 E. 2nd Street
Bay Minette, Alabama
EPA I.D. Number ALD031490501
Post-Closure Costs - $85,510.00
Corrective Action Cost Estimate - $539,580.00

SCHEDULE B

SouthTrust Bank of Mobile Money Multiplier Account	$ 80,321.00
Cash	52.25
SouthTrust Bank of Baldwin County Letter of Credit #1115	85,510.00
TOTAL (as of 04/10/92)	$165,883.25

EXHIBIT A

Thomas A. McMillan, President
Mabrey T. Easley, Jr., Vice President

SCHEDULE A

This Agreement demonstrates financial assurance for the following cost estimate(s) for the following facility(ies):

U.S. Environmental Protection Agency Identification Number of Facility	Name of Facility	Address of Facility	Cost Estimate for Which Financial Assurance is Being Demonstrated by This Agreement
ALD 031 490 501	Baldwin Pole & Piling Co., Inc.	1101 Hwy 31 N. Bay Minette, AL	Post Closure $100,034.00 Corrective Action Costs as of 2013 $790,590

SCHEDULE B

This Agreement demonstrates financial assurance for the following cost estimate(s) for the following facility(ies):

U.S. Environmental Protection Agency Identification Number of Facility	Name of Facility	Address of Facility	Property Used to Provide Financial Assurance
ALD 031 490 501	Baldwin Pole & Piling Co., Inc.	1101 Hwy 31 N. Bay Minette, AL	Post Closure Letter of Credit $100,034.00 Corrective Action Trust Fund Value as of 12/31/12 $889,541

HANCOCK WHITNEY

STATEMENT OF ACTIVITY

JANUARY 01, 2023 TO DECEMBER 31, 2023

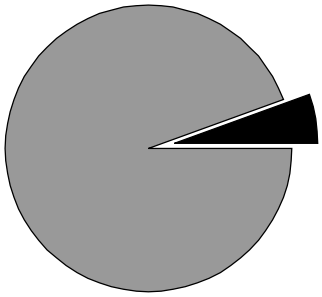
ACCOUNT NAME: BALDWIN POLE
ACCOUNT NUMBER: 3115000129

Alabama Department Of
Environmental Management
P.O. Box 301463
Montgomery, AL 36130-1463

ACCOUNT NAME:	**BALDWIN POLE & PILING INC TRUST** **HANCOCK WHITNEY BANK SUCC TTEE**
ACCOUNT NUMBER:	**3115000129**
RELATIONSHIP MANAGER:	**JENNIFER KEMP** **251-665-1635** **JENNIFER.KEMP** **@HANCOCKWHITNEY.COM**
INVESTMENT OBJECTIVE:	**CONSERVATIVE INC - TAXABLE BONDS**

PORTFOLIO SUMMARY

MARKET VALUE AS OF	01/01/2023	12/31/2023	% OF ACCOUNT
CASH AND EQUIVALENTS	38,375.09	51,175.76	5.5%
FIXED INCOME	853,722.41	875,180.71	94.5%
Total	892,097.50	926,356.47	100.0%



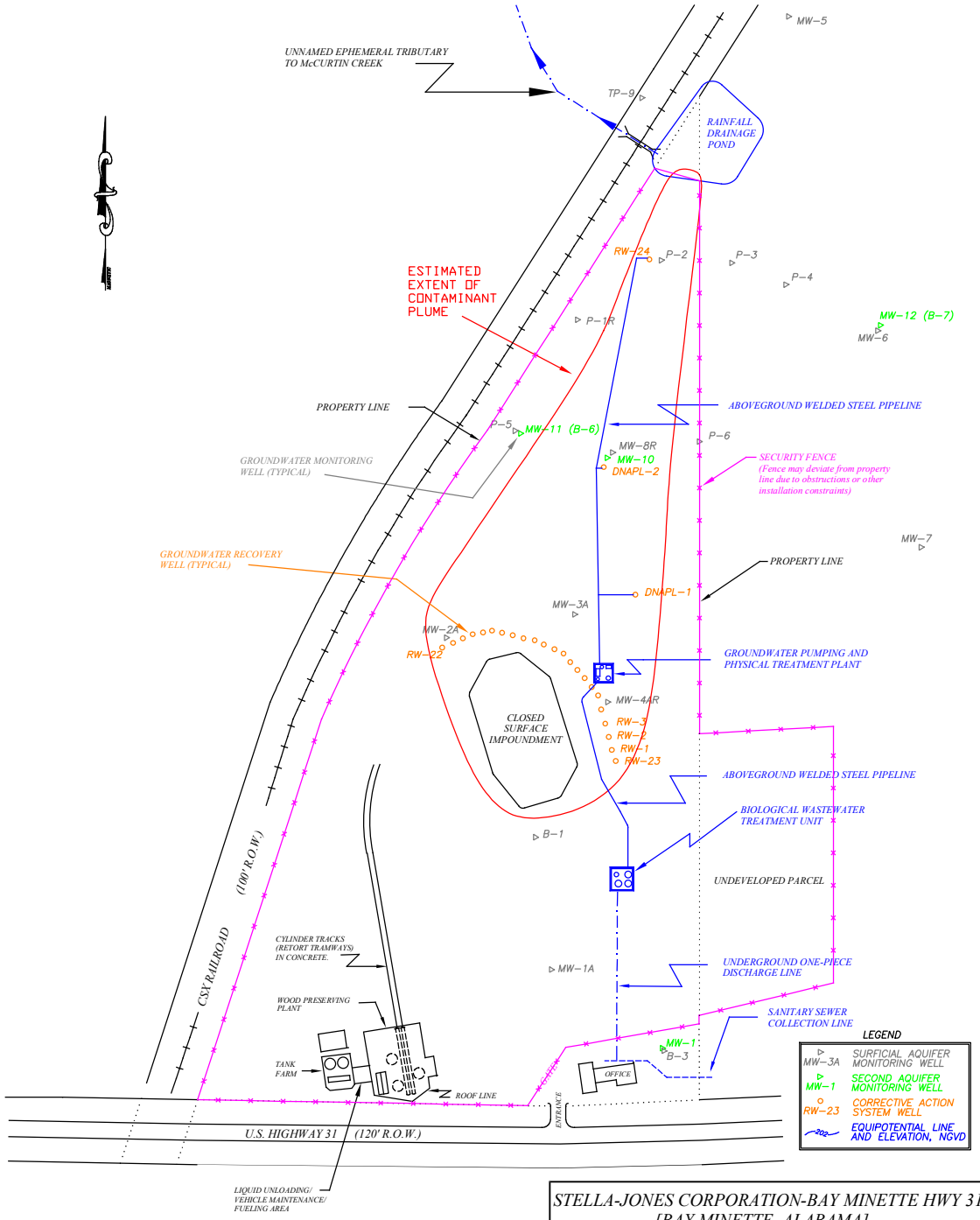
ACTIVITY SUMMARY

	THIS PERIOD	YEAR TO DATE
BEGINNING MARKET VALUE	**892,097.50**	**892,097.50**
DIVIDENDS	2,063.27	2,063.27
INTEREST	19,164.31	19,164.31
FEES	5,884.97-	5,884.97-
CHANGE IN MARKET VALUE	18,916.36	18,916.36
ENDING MARKET VALUE	**926,356.47**	**926,356.47**

REALIZED CAPITAL GAINS / LOSSES

	THIS PERIOD	YEAR TO DATE
LONG TERM	63.06	63.06
TOTAL GAINS / LOSSES	**63.06**	**63.06**

EXHIBIT 12



NOTE:
THIS DRAWING BASED ON WORK OF McCRORY & WILLIAMS, CONSULTING ENGINEERS AND LAND SURVEYORS, DAPHNE, AL, OCTOBER 30, 1986.

LOCATIONS OF SITE FEATURES ARE APPROXIMATE

STELLA-JONES CORPORATION-BAY MINETTE HWY 31 [BAY MINETTE, ALABAMA]		
SCALE: 1" = 200'	APPROVED BY:	DRAWN BY: JMR
DATE: 2/15/24		
ESTIMATED EXTENT OF CONTAMINATION		
H. M. ROLLINS CO., INC. GULFPORT, MISSISSIPPI		DRAWING NUMBER 240215

EXHIBIT 13

Stella-Jones Corporation

Typical Monitoring Well Construction Drawings

Exhibit 13

Post-Closure Permit Renewal Application

March 1, 2024

Stella-Jones Corporation (Stella-Jones) acquired the Baldwin Pole & Piling Co., Inc., facility in July of 2023. Many of the documents in this Exhibit reflect the fact that this work was conducted by the prior owner before Stella-Jones acquire the site.

MONITORING WELL DESIGNATIONS

WELL NUMBER	WELL TYPE *	WELL LATITUDE	WELL LONGITUDE	UNIT(S) MONITORED	WELL DEPTH (ft)	GROUND ELEVATION (ft. MSL)	TOP-OF-RISER ELEVATION (ft. MSL)	SCREENED INTERVAL (ft. MSL)	MONITORED ZONE
MW-1	PGM	30°53.435' N	87°45.331' W	Landfill	124	243.60	244.99	Est 121 - 131	Lower
MW-1A	BKG	30°53.461' N	87°45.363' W	Landfill	20.5	245.10	246.14	225.64 - 235.64	Upper
MW-2A	POC	30°53.559' N	87°45.405' W	Landfill	13.5	217.90	219.52	206.02 - 216.02	Upper
MW-3A	POC	30°53.568' N	87°45.354' W	Landfill	13.5	216.60	217.75	204.25 - 214.25	Upper
MW-4AR	POC	30°53.542' N	87°45.346' W	Landfill	19	221.89	224.47	205.47 - 215.47	Upper
MW-5	PGM	30°53.758' N	87°45.274' W	Landfill	10	214.90	217.52	207.52 - 212.52	Upper
MW-6	PGM	30°53.660' N	87°45.250' W	Landfill	15	214.10	216.46	201.46 - 206.46	Upper
MW-7	PGM	30°53.596' N	87°45.220' W	Landfill	15	217.00	219.76	204.76 - 209.76	Upper
MW-8R	EFF	30°53.627' N	87°45.338' W	Landfill	15	206.00	207.90	192.90 - 202.90	Upper
MW-10	BDY	30°53.630' N	87°45.340' W	Landfill	83.5	206.20	209.66	126.16 - 136.16	Lower
MW-11	PGM	30°53.627' N	87°45.373' W	Landfill	63	214.60	216.50	153.50 - 163.05	Lower
MW-12	PGM	30°53.660' N	87°45.250' W	Landfill	58	214.30	215.25	157.25 - 167.25	Lower
P-1R	BDY	30°53.658' N	87°45.355' W	Landfill	9	205.16	207.89	198.89 - 203.89	Upper
P-2	EFF	30°53.678' N	87°45.325' W	Landfill	16.5	200.70	203.34	186.84 - 191.84	Upper
P-3	PGM	30°53.676' N	87°45.308' W	Landfill	12	201.40	204.85	192.85 - 197.85	Upper
P-4	PGM	30°53.675' N	87°45.281' W	Landfill	10	204.30	206.82	196.82 - 201.82	Upper
P-5	PGM	30°53.626' N	87°45.374' W	Landfill	8	215.40	216.99	208.99 - 213.99	Upper
P-6	BDY	30°53.619' N	87°45.315' W	Landfill	15.8	205.60	206.45	190.65 - 195.65	Upper
TP-9	BDY	30°53.715' N	87°45.336' W	Landfill	15	197.20	199.92	184.92 - 187.92	Upper
RW-1	REC	30°53.532' N	87°45.343' W	Landfill	22.5	221.97	224.37	201.87 - 211.87	N/A (Upper)
RW-2	REC	30°53.536' N	87°45.344' W	Landfill	22.5	222.72	225.12	202.62 - 212.62	N/A (Upper)
RW-3	REC	30°53.538' N	87°45.345' W	Landfill	22.5	223.00	225.40	202.90 - 212.90	N/A (Upper)
RW-4	REC	30°53.541' N	87°45.346' W	Landfill	22.5	222.42	224.82	202.32 - 212.32	N/A (Upper)
RW-5	REC	30°53.544' N	87°45.348' W	Landfill	22.5	222.93	225.33	202.83 - 212.83	N/A (Upper)
RW-6	REC	30°53.547' N	87°45.350' W	Landfill	22.5	222.45	224.85	202.35 - 212.35	N/A (Upper)
RW-7	REC	30°53.548' N	87°45.351' W	Landfill	22.5	222.32	224.72	202.22 - 212.22	N/A (Upper)
RW-8	REC	30°53.552' N	87°45.353' W	Landfill	22.5	222.17	224.57	202.07 - 212.07	N/A (Upper)
RW-9	REC	30°53.554' N	87°45.357' W	Landfill	22.5	222.65	225.05	202.55 - 212.55	N/A (Upper)
RW-10	REC	30°53.555' N	87°45.358' W	Landfill	22.5	222.19	224.59	202.09 - 212.09	N/A (Upper)
RW-11	REC	30°53.558' N	87°45.359' W	Landfill	22.5	222.16	224.56	202.06 - 212.06	N/A (Upper)
RW-12	REC	30°53.560' N	87°45.360' W	Landfill	22.5	222.40	224.80	202.30 - 212.30	N/A (Upper)
RW-13	REC	30°53.560' N	87°45.362' W	Landfill	22.5	222.18	224.58	202.08 - 212.08	N/A (Upper)
RW-14	REC	30°53.561' N	87°45.363' W	Landfill	22.5	222.38	224.78	202.28 - 212.28	N/A (Upper)
RW-15	REC	30°53.562' N	87°45.368' W	Landfill	22.5	222.00	224.40	201.90 - 211.90	N/A (Upper)
RW-16	REC	30°53.562' N	87°45.373' W	Landfill	22.5	222.08	224.48	201.98 - 211.98	N/A (Upper)
RW-17	REC	30°53.562' N	87°45.382' W	Landfill	22.5	222.17	224.57	202.07 - 212.07	N/A (Upper)
RW-18	REC	30°53.561' N	87°45.386' W	Landfill	22.5	221.42	223.82	201.32 - 211.32	N/A (Upper)
RW-19	REC	30°53.560' N	87°45.389' W	Landfill	22.5	221.84	224.24	201.74 - 211.74	N/A (Upper)
RW-20	REC	30°53.558' N	87°45.393' W	Landfill	22.5	222.71	225.11	202.61 - 212.61	N/A (Upper)
RW-21	REC	30°53.557' N	87°45.397' W	Landfill	22.5	222.64	225.04	202.54 - 212.54	N/A (Upper)
RW-22	REC	30°53.555' N	87°45.400' W	Landfill	22.5	222.08	224.48	201.98 - 211.98	N/A (Upper)
RW-23	REC	30°53.523' N	87°45.337' W	Landfill	22.5	222.00	224.40	201.90 - 211.90	N/A (Upper)
RW-24	REC	30°53.672' N	87°45.323' W	Landfill	15	Est 201	Est 203	Est 188 - 198	N/A (Upper)
DNAPL-1	REC	30°53.583' N	87°45.346' W	Landfill	15	Est 207	Est 209	Est 194 - 204	N/A (Upper)
DNAPL-2	REC	30°53.621' N	87°45.345' W	Landfill	12.5	Est 206	Est 208.5	Est 196 - 206	N/A (Upper)

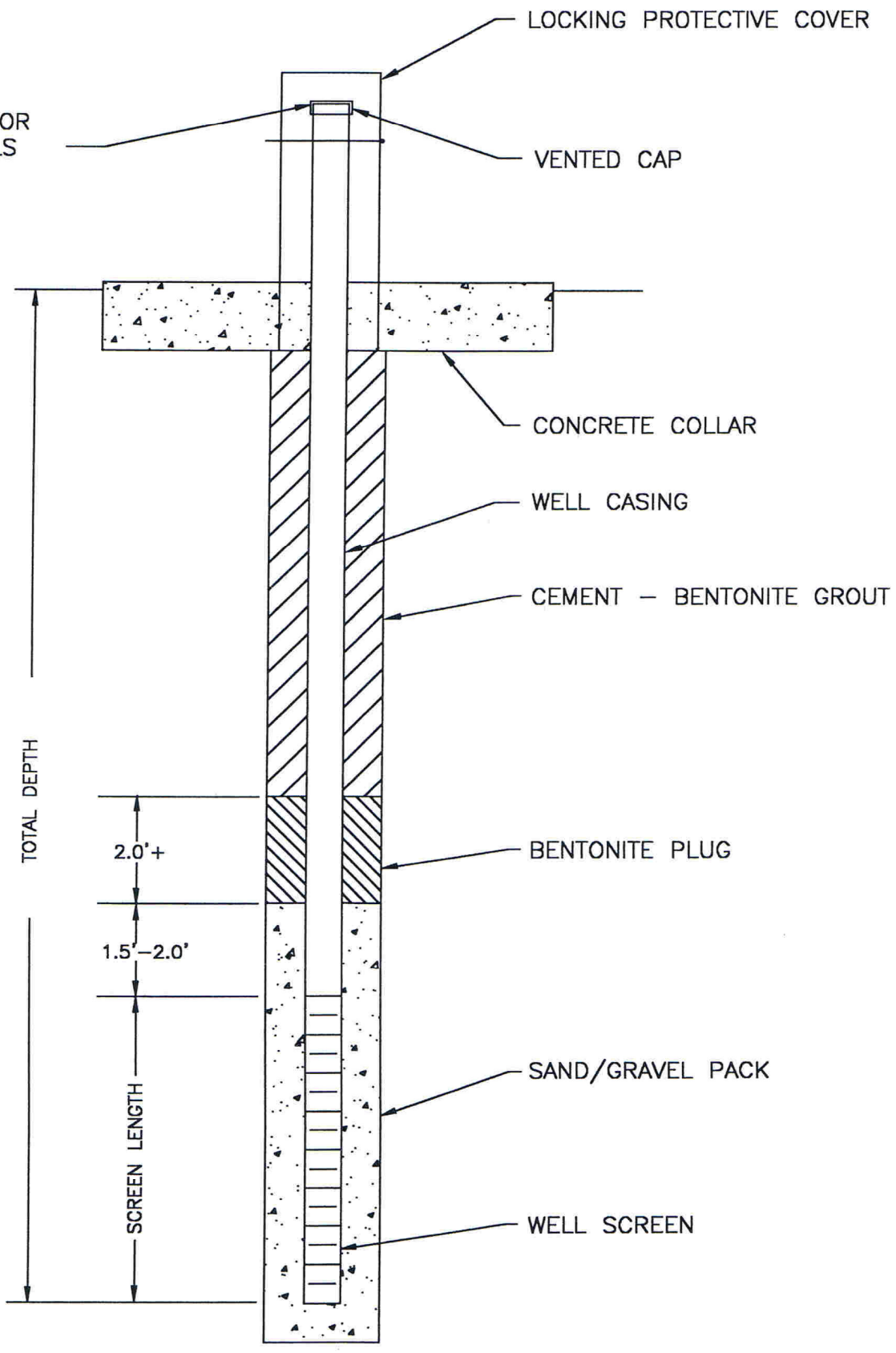
* Well Type:
POC - Point of Compliance Wells
EFF - Effectiveness Monitoring Wells
PGM - Piezometers and/or General Monitoring Wells
BKG - Background Wells
BDY - Boundary Monitoring Wells
UPG - Upgradient Well
REC - Recovery Well
TRN - Trench Well

BALDWIN POLE & PILING CO., INC.
BAY MINETTE, ALABAMA
Monitoring Well Construction Data

Well No.	Top of Casing Elevation, ft	Ground Elevation, ft	Total Well Depth, ft	Drill Size, in	Casing Diameter, in	Screen Length, ft	Casing/ Screen Material
MW-1	244.99	243.60	124	Unknown	4	Est. 10	PVC
MW-10	209.66	206.20	83	6	2	10	PVC
MW-11	216.50	214.60	63	6	2	10	PVC
MW-12	215.25	214.30	58	6	2	10	PVC
MW-1A	246.14	245.10	20.5	6	2	10	PVC
MW-2A	219.52	217.90	13.5	6	2	10	PVC
MW-3A	217.75	216.60	13.5	6	2	10	PVC
MW-4AR	224.47	221.89	19	4	2	10	PVC
MW-5	217.52	214.90	10	6	2	5	PVC
MW-6	216.46	214.10	15	6	2	5	PVC
MW-7	219.76	217.00	15	6	2	5	PVC
MW-8R	207.90	206.00	15	6	2	10	PVC/SS
P-1R	207.89	205.16	9	4	2	5	PVC
P-2	203.34	200.70	16.5	4	1.25	5	PVC
P-3	204.85	201.40	12	4	1.25	5	PVC
P-4	206.82	204.30	10	4	1.25	5	PVC
P-5	216.99	215.40	8	4	1.25	5	PVC
P-6	206.45	205.60	16	4	1.25	5	PVC
TP-9	199.92	197.20	15	4	1.25	3	PVC

Revised 6/12/2014

Prepared by:
H. M. Rollins Co., Inc.
Gulfport, MS



TYPICAL WELL CONSTRUCTION

BALDWIN POLE & PILING CO., INC.

BALDWIN POLE & PILING CO., INC.
BAY MINETTE, ALABAMA
Monitoring Well Locations by Latitude/Longitude

Well	Latitude	Longitude
MW-1	30°53.435' N	87°45.331 W
MW-10	30°53.630' N	87°45.340 W
MW-11	30°53.627' N	87°45.373 W
MW-12	30°53.660' N	87°45.250 W
MW-1A	30°53.461' N	87°45.363 W
MW-2A	30°53.559' N	87°45.405 W
MW-3A	30°53.568' N	87°45.354 W
MW-4AR	30°53.542' N	87°45.346 W
MW-5	30°53.758' N	87°45.274 W
MW-6	30°53.660' N	87°45.250 W
MW-7	30°53.596' N	87°45.220 W
MW-8R	30°53.627' N	87°45.338 W
P-1R	30°53.658' N	87°45.355 W
P-2	30°53.678' N	87°45.325 W
P-3	30°53.676' N	87°45.308 W
P-4	30°53.675' N	87°45.281 W
P-5	30°53.626' N	87°45.374 W
P-6	30°53.619' N	87°45.315 W
TP-9	30°53.715' N	87°45.336 W

Note: The latitudes and longitudes shown above were taken from hand-held GPS readings. Therefore, these locations may be off by as much as 10 meters.

H. M. ROLLINS COMPANY, INC.

P.O. BOX 3471 - GULFPORT, MS 39505

BORING/WELL LOG

CLIENT: Baldwin Pole & Piling Company, Inc. - Bay Minette, AL DATE: September 10, 1987

BORING/WELL NUMBER: Boring B-5 (MW-10) GROUND ELEVATION: 206.5

BORING LOCATION: Located 8' Southwest of MW-9

DRILLER: Southern Earth Sciences RIG TYPE: CME-55

DRILLING METHOD: Rotary Hydraulic/Bentonite Fluid SAMPLING INTERVAL & METHOD: Cont. Sampling: Split Spoon below 22'

BIT/AUGER SIZE: 8" Fishtail to 35.0' Set casing & used 4" fishtail thereafter: Reamed 35-TD with 6" bit.

FIELD ENGINEER: H.N. Blakeney/Lloyd Fell/C.H. Rollins, Jr. GEOLOGIST: Harvey Blakeney

SAMPLE NUMBER	SAMPLE DEPTH	BLOW COUNT (6 INCH)	SAMPLE RECOVERY	NARRATIVE DESCRIPTION (GEOLOGIC OBSERVATIONS, DRILLING OBSERVATIONS, AND/OR OTHER REMARKS)
				Drilled to 22.0' with 8" fishtail. Heavy foaming and odor of creosote. Had difficulty drilling through stumps and logs near surface. Sampled 22.0'-24.0'.
1	22-24'	5-7-9-4	15"	White very fine silty sand (SM) with strong odor and free creosote in sample. Creosote possibly draining down from above.
				Crew knocked off 1600. Crew Arrived 0815 on 9/11/87 cleaned hole to 25.0' with 4" fishtail. Sampled 25.0'-27.0' (overdrilled 1.0 ft.).
2	25-27'	3-6-6-6	14"	25.0-25.3' Soft gray fat sandy clay (CH). 25.3-27.0' White, fine silty sand (SM) with thin clay partings. Cleaned hole to 28.0'.
3	28-30'	4-2-2-3	18"	White silty clayey sand (SM-SC) with thin lenses of brown silt.

H. M. ROLLINS COMPANY, INC.

P.O. BOX 3471 - GULFPORT, MS 39505

BORING/WELL LOG

CLIENT: Baldwin Pole & Piling Company, Inc. - Bay Minette, AL DATE: September 11, 1987

BORING/WELL NUMBER: Boring B-5 (MW-10) GROUND ELEVATION: 206.5

FIELD ENGINEER: H.N. Blakeney/Loyd Fell/C.H. Rollins, Jr. GEOLOGIST: Harvey Blakeney

SAMPLE NUMBER	SAMPLE DEPTH	BLOW COUNT (6 INCH)	SAMPLE RECOVERY	NARRATIVE DESCRIPTION (GEOLOGIC OBSERVATIONS, DRILLING OBSERVATIONS, AND/OR OTHER REMARKS)
4	30-32'	3-3-3-6	18"	Same as sample 3.
5	32-34'	10-9-8-6	18"	Same as above.
6	34-36'	5-5-5-5	24"	34.0-35.0' White fine clayey sand (SC). 35.0-36.0' Gray sandy fat clay (CH). Rig broke down 1000 - Crew gone for day.
				September 15, 1987
7	36-38'	12-12-15-16	22"	36.0-36.8' Gray and tan (CL) sandy clay . Gray (CH) fat clay with lens of sandy clay. (Very Stiff). Fish tailed out to 35.0' with 8" bit. Set 38.4' of 6" PVC pipe. Grouted in with 9 bags of cement and mud. Left rig in place. Quit for the day.
				September 16, 1987
8	38-40'	9-10-14-10	22"	38.0-39.2' Tan and gray (CL) sandy clay. 39.2-40.0' Tan and gray (CH) fat clay. (Very Stiff).
9	40-42'	3-2-3-1	23"	40.0-40.5' Tan and gray (CH) fat clay. 40.5-41.5' (SC) clayey sand. 41.5-42.0' (SP) sand poorly graded. (Firm).

H. M. ROLLINS COMPANY, INC.

P.O. BOX 3471 - GULFPORT, MS 39505

BORING/WELL LOG

CLIENT: Baldwin Pole & Piling Company, Inc. - Bay Minette, AL DATE: September 15, 1987

BORING/WELL NUMBER: Boring B-5 (MW-10) GROUND ELEVATION: 206.5

FIELD ENGINEER: H.N. Blakeney/Loyd Fell/C.H. Rollins, Jr. GEOLOGIST: Harvey Blakeney

SAMPLE NUMBER	SAMPLE DEPTH	BLOW COUNT (6 INCH)	SAMPLE RECOVERY	NARRATIVE DESCRIPTION (GEOLOGIC OBSERVATIONS, DRILLING OBSERVATIONS, AND/OR OTHER REMARKS)
10	42-44'	5-7-13-18	17"	Tan and gray (SM) silty sandy. (Firm).
11	44-46'	7-20-25-26	14"	White and brown (SP) poorly graded sand. (Dense).
12	46-48'	20-30-30-34	18"	White and brown (SP) poorly graded sand. (Very dense).
13	48-50'	10-25-33-35	19"	Pink and gray (SP) sand - poorly graded. (Very dense).
14	50-52'	15-16-16-16	15"	50.0-50.8' Pink (SP) sand poorly graded. 51.1-52.0 Gray and tan (SP) sandy clay.
15	52-54'	5-6-9-11	22"	Tan and pink sand and clay (CL) sandy clay with lens of (CH) fat clay. (Stiff).
16	54-56'	3-7-12-16	24"	Tan and pink sandy clay (CL) with lens of fat clay (CH) - trace pyrite. (Very Stiff).
17	56-68'	10-14-16-14	18"	Gray and tan (SM) silty sand with clay lens. (Very Firm).

H. M. ROLLINS COMPANY, INC.

P.O. BOX 3471 - GULFPORT, MS 39505

BORING/WELL LOG

CLIENT: Baldwin Pole & Piling Company, Inc. - Bay Minette, AL DATE: September 16, 1987

BORING/WELL NUMBER: Boring B-5 (MW-10) GROUND ELEVATION: 206.5

FIELD ENGINEER: H.N. Blakeney/Loyd Fell/C.H. Rollins, Jr. GEOLOGIST: Harvey Blakeney

SAMPLE NUMBER	SAMPLE DEPTH	BLOW COUNT (6 INCH)	SAMPLE RECOVERY	NARRATIVE DESCRIPTION (GEOLOGIC OBSERVATIONS, DRILLING OBSERVATIONS, AND/OR OTHER REMARKS)
18	58-60'	8-14-16-18	19"	Gray and tan (SM) silty sand with clay lenses. 0.2' (CH) fat clay in bottom of drive. (Very Firm).
19	60-62'	10-17-20-24	22"	60.0-60.2' Pink (CH) fat clay. 60.2-61.0' Brown (SP) sand - poorly graded. 61.0-62.0' Gray and tan (SC) clayey sand. (Dense).
20	62-64'	9-15-21-23	15"	62.0-62.3' Gray and tan (CH). Fat clay. 62.3-64.0' Coarse and fine (SP) sand, well graded. (Dense).
21	64-66'	21-28-30-31	14"	(SW) Sand well graded trace clay at top. (Very Dense).
22	66-68'	23-28-33-34	22"	(SW) sand well graded. (Very Dense).
23	68-70'	16-28-30-30	16"	(SW) Sand well graded. (Very Dense).
24	70-72'	23 50+	10"	70.0-70.5' Tan (SM) silty sand. 71.0-72.0' Fish tailed - (Very Dense).
25	74-76'	40 50/0.4	9"	Gray (SM) silty sand. 72.9-74.0' Fish tailed. (Very Dense).

H. M. ROLLINS COMPANY, INC.

P.O. BOX 3471 - GULFPORT, MS 39505

BORING/WELL LOG

CLIENT: Baldwin Pole & Piling Company, Inc. - Bay Minette, AL DATE: September 16, 1987

BORING/WELL NUMBER: Boring B-5 (MW-10) GROUND ELEVATION: 206.5

FIELD ENGINEER: H.N. Blakeney/Loyd Fell/C.H. Rollins, Jr. GEOLOGIST: Harvey Blakeney

SAMPLE NUMBER	SAMPLE DEPTH	BLOW COUNT (6 INCH)	SAMPLE RECOVERY	NARRATIVE DESCRIPTION (GEOLOGIC OBSERVATIONS, DRILLING OBSERVATIONS, AND/OR OTHER REMARKS)
26	74-81'	40 50/0.4	4"	Gray (SP) sand well graded. 74.9-81.0' Fish tailed. (Very Dense).
27	81-83'	15-29-17-14	18"	Yellow (SM) silty sand. (Dense).
	83.0-85.5'			Fish tailed from 83.0 to 85.5'. Driller says he noticed drilling change at 84'. He thought it was gravel in sand. After seeing sample, he said it must have been clay.
28	85.5-87.5'	7-10-12-14	22"	Gray and brown (CH) fat clay. (Very Stiff).
	87.5-91.0			Fish tailed from 87.5-91.0'.
29	91-93'	9-15-17-19	22"	Gray and brown (CH) fat clay. (Very Hard.).
				Bottom of Hole.
				MW-10 - Set Bottom of 10 ft. screen at 79.5'. Backfilled with sand to 67.0'. Backfilled with ¼" Bentonite pellets to 65.0'. Grouted with cement to top of hole with 6 bags cement.

H. M. ROLLINS COMPANY, INC.

P.O. BOX 3471 - GULFPORT, MS 39505

BORING/WELL LOG

SHEET 1 OF 5

CLIENT: Baldwin Pole & Piling Company, Inc. - Bay Minette, AL DATE: September 17, 1987

BORING/WELL NUMBER: Boring B-6 (MW-11) GROUND ELEVATION: 214.5

BORING LOCATION: Located 10 Ft. East of P-5

DRILLER: Southern Earth Sciences RIG TYPE: CME-55

DRILLING METHOD: Rotary Hydraulic/Bentonite Fluid SAMPLING INTERVAL & METHOD: Cont. Sampling: Split Spoon

BIT/AUGER SIZE: 4"/8"

FIELD ENGINEER: C.E. Rollins, Jr./Lloyd Fe[illegible] GEOLOGIST: Harvey Playpay

SAMPLE NUMBER	SAMPLE DEPTH	BLOW COUNT (6 INCH)	SAMPLE RECOVERY	NARRATIVE DESCRIPTION (GEOLOGIC OBSERVATIONS, DRILLING OBSERVATIONS, AND/OR OTHER REMARKS)
1	0-2'	1-1-2-2	12"	0-1.5' - Brown and black silty sand (SM). (Very Loose). 1.5-2.0' - Black and brown organic clay.
2	2-4'	4-3-7-8	13"	Tan (SC) clayey sand with trace of gravel. (Firm).
3	4-6'	5-5-5-3	14"	Gray and brown (SM) silty sand. (Loose).
4	6-8'	11-17-17-23	18"	Top - Trace of (SC) clayey sand. Gray and tan (SP) sand. Poorly graded. (Dense).
5	8-10'	9-7-4-12	18"	8.0-8.5' Yellow and tan (SM) silty sand. 8.5-10.0' Gray (CH) fat clay. (Stiff).
6	10-12'	4-9-10-13	6"	Gray and tan (CH) fat clay. Very (stiff).

H. M. ROLLINS COMPANY, INC.

P.O. BOX 3471 - GULFPORT, MS 39505

BORING/WELL LOG

CLIENT: Baldwin Pole & Piling Company, Inc. - Bay Minette, AL DATE: September 17, 1987

BORING/WELL NUMBER: Boring B-6 (MW-11) GROUND ELEVATION: 214.5

FIELD ENGINEER: C.H. Rollins, Jr./Lloyd Fell REGOBIST: Harvey Blakeney

SAMPLE NUMBER	SAMPLE DEPTH	BLOW COUNT (6 INCH)	SAMPLE RECOVERY	NARRATIVE DESCRIPTION (GEOLOGIC OBSERVATIONS, DRILLING OBSERVATIONS, AND/OR OTHER REMARKS)
7	12-14'	5-11-15-22	10"	Gray and tan (CH) fat clay. (Very Stiff).
8	14-16'	11-17-20-23	22"	Gray and tan (CH) fat clay. (Very Hard).
9	16-18'	8-16-18-20	18"	Gray and tan (CH) fat clay. (Very Hard).
10	18-20'	7-12-15-21	18"	Gray and tan (CH) fat clay. (Very Stiff).
11	20-22'	9-16-20-23	16"	Pink and gray (CH) fat clay. (Very Hard).
12	22-24'	8-12-12-15	22"	Pink and gray (CH) fat clay. (Very Stiff).
13	24-26'	6-9-11-12	14"	Pink and gray (CH) fat clay. (Very stiff).
14	26-28'	4-6-9-10	20"	Pink and gray (CH) fat clay. (Stiff).

H. M. ROLLINS COMPANY, INC.

P.O. BOX 3471 - GULFPORT, MS 39505

BORING/WELL LOG

CLIENT: Baldwin Pole & Piling Company, Inc. - Bay Minette, AL DATE: September 17, 1587

BORING/WELL NUMBER: Boring B-6 (MW-11) GROUND ELEVATION: 214.6

FIELD ENGINEER: C. E. Rollins, Jr./Lloyd Fell GEOLOGIST: Harvey Blakeney

SAMPLE NUMBER	SAMPLE DEPTH	BLOW COUNT (6 INCH)	SAMPLE RECOVERY	NARRATIVE DESCRIPTION (GEOLOGIC OBSERVATIONS, DRILLING OBSERVATIONS, AND/OR OTHER REMARKS)
15	28-30'	4-8-7-8	24"	Pink and gray (CH) fat clay. (Stiff).
16	30-32'	6-6-7-9	12"	Tan and gray (CH) fat clay with sand lens. (Stiff).
17	32-34'	6-6-12-12	10"	Pink and tan (CH) fat clay with 0.2' of brown silty sand at 32.9-33.1'. (Very Stiff).
18	34-35'	3-3-4-4	11"	Pink soft (CH) fat clay with layer (SC) clayey sand. (Firm).
19	36-38'	3-4-6-11	10"	Pink soft (CH) fat clay with layer (SC) clayey sand. (Stiff).
20	38-40'	3-6-5-5	20"	Tan and gray (SC) clayey sand with layer of (CH) fat clay. (Firm).
21	40-42'	1-1-3-5	20"	Gray and tan (CH) fat clay with layer (SC) clayey sand. (Soft).
22	42-44'	4-7-10-11	22"	Gray and tan (CH) fat clay with layer (SC) clayey sand. (Very Stiff).

H. M. ROLLINS COMPANY, INC.

P.O. BOX 3471 - GULFPORT, MS 39505

BORING/WELL LOG

CLIENT: Baldwin Pole & Piling Company, Inc. - Bay Minette, AL DATE: September 17, 1987

BORING/WELL NUMBER: Boring B-6 (MW-11) GROUND ELEVATION: 214.6

FIELD ENGINEER: C.H. Rollins, Jr./Lloyd Fell GEOLOGIST: Harvey Blakeney

SAMPLE NUMBER	SAMPLE DEPTH	BLOW COUNT (6 INCH)	SAMPLE RECOVERY	NARRATIVE DESCRIPTION (GEOLOGIC OBSERVATIONS, DRILLING OBSERVATIONS, AND/OR OTHER REMARKS)
23	44-46'	6-10-13-17	22"	Gray and tan (CH) fat clay with layer (SC) clayey sand. (Very Stiff).
24	46-48'	6-9-13-13	22"	Gray (CL) sandy clay. (Very Stiff).
25	48-50'	4-6-8-11	18"	Gray and tan (SC) (SM) clayey sand, silty sand. (Firm).
26	50-52'	12-18-20-24	16"	Tan (SM) silty sand. (Firm).
27	52-54'	15-28 50/5	9"	Tan (SM) silty sand. (Very dense).
28	54-56'	25-37 50/5	9"	Gray and tan (SP) sand - poorly graded. (Very dense).
29	56-58'	18-23-24-28	13"	Gray and tan (SP) sand - poorly graded. (Dense).
30	58-60'	13-23-30-26	12"	Gray and tan (SP) sand - poorly graded. (Very dense).

H. M. ROLLINS COMPANY, INC.

P.O. BOX 3471 - GULFPORT, MS 39505

BORING/WELL LOG

CLIENT: Baldwin Pole & Piling Company, Inc. - Bay Minette, AL DATE: September 17, 1987

BORING/WELL NUMBER: Boring B-6 (MW-11) GROUND ELEVATION: 214.6

FIELD ENGINEER: C. H. Rollins, Jr./Lloyd Fell GEOLOGIST: Harvey Blakeney

SAMPLE NUMBER	SAMPLE DEPTH	BLOW COUNT (6 INCH)	SAMPLE RECOVERY	NARRATIVE DESCRIPTION (GEOLOGIC OBSERVATIONS, DRILLING OBSERVATIONS, AND/OR OTHER REMARKS)
31	60-62'	11-12-15-23	11"	Gray and tan (SP) sand - poorly graded. (Very Firm).
				Fish tailed to 63.5'

MW-11 Set bottom of 10' screen at 63.3'.

Backfilled with sand to 51.0'.

Backfilled with ¼" Bentonite pellets to 49.0'.

Grouted with cement to top of hole with 9 bags cement.

H. M. ROLLINS COMPANY, INC.

P.O. BOX 3471 - GULFPORT, MS 39505

BORING/WELL LOG

CLIENT: Baldwin Pole & Piling Company, Inc. - Bay Minette, AL DATE: September 18, 1987

BORING/WELL NUMBER: Boring B-7 (MW-12) GROUND ELEVATION: 214.3

BORING LOCATION: Located 10 Ft. East of MW-6

DRILLER: Southern Earth Sciences RIG TYPE: CME-55

DRILLING METHOD: Rotary Hydraulic/Bentonite Fluid SAMPLING INTERVAL & METHOD: Cont. Sampling: Split Spoon

BIT/AUGER SIZE: 4"/8"

FIELD ENGINEER: C.H. Rollins, Jr./Lloyd Fell GEOLOGIST: Harvey Blakeney

SAMPLE NUMBER	SAMPLE DEPTH	BLOW COUNT (6 INCH)	SAMPLE RECOVERY	NARRATIVE DESCRIPTION (GEOLOGIC OBSERVATIONS, DRILLING OBSERVATIONS, AND/OR OTHER REMARKS)
	0-16'			Fish tailed - no sample
1	16-18'	8-9-12-14	12"	Top 0.3 (SP) sand - poorly graded with trace gravel. Gray (CH) fat clay. (Very stiff).
2	18-20'	4-9-10-14	20"	Gray and tan (CH) fat clay. (Very stiff).
3	20-22'	5-10-15-15	20"	Gray and tan (CH) fat clay. (Very stiff).
4	22-24'	4-6-8-10	6"	Spring broke. Sample slid out all but 0.5', Gray and tan (CH) fat clay. (Stiff)
5	24-26'	4-5-7-7	20"	Gray and tan (CH) fat clay. (Stiff).

H. M. ROLLINS COMPANY, INC.

P.O. BOX 3471 - GULFPORT, MS 39505

BORING/WELL LOG

CLIENT: Baldwin Pole & Piling Company, Inc. - Bay Minette, AL DATE: September 21, 1987

BORING/WELL NUMBER: Boring B-7 (MW-12) GROUND ELEVATION: 214.3

FIELD ENGINEER: H. M. Rollins, Jr./Lloyd Fell GEOLOGIST: Harvey Blakeney

SAMPLE NUMBER	SAMPLE DEPTH	BLOW COUNT (6 INCH)	SAMPLE RECOVERY	NARRATIVE DESCRIPTION (GEOLOGIC OBSERVATIONS, DRILLING OBSERVATIONS, AND/OR OTHER REMARKS)
6	26-28'	3-4-4-5	20"	Gray and tan (CH) fat clay. (Firm).
7	28-30'	6-19-11-9	16"	Gray and tan (CH) fat clay. Bottom 0.2' (SM) silty sand. (Very stiff).
8	30-32'	11-13-11-12	9"	Pink (CH) fat clay. Bottom 0.3' (SM) silty sand. (Very Stiff).
9	32-34'	4-7-8-7	20"	Pink (CH) fat clay with brown (SC) clayey sand. (Stiff).
10	34-36'	4-1-1-5	20"	Pink (CH) fat clay with brown (SC) clayey sand. (Very soft).
11	36-38'	3-4-5-6	20"	Gray (CH) fat clay with trace (CL) sandy clay. (Stiff).
12	38-40'	3-4-5-7	20"	Gray (SC) clayey sand with trace (CH) fat clay. (Loose).
13	40-42'	3-4-8-7	18"	Gray and tan (CL) sandy clay. (Stiff).

H. M. ROLLINS COMPANY, INC.

P.O. BOX 3471 - GULFPORT, MS 39505

BORING/WELL LOG

CLIENT: Baldwin Pole & Piling Company, Inc. - Bay Minette, AL DATE: September 21, 1987

BORING/WELL NUMBER: Boring B-7 (MW-12) GROUND ELEVATION: 214.3

FIELD ENGINEER: C.H. Rollins, Jr./Lloyd Fell GEOLOGIST: Harvey Blakeney

SAMPLE NUMBER	SAMPLE DEPTH	BLOW COUNT (6 INCH)	SAMPLE RECOVERY	NARRATIVE DESCRIPTION (GEOLOGIC OBSERVATIONS, DRILLING OBSERVATIONS, AND/OR OTHER REMARKS)
14	42-44'	2-3-6-10	19"	Gray and tan (CL) sandy clay with layer (CH) fat clay. (Stiff).
15	44-46'	4-6-10-10	20"	Gray and tan (SC) clayey sand with layers of (SM) silty sand. (Firm).
16	46-48'	3-8-19-28	20"	46.0-47.0' Tan (CL) clayey sand. 47.0-48.0' Yellow (SM) silty sand. (Very Firm).
17	48-50	11-11-10-11	16"	Tan (SM) silty sand. (Very firm).
18	50-52'	8-6-4-12	17"	Tan (SM) silty sand. (Loose).
19	52-54'	13 35 50/5	11"	Tan (SP) sand - poorly graded. (Very dense).
20	54-56'	33 50/5	8"	Tan (SP) sand - poorly graded. (Very dense).

H. M. ROLLINS COMPANY, INC.

P.O. BOX 3471 - GULFPORT, MS 39505

BORING/WELL LOG

CLIENT: Baldwin Pole & Piling Company, Inc. - Bay Minette, AL DATE: September 21, 1987

BORING/WELL NUMBER: Boring B-7 (MW-12) GROUND ELEVATION: 214.3

FIELD ENGINEER: C.H. Rollins, Jr./Lloyd Fell. GEOLOGIST: Harvey Blakeney

SAMPLE NUMBER	SAMPLE DEPTH	BLOW COUNT (6 INCH)	SAMPLE RECOVERY	NARRATIVE DESCRIPTION (GEOLOGIC OBSERVATIONS, DRILLING OBSERVATIONS, AND/OR OTHER REMARKS)
21	56-58'	26 50/5	4"	Tan (SP sand - poorly graded. Fish tailed to 58.0'. No sample.

MW-12 Set bottom of 10' screen at 58.0'.

Backfilled to 46.0' with sand.

Backfilled with ¼" Bentonite pellets to 44.0'.

Cemented well to top of hole with 9 bags cement.

MONITORING WELL LOG

PROJECT BPP MW-1A WELL NO. 1A

DRILLING METHOD HOLLOW-STEM AUGER

DRILLER JOHN HARRISON, BOB WILBORN DATE 10-10-85

GROUND ELEVATION 245.09'
TOP OF WELL 246.39'
DEPTH OF WELL 20.2'

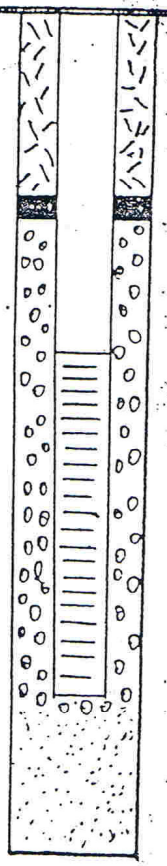
GROUND WATER DEPTH (ft):
AT COMPLETION 15.6'
AFTER ____ HOURS ____

CASING MATERIAL 2" PVC SCREEN 2" PVC

SAND OR GRAVEL PACK
BENTONITE
BACK FILL
CONCRETE
SCREEN



STRATA DEPTH	SAMPLE DEPTH	DESCRIPTION	CONSTRUCTION
0		OVERBURDEN	
		RED SAND FILL	
5		COARSE LIGHT COLORED SAND	
10			
		WHITE SAND (WET)	
15			
20		COARSE, LIGHT RED SAND (WET)	
25		YELLOW-WHITE SANDY CLAY	
		RED CLAY HARDPAN	
30			
35			
40			



MONITORING WELL LOG

PROJECT BPP MW-2A — WELL NO. 2A

DRILLING METHOD HOLLOW-STEM AUGER

DRILLER JOHN HARRISON, BOB WILBORN — DATE 10-10-85

GROUND ELEVATION 217.40'

TOP OF WELL 218.50'

DEPTH OF WELL 14.1'

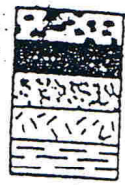
GROUND WATER DEPTH (ft):

AT COMPLETION 5.9'

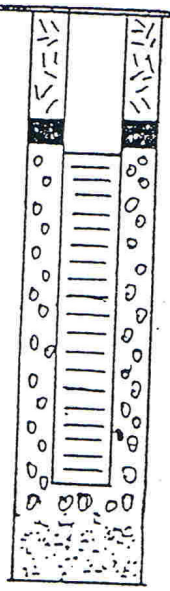
AFTER ____ HOURS ____

CASING MATERIAL 2" PVC — SCREEN 2" PVC

SAND OR GRAVEL PACK
BENTONITE
BACK FILL
CONCRETE
SCREEN



STRATA DEPTH	SAMPLE DEPTH	DESCRIPTION	CONSTRUCTION
		OVERBURDEN	
		DARK SAND (MOIST)	
		LIGHT BROWN SAND (WET)	
		CLAY	



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SHEET 1 OF 1

MONITORING WELL LOG

PROJECT BPP MW-3A WELL NO. 3A

DRILLING METHOD HOLLOW STEM AUGER

DRILLER JOHN HARRISON, BOB WILBORN DATE 10-10-85

GROUND ELEVATION 215.35'

TOP OF WELL 216.65'

DEPTH OF WELL 12.3'

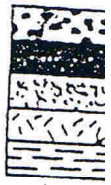
GROUND WATER DEPTH (ft):

AT COMPLETION 3.6'

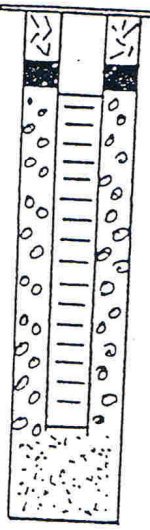
AFTER ____ HOURS ____

CASING MATERIAL 2" PVC SCREEN 2" PVC

GRAVEL PACK
BENTONITE
BACK FILL
CONCRETE
SCREEN



STRATA DEPTH	SAMPLE DEPTH	DESCRIPTION	CONSTRUCTION
0		DARK OVERBURDEN	
5		YELLOW-BROWN SAND	
10			
15		CLAY	
20			
25			
30			
35			
40			



SHEET 1 OF 1

MONITORING WELL LOG

PROJECT BPP MW-4A WELL NO. 4A

DRILLING METHOD HOLLOW-STEM AUGER

DRILLER JOHN HARRISON, BOB WILSON DATE 10-11-85

GROUND ELEVATION 219.64'

TOP OF WELL 221.39'

DEPTH OF WELL 11.55'

GROUND WATER DEPTH (ft):

AT COMPLETION 2.85'

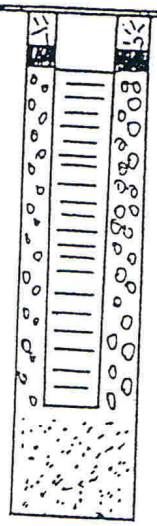
AFTER ____ HOURS ____

CASING MATERIAL 2" PVC SCREEN 2" PVC

GRAVEL PACK
BENTONITE
BACK FILL
CONCRETE
SCREEN



STRATA DEPTH	SAMPLE DEPTH	DESCRIPTION	CONSTRUCTION
		OVERBURDEN	
		DARK SAND (WET, W/STRONG SWAMPY ODOR)	
		YELLOW-BROWN SAND (CLEANER LOOK & SMELL THAN DARK SAND)	
		YELLOW CLAY (GRAB SAMPLE FROM AUGER BIT)	
		* ROOT IN SAMPLE SPOON, NOT ENOUGH SOIL FOR SAMPLE.	



5 10 15 20 25 30 35 40

SHEET 1 OF 1

LOG OF BORING NO. MW-5

BALDWIN POLE AND PILING
BAY MINETTE, ALABAMA
OUR JOB NO: 86-144

TYPE: ASTM D-1586

LOCATION: As Directed by Client

SURF. EL: Unknown

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT	BLOWS PER FOOT (N) 5 10 15 20 25 30 35 / PLASTIC LIMIT — WATER CONTENT, % — LIQUID LIMIT 10 20 30 40 50 60 70	ELEVATION, FT
0			VERY LOOSE Tan Fine to Medium SILTY CLAYEY SAND	4			
5			LOOSE White Fine to Medium SAND	9			
10			VERY STIFF Mottled Yellow, White and Reddish Brown SANDY SILTY CLAY with "Ironstone"	30			
15							
20							
25							
30							
35							
40							
45							
50							

COMPLETION DEPTH: 11.5 Feet
DATE: September 2, 1986

DEPTH TO WATER IN BORING: Not Measured
DATE:

southern earth sciences, inc.

LOG OF BORING NO. MW-6

BALDWIN POLE AND PILING
BAY MINETTE, ALABAMA
OUR JOB NO: 86-144

TYPE: ASTM D-1586

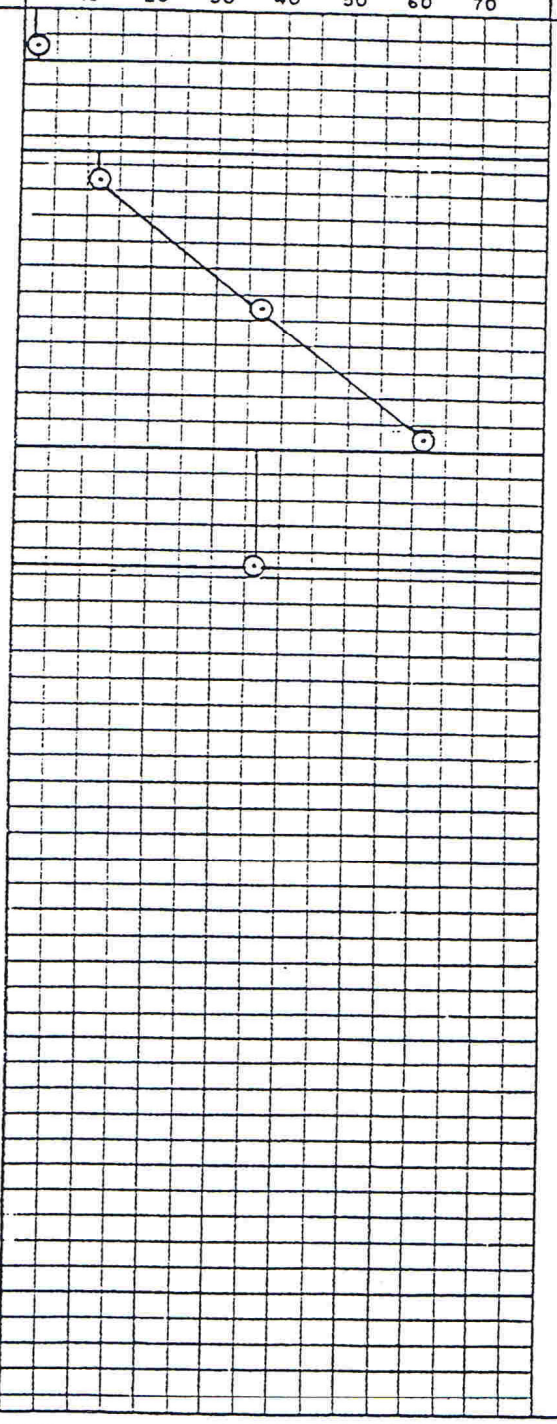
LOCATION: As Directed by Client

SURF. EL: Unknown

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT
0			VERY LOOSE Brown Fine SILTY SAND	1	
5			Brown to Black Fine SILTY CLAYEY SAND	6	
10			LOOSE to DENSE Yellow Fine to Medium SILTY SAND with some small Gravel	18	
15				31	
20			VERY STIFF Mottled Light Gray Yellow and Reddish Brown SANDY SILTY CLAY	18	
25					
30					
35					
40					
45					
50					

BLOWS PER FOOT (N)
5 10 15 20 25 30 35

PLASTIC LIMIT — WATER CONTENT, % — LIQUID LIMIT
10 20 30 40 50 60 70



ELEVATION, FT

COMPLETION DEPTH: 22.0 Feet
DATE: September 2, 1986

DEPTH TO WATER IN BORING: Not Measured
DATE:

southern earth sciences, inc

LOG OF BORING NO. MW-7

BALDWIN POLE AND PILING
BAY MINETTE, ALABAMA
OUR JOB NO: 86-144

TYPE: ASTM D-1586 LOCATION: As Directed by Client

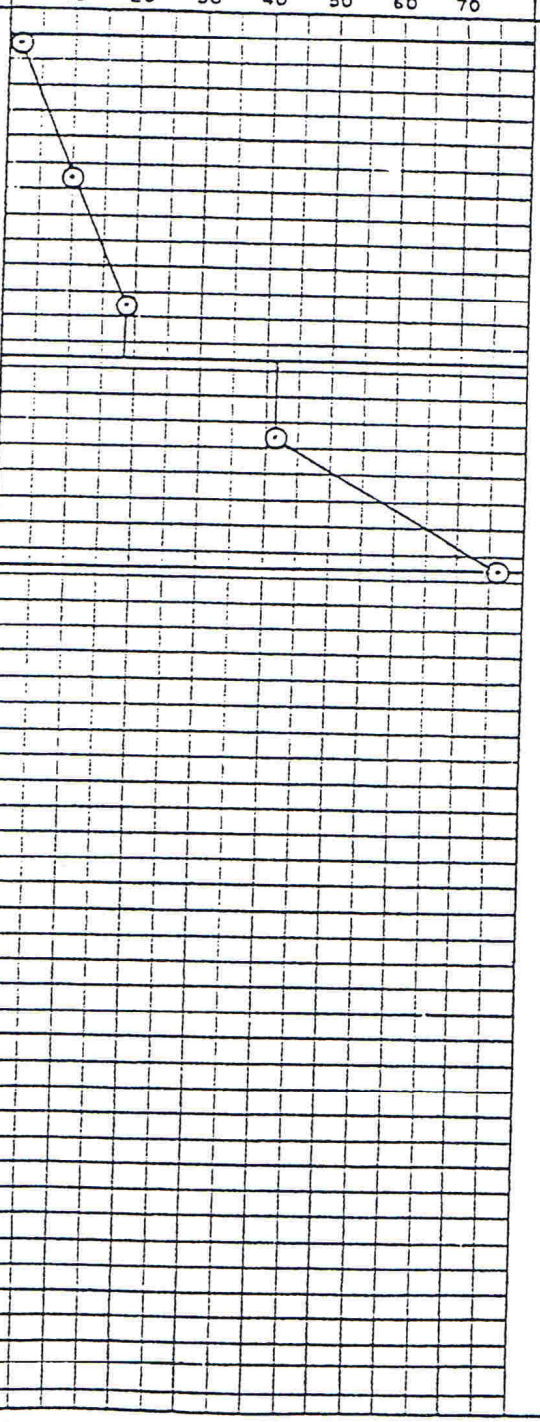
SURF. EL: Unknown

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT
			VERY LOOSE Brown Fine *	1	
5			VERY LOOSE to LOOSE Fine to Medium Light Gray and Yellow CLAYEY SAND	5	
10				9	
15			VERY STIFF to HARD Mottled Yellow and Gray CLAY	20	
20				38	
25			*SILTY SAND		
30					
35					
40					
45					
50					

BLOWS PER FOOT (N)
5 10 15 20 25 30 35

PLASTIC LIMIT — WATER CONTENT, % — LIQUID LIMIT
10 20 30 40 50 60 70

ELEVATION, FT



COMPLETION DEPTH: 21.5 Feet
DATE: September 3, 1986

DEPTH TO WATER IN BORING: Not Measured DATE:

southern earth sciences inc

LOG OF BORING NO. MW-8

BALDWIN POLE AND PILING
BAY MINETTE, ALABAMA
OUR JOB NO: 86-144

TYPE: ASTM D-1586 LOCATION: As Directed by Client

SURF. EL: Unknown

DEPTH, FT	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WT LB/CU FT
	VERY SOFT Gray and Brown SANDY CLAYEY SILT with Organics	1/24"	
		WOH	
5	VERY LOOSE Fine to Medium SILTY CLAYEY SAND Creosote present in *	1	
		WOH	
10	VERY SOFT to FIRM Black, Gray, and Tan SANDY SILTY **	WOH	
		WOH	
		Push	
15			
20			
25			
30			
35			
40			
45			
50			

*sample

**CLAY with SAND and CLAY Seams Creosote present in sample

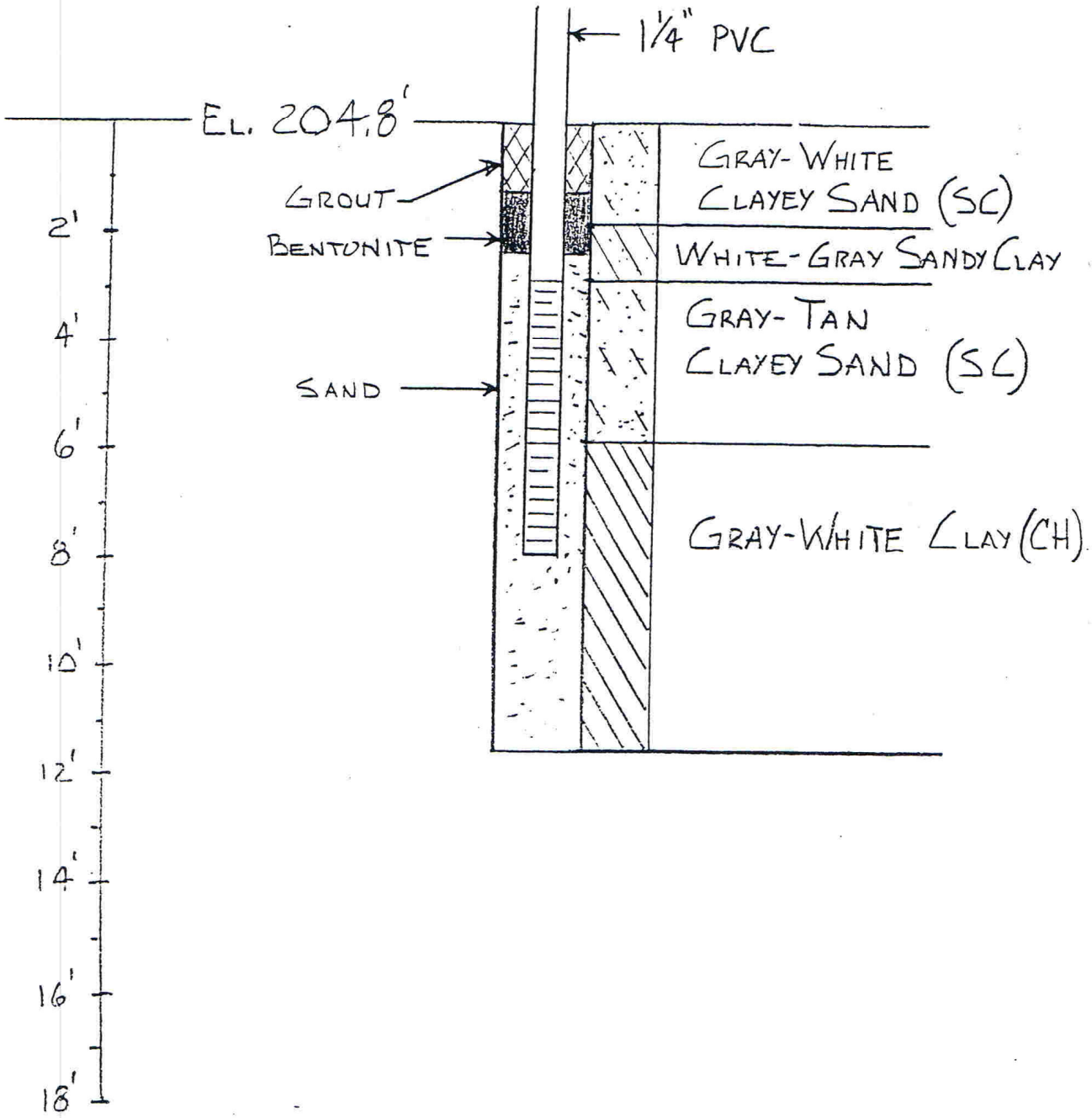
BLOWS PER FOOT (N): 5 10 15 20 25 30 35

PLASTIC LIMIT — WATER CONTENT, % — LIQUID LIMIT: 10 20 30 40 50 60 70

ELEVATION, FT

COMPLETION DEPTH: 14.0 Feet
DATE: September 4, 1986

DEPTH TO WATER IN BORING: Not Measured DATE:



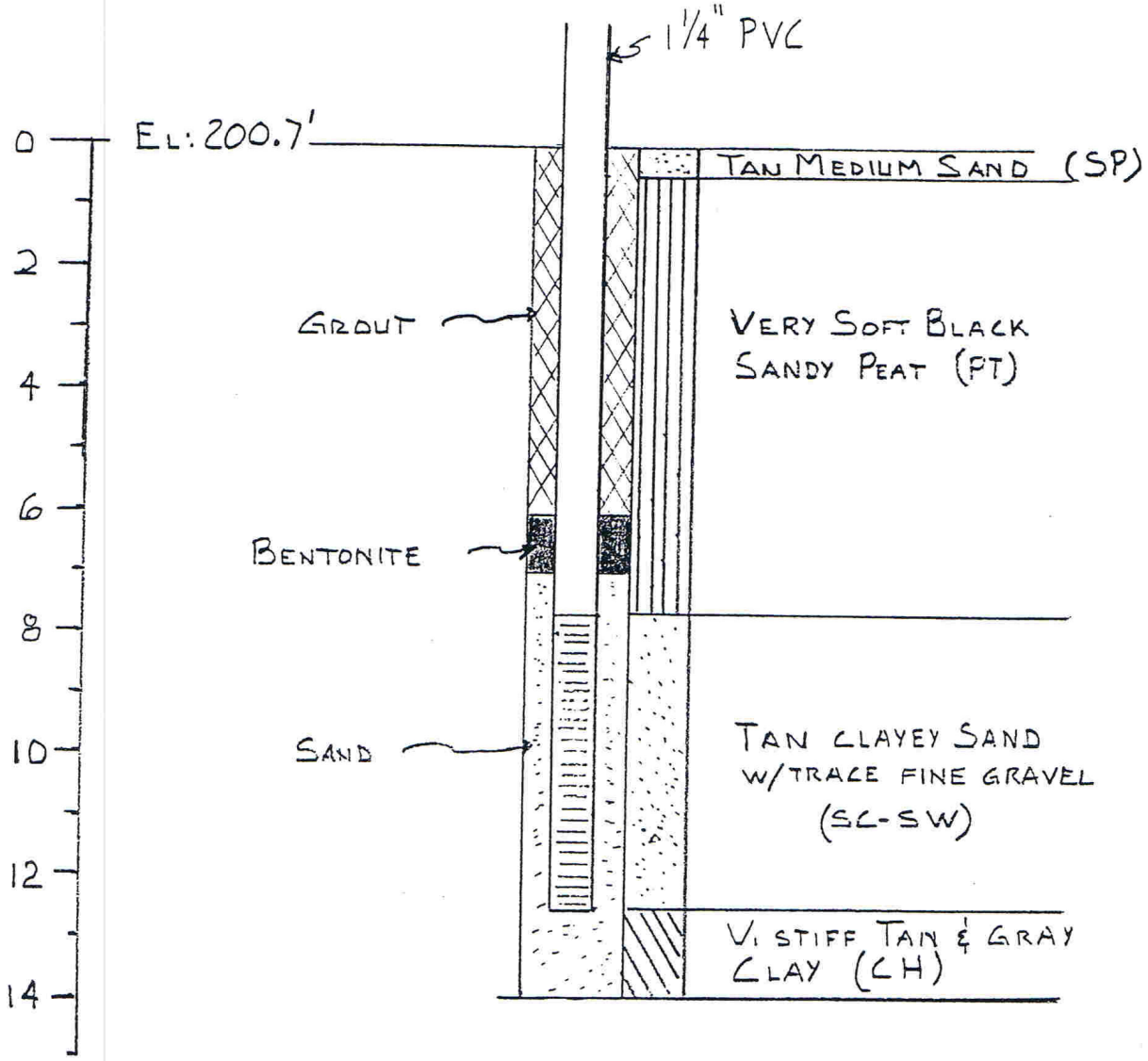
BALDWIN POLE & PILING CO.
BAY MINETTE, AL.

SCALE: V: 1"=3'	APPROVED BY	DRAWN BY LHR
DATE: 9-15-87		

PIEZOMETER LOG — P-1

H.M. ROLLINS CO., GULFPORT, MS.

DRAWING NUMBER



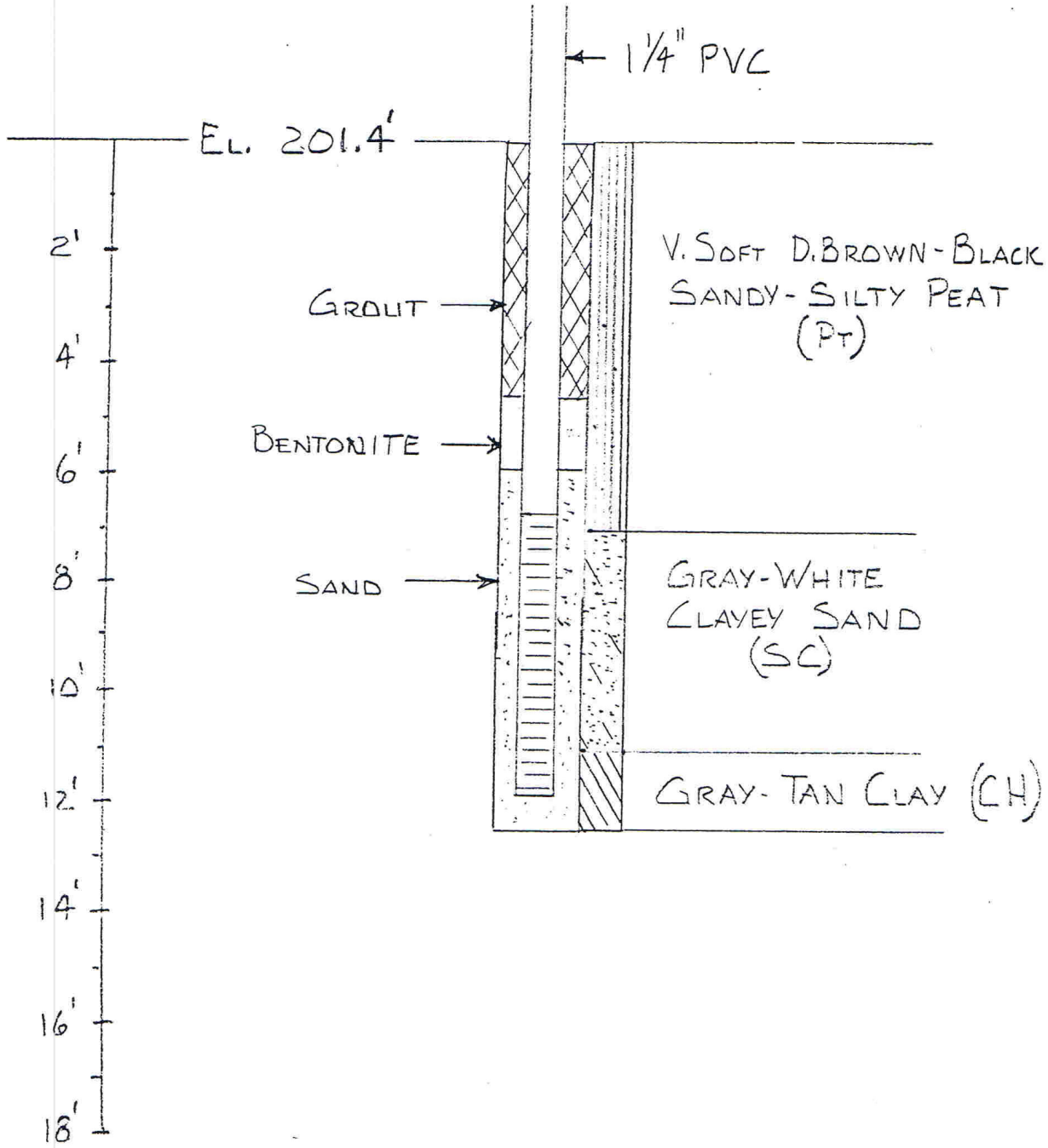
BALDWIN POLE & PILING CO.
BAY MINETTE, AL.

SCALE: V: 1" = 3'	APPROVED BY	DRAWN BY LHR
DATE: 9-15-87		

PIEZOMETER LOG — P-2

H.M. ROLLINS CO., GULFPORT, MS.

DRAWING NUMBER



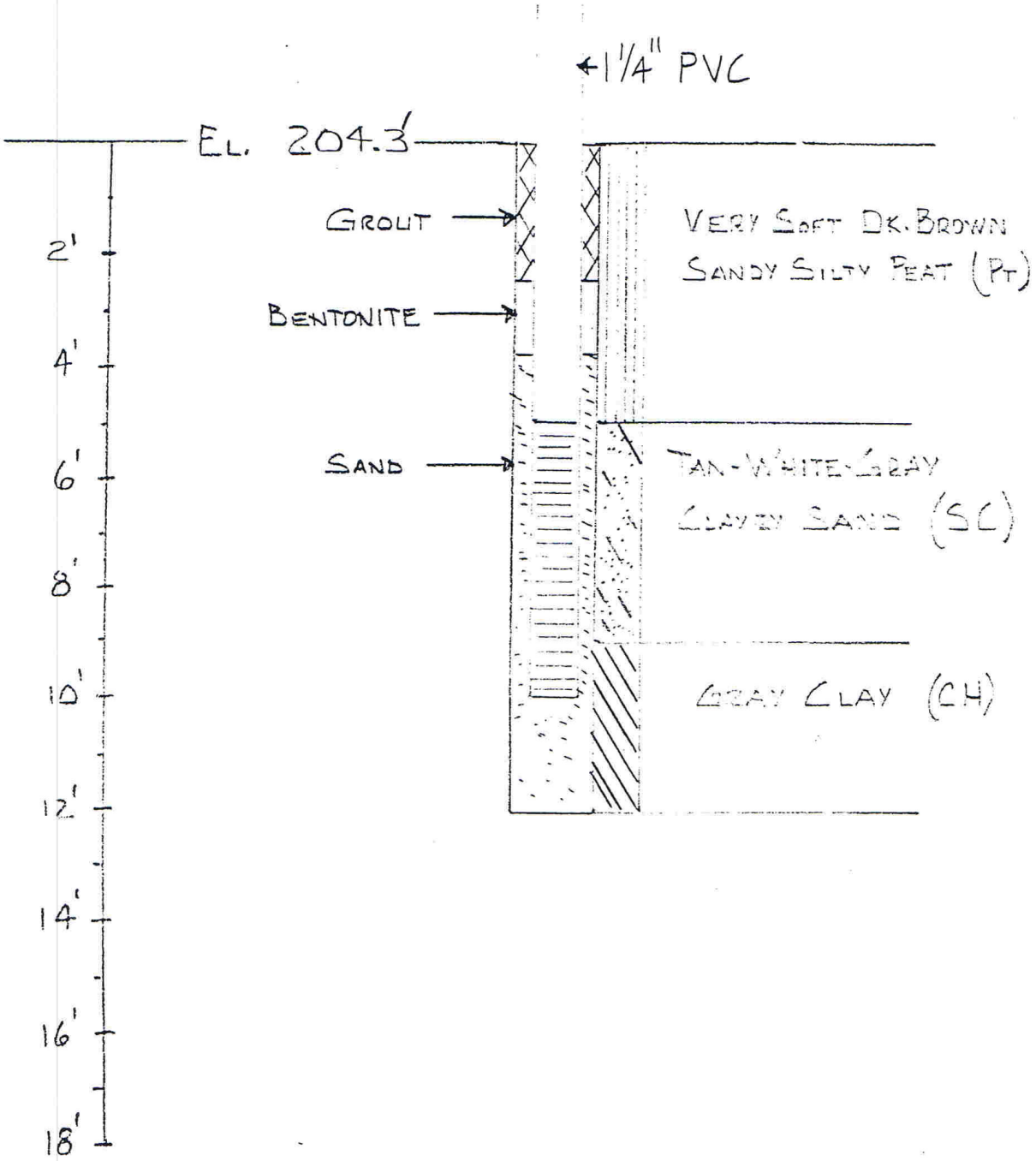
BALDWIN POLE & PILING CO.
BAY MINETTE, AL.

SCALE: V: 1" = 3'	APPROVED BY	DRAWN BY LHR
DATE: 9-15-87		

PIEZOMETER LOG — P-3

H.M. ROLLINS CO., GULFPORT, MS.

DRAWING NUMBER



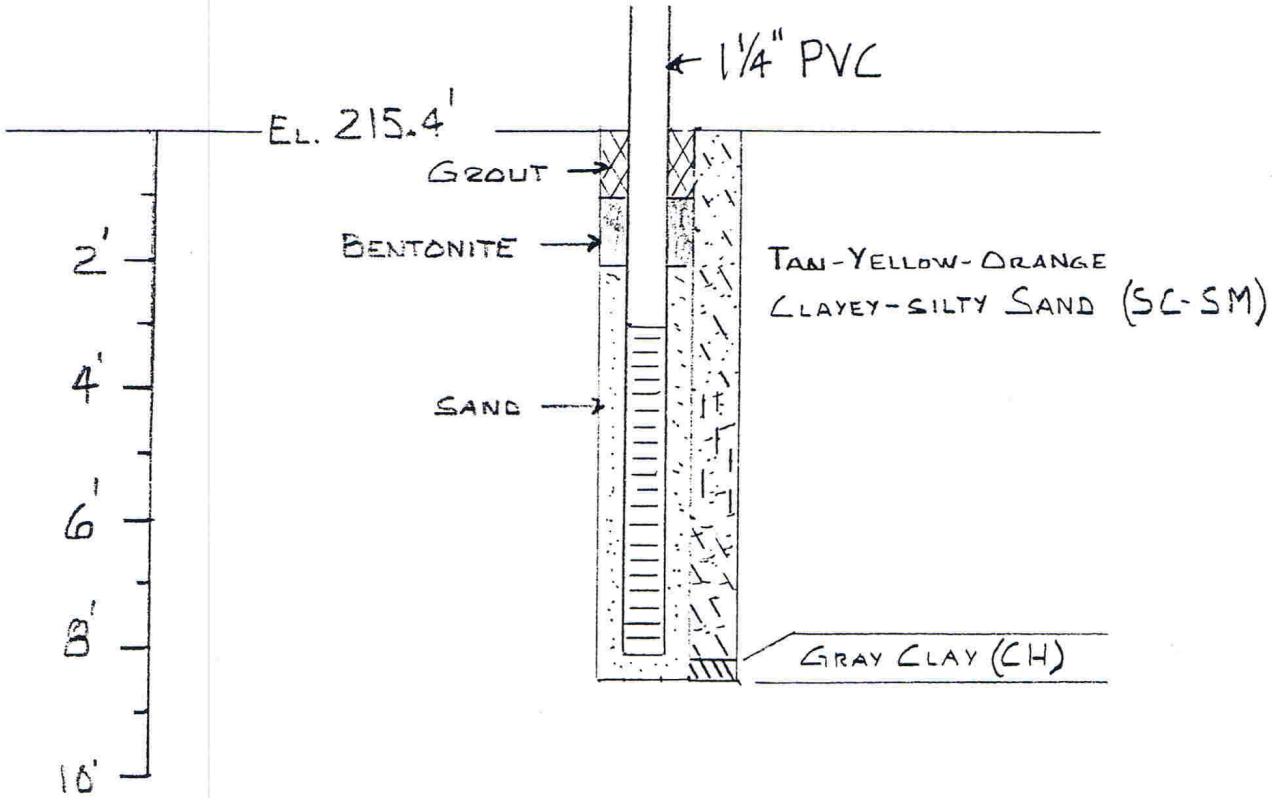
BALDWIN POLE & PILING CO.
BAY MINETTE, AL.

SCALE: V: 1" = 3'	APPROVED BY	DRAWN BY LHR
DATE: 9-15-87		

PIEZOMETER LOG – P-4

H.M. ROLLINS CO., GULFPORT, MS.

DRAWING NUMBER



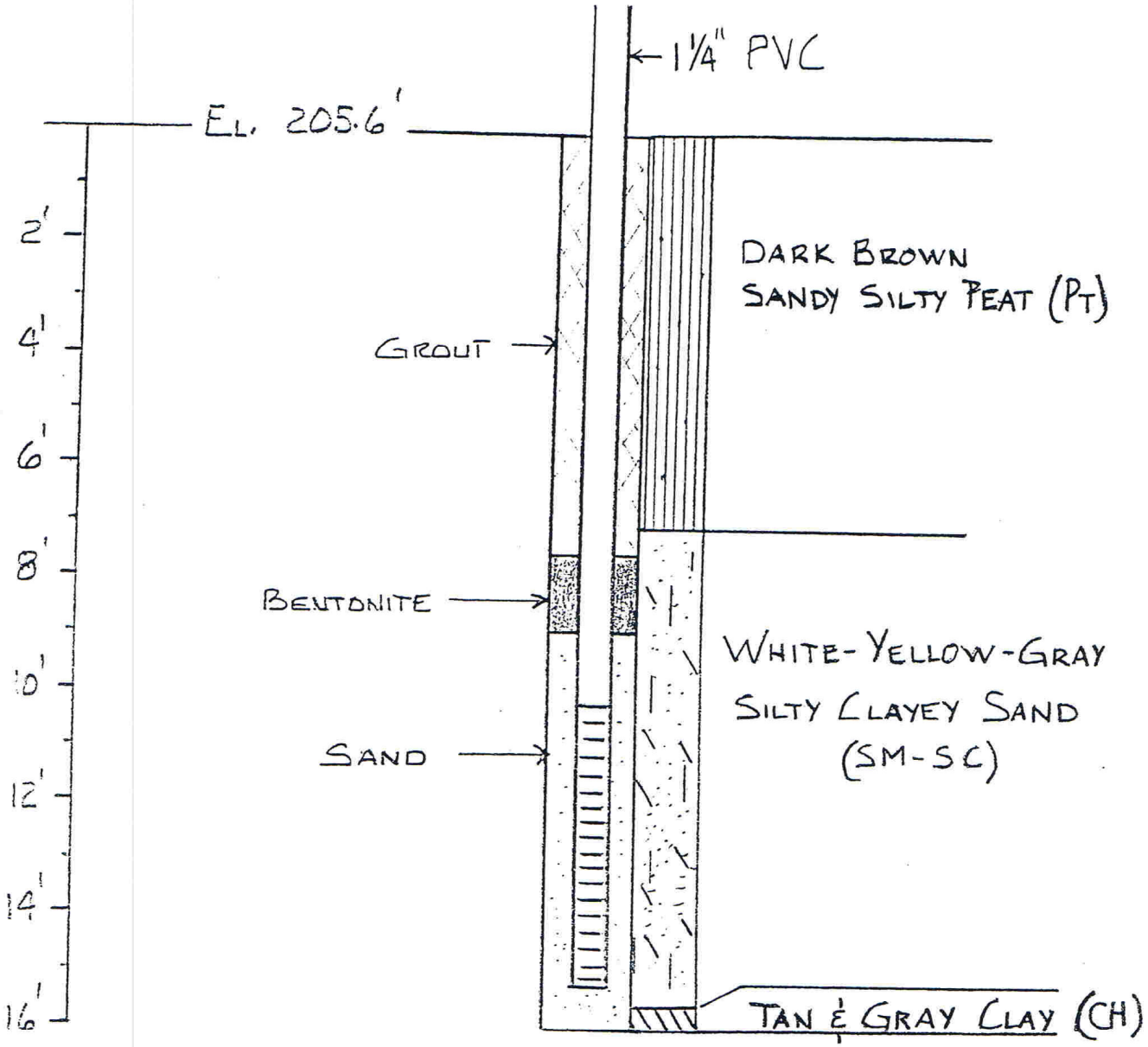
BALDWIN POLE & PILING CO.
BAY MINETTE, AL.

SCALE: V: 1"=3'	APPROVED BY	DRAWN BY LHR
DATE: 9-15-87		

PIEZOMETER LOG — P-5

H.M. ROLLINS CO., GULFPORT, MS.

DRAWING NUMBER



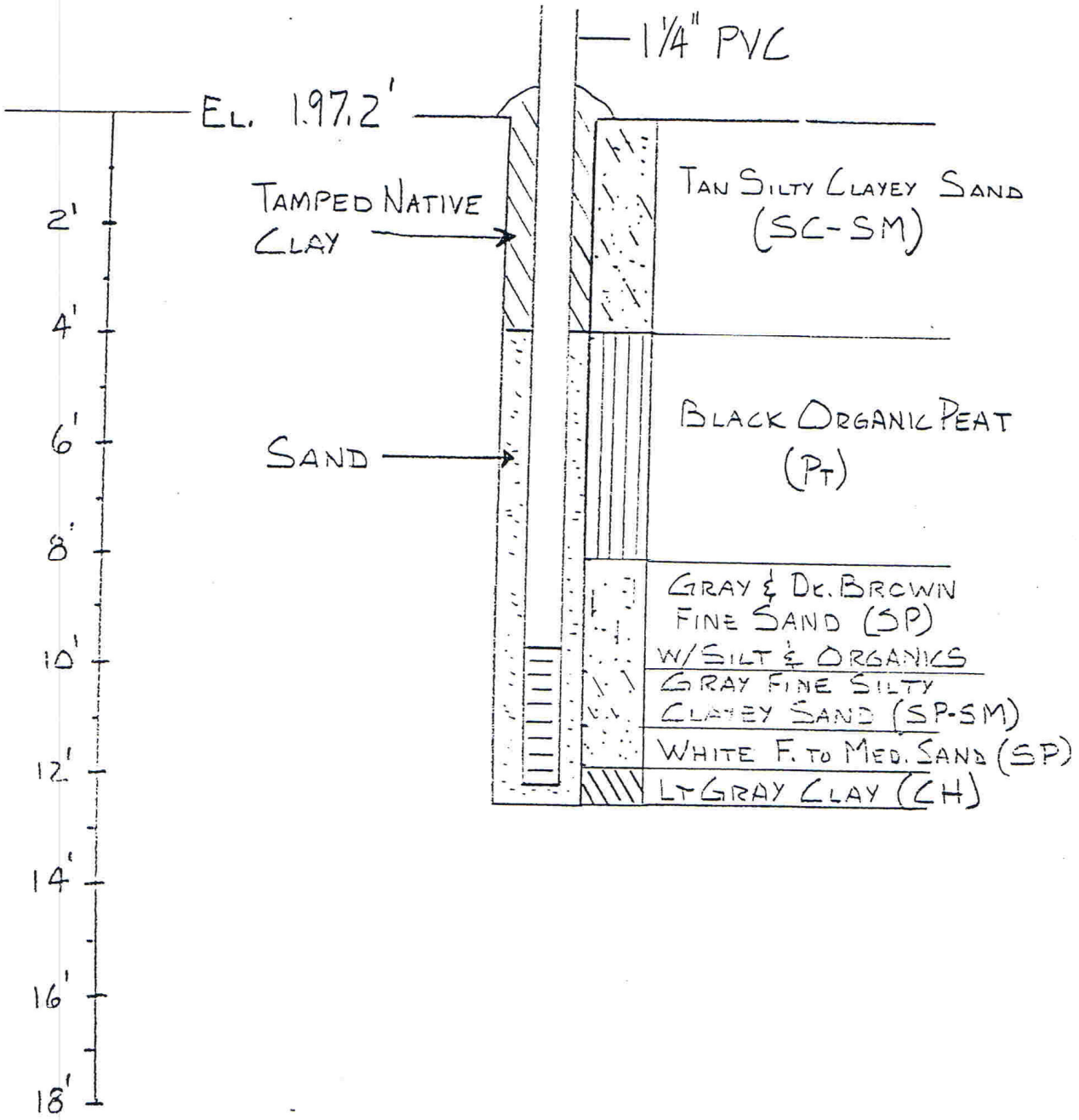
BALDWIN POLE & PILING CO.
BAY MINETTE, AL.

SCALE: V: 1"=3'	APPROVED BY	DRAWN BY LHR
DATE: 9-15-87		

PIEZOMETER LOG — P-6

H.M. ROLLINS CO., GULFPORT, MS.

DRAWING NUMBER



BALDWIN POLE & PILING CO.
BAY MINETTE, AL.

SCALE: V: 1"=3'	APPROVED BY	DRAWN BY LHR
DATE: 9-15-87		

PIEZOMETER LOG - TP-9

H.M. ROLLINS CO., GULFPORT, MS.

DRAWING NUMBER

EXHIBIT 14

STELLA-JONES CORPORATION
BAY MINETTE, ALABAMA

GROUNDWATER SAMPLING AND ANALYSIS PLAN

Prepared By:
H. M. Rollins Company, Inc.
P. O. Box 3471
Gulfport, Mississippi 39505
(228) 832-1738

March 1, 2024

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APPENDIX A Monitoring Well Sampling Record and Coversheet

APPENDIX B Analysis Request/Chain-of-Custody Form

1.0 GENERAL

This Groundwater Sampling and Analysis Plan modification is prepared to reflect the change in ownership of the facility in July of 2023 from Baldwin Pole & Piling Co., Inc., to Stella-Jones Corporation (Stella-Jones). In addition, the modifications reflect some changes in the groundwater monitoring system and some analytical methods.

This Groundwater Sampling and Analysis Plan is to be used and followed by all personnel engaged in groundwater sampling and analysis activities at this site. Proper procedures and techniques for sample collection, sample preservation and shipment, chain-of-custody, and laboratory and field analysis will result in data which fairly represent the groundwater quality at the site.

2.0 QUALITY CONTROL/QUALITY ASSURANCE

Groundwater samples will be analyzed by an independent commercial laboratory. All phases of a laboratory's qualifications, experience, personnel, equipment, reputation and QA/QC procedures will be considered in selection of the laboratory. Where available, a copy of the chosen laboratory's QA/QC manual will be kept at the facility.

The procedures outlined in this plan are the basis of the Quality Assurance Plan at this site. Where appropriate, each section within this plan addresses the specific quality control aspects of the subjects covered by that section. The Plant Manager shall designate the Quality Assurance Coordinator for the Facility. The Quality Assurance Coordinator is responsible for seeing that the specific quality control procedures as outlined in this plan are followed, and for tracking and recording the results of specific quality control (QC) programs. The Quality Assurance Coordinator is responsible for the field analysis QC

program, the sampling event records, analytical results, and notifying the appropriate persons of any observed problems.

The Plant Manager is responsible for seeing that personnel receive adequate training in order to provide the required quality control for sampling operations. In addition, he may periodically observe the professional contract personnel and Stella-Jones employees under actual field operating conditions to insure that the Sampling Plan as outlined in this document is being followed.

Corrective actions will be taken any time when deemed necessary. Problems with field quality control may result from contamination of field blanks or contamination of field equipment and supplies either from the vendor, during the cleaning/loadout process, or during field operations. Corrective actions must be taken immediately when data is of questionable quality. These corrections may range from modifying certain procedures to reconducting an entire sampling event.

3.0 SITE SPECIFIC CONDITIONS

3.1 History

The groundwater at this site has been impacted by the past use of a surface impoundment to manage the hazardous waste listed as K001. The chemicals used as the basis for listing K001 as a hazardous waste are listed in 40 CFR Part 261, Appendix VII.

3.2 Dense Non-Aqueous Phase Liquids (DNAPL's)

The presence of a dense non-aqueous phase liquid in the first aquifer has been documented. This DNAPL is a black oily liquid which physically resembles coal tar creosote. No substantial accumulation of DNAPL was identified during prior site investigations, but the presence of small quantities have been observed in soil and groundwater samples taken. The presence of any DNAPL in a sample would render the results meaningless in terms of groundwater concentrations.

If the presence of DNAPL is detected in a well during water level and well depth measurement or during well purging activities, this will be noted in the sampling record. If a DNAPL-free sample cannot be obtained, sampling activities will be terminated for that well, and a note explaining the reason that no sample was taken will be placed in the sampling record.

4.0 ANALYTICAL PARAMETERS

4.1 Analytes

All wells sampled will be analyzed for the list of constituents specified in the Post-Closure Permit.

Compliance point and effectiveness wells shall be sampled semiannually. Boundary wells shall be sampled on an annual basis. If the facility completes corrective action and enters a detection monitoring mode, the background well and compliance point wells will be sampled on a semiannual basis.

4.2 Analytical Procedures

All samples shall be analyzed using methodology listed in US EPA SW-846, latest edition. Typically, Method 870 will be used, which provides method detection limits in the 10 ppb range, depending upon matrix interference and dilutions required on individual samples. ADEM previously agreed in writing that the use of these methods during the corrective action period was adequate. However, recent correspondence from ADEM has requested the use of methods with detection limits capable of reaching the groundwater protection standards (GPS) published in the facility permit for the boundary wells being monitored, if that is possible using methods in SW-846. This will require the use of multiple methods on those samples, greatly increasing their cost, and it is uncertain if the low detection limits can be achieved on actual environmental samples.

Stella-Jones acknowledges that should corrective action be nearing completion, that all wells must demonstrate compliance with the GPS for a period of three years, and methods must have detection limits below the GPS values unless no method exists in SW-846 that can achieve those detection limits.

5.0 SAMPLING PROCEDURES

5.1 Sampling Event Planning

Prior to each sampling event, the sampling team leader will review the appropriate permit conditions to insure that the proper samples will be taken. The team leader will use personal knowledge or a review of prior sampling results to determine the expected ranking of the total contaminant level to be found in each well to be

sampled. All measurements and sampling activities will be conducted in inverse order of expected contamination. The cleanest well will be sampled first, the dirtiest last. This will minimize any potential for cross-contamination between wells. The sampling team leader shall not schedule a sampling event immediately following any well maintenance activities (such as painting of the protective well casing) that would affect sample quality.

5.2 Sample Containers and Preservation

Samples to be analyzed for extractable organic compounds shall be collected in glass containers with Teflon lid liners. The minimum volume shall be 1 quart (0.946 l). No preservative chemicals are required.

In the event that samples are to be analyzed for purgeable or volatile organic compounds (VOC's), 40-ml glass vials with Teflon lined septum sealed caps will be used. Four drops of concentrated hydrochloric acid (HCL) will be added to each vial before filling.

If samples are to be analyzed for the metallic elements, polyethylene containers with polyethylene caps will be utilized. The minimum size shall be 1 quart (0.946 l). Two milliliters of 50% nitric acid shall be added to each container prior to filling (Micro-Methods, Inc., Ocean Springs, MS, advised that this will insure a sample pH of < 2 S.U.'s).

Sample containers will either be furnished by the analytical laboratory or they will be purchased. If purchased, the containers shall be ordered from a reputable

supplier of laboratory supplies and equipment, and shall be pre-cleansed according to approved EPA protocols.

5.3 Sample Labels

Each sample container will be labeled with:

STELLA-JONES CORPORATION WELL NUMBER DATE AND TIME OF COLLECTION NAME OF SAMPLER

The labels will be marked with water-proof ink and the glue must be as water-proof as possible to insure that the labels remain on the containers. The labels will be affixed to the container prior to filling. As a secondary identification, the well designation will also be marked on the container top with an indelible marker.

5.4 Sample Seals

Sample seals will not be used for individual samples. In the event that the samples will leave the sampler's immediate control, such as UPS shipment, the shipping container will be sealed with a tape which must be cut or broken if the shipping container is opened.

5.5 Sampling Field Records

Prior to the start of each sampling event, a sampling record coversheet will be completed. A monitoring well sampling record will be completed for each well sampled during that sampling event. The completed monitoring well sampling records and coversheet will be maintained in the permanent facility files. These records will be the permanent field records. A sampling record coversheet and monitoring well sampling record are found in Appendix A.

In addition to the records required above, the facility will ensure that a chain-of-custody document is completed covering all samples taken during each event. The original, signed copy of this document shall accompany the samples to the lab, and upon completion of laboratory analysis, shall be returned and stored at the facility with the analytical results.

5.6 Water Level/Well Depth Measurements

Prior to opening the well cover, the area surrounding the lock shall be inspected to insure that no excess oil is present which may inadvertently contaminate the well. Any excess oil shall be wiped away prior to opening.

After opening the well cover and removing the cap, the distance from the top of the well casing to the static water level in the well will be measured. The measurement will be made by use of a water level meter which gives an audible and/or visual indication or signal.

The distance to the static water shall be measured at the measuring point marked with black ink on the top of each casing, and shall be measured to the nearest 0.01 foot and recorded on the monitoring well sampling record.

The total depth of each well will be measured annually. If no non-aqueous phase liquids are expected, the water level meter may be used. Otherwise, a weighted steel tape will be used to determine total depth. If measurement of dense non-aqueous phase liquids is required, an interface probe will be used.

The water level probe, interface probe, and any wetted cable or tape will be washed with non-phosphate laboratory detergent and thoroughly rinsed with distilled water between wells. The rinsed probe should be protected from dust and dirt between uses.

5.7 Well Purging

After water level/depth measurements are completed, the volume of water present in each well casing will be calculated. Each well will be purged prior to sampling by the removal of at least three times that calculated volume.

In a 1¼" ID well, each foot of water column contains 0.064 gallons of water. Three times that volume is 0.191 gallons, which is rounded to 0.2 gallons. Therefore, for each foot of water present in a 1¼" well, the required purge volume is 0.2 gallons.

In a 2" ID well, each foot of water column contains 0.163 gallons of water. Three times that volume is 0.49 gallons, which is rounded up to 0.50 gallons. Therefore, for each foot of water in a 2" well, the required purge volume is ½ gallon.

In a 4" ID well, each foot of water column contains 0.652 gallons. Three times that volume is 1.956 gallons, which is rounded up to 2.0 gallons. Therefore, for each foot of water in a 4" well, the required purge volume is 2 gallons.

If any well fails to recover rapidly enough to allow purging of three well volumes in a reasonable time period, then the well will be purged to dryness prior to sampling. Field parameters shall be checked prior to purging and after each well volume has been removed and compared to historic findings.

All wells will be purged by use of: (1) a single-use bailer, which will be raised and lowered by a new length of nylon twine; or (2) a suction lift pump using dedicated or single use suction tubing.

All purge water will be poured on the ground downgradient of the well in accordance with EPA guidance.

5.8 Sampling, Field Analysis, Preservation And Holding Times

The specific conductivity and pH of the water will be measured prior to purging and after each well volume of water has been removed, and will be recorded on the well sampling records.

Samples shall be collected in the order of their volatility. All samples will be obtained by the use of sufficiently inert single-use disposable bailers, raised and lowered by new white nylon twine. Given the fact that the majority of the wells to be sampled are constructed of PVC, these bailers may be constructed of PVC or polyethylene, which have been shown to be sufficiently inert through their use in all prior groundwater investigations at this site.

All personnel handling the twine, the bailer, or the sample container shall wear single-use medical examination gloves to minimize potential contamination of the sample.

Sample containers of one quart or larger will be carefully filled, leaving a small amount of head space. If 40-ml vials are required for purgeable or volatile analytes, they will be carefully and slowly filled, ensuring that no air remains in the filled vial. The sample containers will be placed into a cooler, cushioned as needed to minimize the risk of breakage, and cooled to 4ºC (39.8ºF). Samples will be immediately delivered to the laboratory by the sampler or by common carrier to ensure that sample holding times are not exceeded.

5.9 Trip Blanks

Prior to each sampling event, one sample container will be filled with organic free water and labeled “Trip Blank.” This container will accompany the sample containers to and from the field. This blank will be analyzed for the same list of constituents as the well samples, and will serve as an indication of any contamination or cross-contamination during handling and transportation.

5.10 Field Blanks

At each sampling event, one sample container will be filled with organic free water at a well site, and this container will be labeled "Field Blank". This blank will be analyzed for the same list of constituents as the well samples themselves, and will serve as an indicator of laboratory error or contamination, container batch contamination, airborne contaminants, or handling contamination.

5.11 Sample Transfer

Upon completion of each sampling event, all samples shall be transported to the chosen commercial laboratory by a representative of Stella-Jones or by a commercial carrier. A chain-of-custody document must accompany the samples at all times. During most sampling events, it is expected that the environmental firm contracted to take the samples will handle sample transporation.

5.12 Sampling Equipment

An inventory of the sampling equipment used at the facility will be maintained as part of the facility's operating records. These records shall include detailed operating, calibrating, and maintenance procedures, and will discuss any maintenance schedules which apply.

Equipment used for groundwater sampling shall be repaired or replaced as soon as possible following the identification of the need. Perishable sampling equipment, such as bailers, twine, and jars, is non-reusable and, therefore, not subject to repair or replacement. Dedicated sampling equipment, such as piping used for well

purging which remains in the monitoring wells and is used only for that well, may be repaired so long as that repair does not affect the quality of the water in the well in any way.

Monitoring equipment, such as pH, conductivity and water level meters, shall be tested prior to use in the field, so that any necessary repairs can be made prior to use. Where repair is not feasible prior to the need for the equipment, replacement equipment will be used. If the equipment cannot be repaired, it will be replaced with new equipment.

6.0 CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Prior to relinquishing custody of the samples, the analysis request and chain-of-custody record will be completed and signed by the leader of the sampling team. The original completed chain-of-custody shall accompany the samples to the commercial laboratory, and a copy of the chain-of-custody record shall be kept in a suspense file until the analytical results are received. At that time, the original chain-of-custody will be filed with the analytical results. A sample chain-of-custody and analysis request record is found in Appendix B.

7.0 EVALUATION AND REPORTS

Data generated at each sampling event will be compared to previous values to look for obvious errors and significant trends. Results of the analyses will be reported in the Corrective Action Effectiveness Reports.

Since the background levels of the organic constituents are expected to be below the analytical method detection limits, there is no need to perform statistical analysis to determine whether the results from the compliance point wells or other wells indicate the presence of contaminants. Any positive finding will be considered evidence of contamination. Should the facility enter a detection monitoring mode, determination of the presence of contamination in the compliance point wells will be based on statistical comparisons to background values in accordance with EPA guidance.

STELLA-JONES CORPORATION
BAY MINETTE, ALABAMA

MONITOR WELL SAMPLING RECORD

SAMPLE PERIOD: SAMPLER:

WELL NUMBER	MW-10	P-1R	P-6
Well Category	Boundary	Boundary	Boundary
Sample Date/Time			
Measuring Pt Elevation	209.66	207.89	206.45
Depth of Well, ft			
Distance to Water, ft			
Water in Well, ft			
Purge Factor (gal/ft)	0.5	0.5	0.2
Purge Volume, gals			
pH, SU			
Temperature, °C or °F			
Specific Conductance			

WELL NUMBER	TP-9	P-2	MW-8R
Well Category	Boundary	Effectiveness	Effectiveness
Sample Date/Time			
Measuring Pt Elevation	199.92	203.34	207.90
Depth of Well, ft			
Distance to Water, ft			
Water in Well, ft			
Purge Factor (gal/ft)	0.2	0.2	0.5
Purge Volume, gals			
pH, SU			
Temperature, °C or °F			
Specific Conductance			

WELL NUMBER	MW-2A	MW-3A	MW-4AR
Well Category	Compliance	Compliance	Compliance
Sample Date/Time			
Measuring Pt Elevation	219.52	217.75	224.47
Depth of Well, ft			
Distance to Water, ft			
Water in Well, ft			
Purge Factor (gal/ft)	0.5	0.5	0.5
Purge Volume, gals			
pH, SU			
Temperature, °C or °F			
Specific Conductance			

STELLA-JONES CORPORATION
BAY MINETTE, ALABAMA

SAMPLING RECORD COVERSHEET

SAMPLE DATE(S): _____ PROTOCOL: ☐ ANNUAL - All Wells
☐ SEMIANNUAL - CP & EFF Wells

WEATHER CONDITIONS: _____

_____

_____

SAMPLING TEAM PERSONNEL:

TEAM LEADER: _____

_____ _____

_____ _____

_____ _____

EQUIPMENT:

☐ WATER LEVEL METER: _____
(TYPE, MODEL & SERIAL NO.)

☐ pH METER: _____ (TYPE, MODEL & SERIAL NO.)
CALIBRATED? _____ INITIAL _____

☐ SPECIFIC CONDUCTIVITY

METER: _____ (TYPE, MODEL & SERIAL NO.)
CALIBRATED? _____ INITIAL _____

☐ SOURCE/TYPE/SIZE OF SAMPLE CONTAINERS: _____

_____

_____

☐ SOURCE AND TYPE OF BAILERS: _____

_____

_____

COMMERCIAL LABORATORY: _____

COMMENTS: _____

_____

_____

_____

RCRA MONITORING WELL SAMPLE ANALYSIS REQUEST AND CHAIN-OF-CUSTODY DOCUMENT

STELLA-JONES CORPORATION
P.O. DRAWER 758
BAY MINETTE, AL 36507 (251)937-2141

Samplers (Signatures):

DATE	TIME	WELL NUMBER	Number of Containers	Type of Containers	Cooled? (Y / N)	ANALYZE FOR: (SW-846 OR EQUIVALENT METHODS) K001 Monitoring List (See Below)				REMARKS (PURGE VOLUME, COLOR, ODOR, etc.)

K001 Monitoring List: Pentachlorophenol, Phenol, 2-Chlorophenol, p-chloro-m-cresol, 2,4-Dimethylphenol, 2,4-Dinitrophenol, Trichlorophenols, Tetrachlorophenols, Phenanthrene, Carbazole, Chrysene, Naphthalene, Flouranthene, Benzo(b)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-CD)pyrene, Benz(a)anthracene, Dibenz(a,h)anthracene, Acenaphthalene.

Container Types: P = Plastic CG = Clear Glass AG = Amber Glass

RELINQUISHED BY: TIME/DATE:	RELINQUISHED BY: TIME/DATE:	LABORATORY:
RECEIVED BY: TIME/DATE:	RECEIVED BY: TIME/DATE:	LAB COMMENTS:

EXHIBIT 15

American Laboratories & Research Services
INCORPORATED

March 28, 1988

Mr. Charles Rollins
H. M. Rollins Company
P.O. Box 3471
Gulfport, MS 39505

Dear Mr. Rollins:

Attached please find a copy of the laboratory report for samples submitted to ALRS for Appendix VIII analyses. Note that only the organic compounds found at levels greater than our detection limit of 10 ug/L are reported. Also please note that the units of concentration for organic compounds are ug/L and the units of concentration for inorganic compounds are mg/L. The samples were screened for the other Appendix VIII compounds, e.g. dioxins, dibenzofurans, PCBs, pesticides, etc. None of these compounds was detected as reflected by their absence in the report.

If you have questions or if we may be of further assistance, please call.

Sincerely,

Ricky L. Hatton, Ph.D.
Vice President

Post Office Box 15609 • Hattiesburg, Mississippi 39404 • (601) 264-9320

From: American Laboratories and
Research Services, Inc.
P.O. Box 15609
Hattiesburg, MS 39404-5609
601/264-9320

Date: March 28, 1988

To: H. M. Rollins Company
P.O. Box 3471
Gulfport, MS 39505
ATTN: Mr. Charles Rollins

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

Sample I.D. AA00243

Sample location: ROLLINS Rollins # MW-3A

Collected by: C ROLLINS Collection date: 02/15/88 Time:

Laboratory submittal date: 02/17/88 Time: 13:42

Parameter	Result
Appendix VIII Organics	see appended report
Appendix VIII Metals	see appended report

Data for Appendix VIII Organics

Component Name	ug/L Concentration	Component MDL
Benzene	86.	10
Toluene	120.	10
Xylene, total	660.	10
Ethylbenzene	52.	10
Stryrene	370.	10
Phenol	7900.	10
2-Methylphenol	6400.	10
4-Methylphenol	16000.	10
2,4-Dimethylphenol	4500.	10
Pentachlorophenol	140.	10
Naphthalene	5400.	10

Data for Appendix VIII Organics (continued)

Component Name	Concentration mg/L	Component MDL
2-Methylnaphthalene	580.	10
1-Methylnaphthalene	310.	10
Acenaphthylene	190.	10
Acenaphthene	1900.	10
Dibenzofuran	1400.	10
Fluorene	360.	10
Phenanthrene	410.	10
Fluoranthene	24.	10
Pyrene	10.	10

Data for Appendix VIII Metals

Component Name	Concentration mg/L	Component MDL
Aluminum	7.00	.01
Iron	11.00	.01
Magnesium	.85	.01
Manganese	.33	.01
Potassium	3.50	.01
Sodium	18.00	.01
Tin	1.30	.01
Antimony	1.10	.01
Arsenic	.010	.005
Barium	Not Det	.1
Cadmium	Not Det	.01
Chromium	Not Det	.01
Copper	Not Det	.01
Lead	Not Det	.01
Mercury	Not Det	.005
Nickel	Not Det	.01
Selenium	.01	.01
Silver	Not Det	.01
Thallium	Not Det	.1
Vanadium	3.30	.01
Zinc	.11	.01
Cobalt	.92	.05
Calcium	27.0	.1

If there are any questions regarding this data, please call.

Ricky L. Hatton, Ph.D.
Vice President

From: American Laboratories and
Research Services, Inc.
P.O. Box 15609
Hattiesburg, MS 39404-5609
601/264-9320

Date: March 28, 1988

To: H. M. Rollins Company
P.O. Box 3471
Gulfport, MS 39505
ATTN: Mr. Charles Rollins

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

Sample I.D. AA00244

Sample location: ROLLINS Rollins # TP-9

Collected by: C ROLLINS Collection date: 02/15/88 Time:

Laboratory submittal date: 02/17/88 Time: 13:46

Parameter	Result
Appendix VIII Organics	see appended report
Appendix VIII Metals	see appended report

Data for Appendix VIII Organics

Component Name	Concentration (ug/L)	Component MDL
Benzene	Not Det	10
Toluene	Not Det	10
Xylene, total	Not Det	10
Ethylbenzene	Not Det	10
Stryrene	Not Det	10
Phenol	Not Det	10
2-Methylphenol	Not Det	10
4-Methylphenol	Not Det	10
2,4-Dimethylphenol	Not Det	10
Pentachlorophenol	Not Det	10
Naphthalene	Not Det	10

Data for Appendix VIII Organics (continued)

Component Name	Concentration (ug/L)	Component MDL
2-Methylnaphthalene	Not Det	10
1-Methylnaphthalene	Not Det	10
Acenaphthylene	Not Det	10
Acenaphthene	Not Det	10
Dibenzofuran	Not Det	10
Fluorene	Not Det	10
Phenanthrene	Not Det	10
Fluoranthene	Not Det	10
Pyrene	Not Det	10

Data for Appendix VIII Metals

Component Name	Concentration (mg/L)	Component MDL
Aluminum	7.30	.01
Iron	64.00	.01
Magnesium	3.00	.01
Manganese	.13	.01
Potassium	2.40	.01
Sodium	.63	.01
Tin	.13	.01
Antimony	Not Det	.01
Arsenic	.010	.005
Barium	.2	.1
Cadmium	Not Det	.01
Chromium	Not Det	.01
Copper	Not Det	.01
Lead	.05	.01
Mercury	Not Det	.005
Nickel	.03	.01
Selenium	.01	.01
Silver	Not Det	.01
Thallium	Not Det	.1
Vanadium	3.30	.01
Zinc	Not Det	.01
Cobalt	Not Det	.05
Calcium	Not Det	.1

If there are any questions regarding this data, please call.

Ricky L. Hatton, Ph.D.
Vice President

EXHIBIT 16

Baldwin Pole & Piling Co., Inc.

Bay Minette, Alabama

Groundwater Monitoring Analytical Results

All analytical data is in mg/l (ppm) Sample Date	Monitor Well Number	Acenaphthene	Fluorene	Phenol	2-Chlorophenol	2,4-Dimethylphenol	p-Chloro-m-cresol (4-Chloro-3-Methylphenol)	Naphthalene	2,4-Dinitrophenol	Acenaphthylene	Trichlorophenols (2,4,6-/2,4,5-)	Phenanthrene	Fluoranthene	Benzo(a)anthracene	Chrysene	Benzo(b)fluoranthene	Tetrachlorophenols (2,3,5,6-/2,3,4,5-/2,3,4,6-)	Pentachlorophenol	Benzo(a)pyrene	Indeno (1,2,3-c,d) pyrene	Dibenz (a,h) anthracene	Carbazole
5/22/1986	MW-02A	not required	not required	**0.014**	<0.010	**0.01**	**0.026**	**0.017**	**0.023**	**0.01**	**0.021**	<0.010	<0.010	NA	<0.010	NA	**0.026**	**0.04**	<0.010	NA	NA	<0.010
5/31/1988	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.05**	<0.010	**0.051**	<0.010	<0.010	<0.010	<0.010	**0.052**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
5/31/1990	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.106**	<0.010	<0.010	<0.010	**0.014**	<0.010	<0.010	<0.010	<0.010	<0.010	**0.016**	<0.010	<0.010	<0.010	<0.010
10/5/1990	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.273**	**0.016**	<0.010	<0.010	**0.062**	**0.023**	<0.010	**0.015**	<0.010	**0.014**	**0.017**	**0.012**	<0.010	<0.010	**0.01**
4/17/1991	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.254**	<0.010	<0.010	<0.010	<0.010
11/14/1991	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.029**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.192**	**0.05**	<0.010	<0.010	<0.010	<0.010
4/15/1992	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.18**	<0.010	<0.010	<0.010	**0.013**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
12/10/1992	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.019**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.011**
7/22/1993	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.014**	<0.010	<0.010	**0.014**	<0.010	<0.010	<0.010	<0.010	<0.010	**0.055**	**0.026**	<0.010	<0.010	<0.010	<0.010
10/21/1993	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/2/1994	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.029**	<0.010	<0.010	<0.010	**0.03**	<0.010	<0.010	<0.010	<0.010	<0.010	**0.153**	<0.010	<0.010	<0.010	**0.016**
12/1/1994	MW-02A	not required	not required	<0.010	<0.010	<0.010	**0.014**	**0.16**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.158**	<0.010	<0.010	<0.010	**0.035**
4/11/1995	MW-02A	not required	not required	<0.010	<0.010	<0.010	**0.021**	**0.053**	<0.010	<0.010	<0.010	**0.03**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.017**
12/5/1995	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.319**	<0.010	<0.010	<0.010	**0.032**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.041**
6/27/1996	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.024**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
11/1/1996	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/9/1997	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
8/12/1997	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/8/1998	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/1/1998	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.014**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
2/22/1999	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.054**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/1/1999	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	**1.091**	<0.010	<0.010	<0.010	**0.0372**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0823**
4/7/2000	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.676**	<0.010	<0.010	<0.010	**0.0138**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0258**
10/5/2000	MW-02A	not required	not required	<0.010	<0.010	**0.0201**	<0.010	**3.308**	<0.010	**0.0132**	<0.010	**0.0971**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.12**
4/10/2001	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.0667**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/9/2001	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.15**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0125**
4/17/2002	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.077**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0125**
11/13/2002	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/30/2003	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.0471**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
11/4/2003	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0304**
5/18/2004	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.0176**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
11/18/2004	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0226**
5/24/2005	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
11/7/2005	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/23/2006	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.0384**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0282**
10/25/2006	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/19/2007	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
8/2/2007	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.0788**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0163**
4/29/2008	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.0122**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/22/2008	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.0269**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.026**
5/13/2009	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.0703**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0295**
11/5/2009	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
5/18/2010	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
11/5/2010	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
3/23/2011	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.028**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/24/2011	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.0143**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
5/4/2012	MW-02A	not required	not required	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	**0.0115**
10/25/2012	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.0222**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/21/2013	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
11/25/2013	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.178**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0272**
6/30/2014	MW-02A	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010

Baldwin Pole & Piling Co., Inc.

Bay Minette, Alabama

Groundwater Monitoring Analytical Results

All analytical data is in mg/l (ppm) Sample Date	Monitor Well Number	Acenaphthene	Fluorene	Phenol	2-Chlorophenol	2,4-Dimethylphenol	p-Chloro-m-cresol (4-Chloro-3-Methylphenol)	Naphthalene	2,4-Dinitrophenol	Acenaphthylene	Trichlorophenols (2,4,6-/2,4,5-)	Phenanthrene	Fluoranthene	Benzo(a)anthracene	Chrysene	Benzo(b)fluoranthene	Tetrachlorophenols (2,3,5,6-/2,3,4,5-/2,3,4,6-)	Pentachlorophenol	Benzo(a)pyrene	Indeno (1,2,3-c,d) pyrene	Dibenz (a,h) anthracene	Carbazole
12/10/2014	MW-02A	**0.0561**	**0.0228**	<0.010	<0.010	<0.010	<0.010	**0.121**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0673**
6/25/2015	MW-02A	**0.0138**	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0171**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
11/19/2015	MW-02A	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/8/2016	MW-02A	**0.015**	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0262**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
12/16/2016	MW-02A	**0.0239**	**0.011**	<0.010	<0.010	<0.010	<0.010	**0.111**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0265**
6/15/2017	MW-02A	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
12/12/2017	MW-02A	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
5/30/2018	MW-02A	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
11/29/2018	MW-02A	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/24/2019	MW-02A	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
12/4/2019	MW-02A	**0.0128**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
3/11/2020	MW-02A	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
12/11/2020	MW-02A	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
3/30/2021	MW-02A	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
8/20/2021	MW-02A	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/20/2022	MW-02A	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996
10/26/2022	MW-02A	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996	<0.00996
3/29/2023	MW-02A	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957
10/26/2023	MW-02A	**0.0912**	**0.0511**	<0.00962	<0.00962	<0.00962	<0.00962	**0.523**	<0.00962	<0.00962	<0.00962	**0.00999**	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	**0.0834**
5/22/1986	MW-03A	not required	not required	**1.09**	**1.04**	**2.959**	**0.113**	**0.363**	**0.07**	**0.102**	**0.3**	**0.039**	**0.02**	NA	<0.010	NA	**1.15**	**0.066**	<0.010	NA	NA	<0.010
5/31/1990	MW-03A	not required	not required	**0.052**	**0.84**	<0.010	<0.010	**5.99**	**0.392**	<0.010	<0.010	**0.69**	**0.023**	**0.04**	**0.152**	<0.010	**0.33**	**1.13**	<0.010	<0.010	<0.010	**0.37**
10/5/1990	MW-03A	not required	not required	<0.010	<0.010	**0.232**	**0.943**	**12.093**	**0.028**	**0.063**	**0.115**	**1.157**	**3.032**	<0.010	**0.01**	<0.010	**0.056**	**5.396**	<0.010	<0.010	<0.010	**0.313**
4/17/1991	MW-03A	not required	not required	<0.100	<0.100	<0.100	<0.100	**8.825**	<0.100	<0.100	<0.100	**0.281**	<0.100	<0.100	<0.100	<0.100	<0.100	**3.819**	<0.100	<0.100	<0.100	<0.100
11/13/1991	MW-03A	not required	not required	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	**1.88**	**0.683**	<0.200	<0.200	<0.200	<0.200	**0.689**	<0.200	<0.200	<0.200	**0.546**
4/15/1992	MW-03A	not required	not required	**9.29**	<0.108	**2.36**	<0.108	**15.4**	<0.108	**0.129**	<0.108	**5.68**	**2.5**	**0.352**	**0.329**	<0.108	<0.108	**0.647**	<0.108	<0.108	<0.108	**0.61**
12/10/1992	MW-03A	not required	not required	**7.6**	<0.070	**0.796**	<0.070	**7.78**	<0.070	<0.070	<0.070	**1.52**	**0.202**	<0.070	<0.070	<0.070	<0.070	<0.070	<0.070	<0.070	<0.070	**0.372**
7/22/1993	MW-03A	not required	not required	SAMPLE WAS BROKEN AT LAB																		
10/21/1993	MW-03A	not required	not required	**7.2**	<0.270	**3.226**	<0.270	**29.062**	<0.270	<0.270	<0.270	**8.349**	**3.654**	**0.689**	**0.741**	**0.348**	<0.270	**0.855**	<0.270	<0.270	<0.270	**0.782**
6/2/1994	MW-03A	not required	not required	<0.400	<0.400	**5.93**	<0.400	**16.4**	**0.95**	<0.400	**0.55**	**0.642**	<0.400	<0.400	<0.400	<0.400	<0.400	**1.12**	<0.400	<0.400	<0.400	**0.7**
12/1/1994	MW-03A	not required	not required	**3.53**	<0.100	**2.25**	**2.73**	**19.7**	<0.100	**0.147**	<0.100	**1.98**	**0.767**	**0.205**	**0.187**	<0.100	**0.328**	**2**	<0.100	<0.100	<0.100	**0.903**
4/11/1995	MW-03A	not required	not required	<0.100	<0.100	**0.693**	<0.100	**6.891**	<0.100	**0.02**	<0.100	**0.351**	**0.086**	**0.014**	**0.011**	<0.100	**0.029**	**0.13**	<0.100	<0.100	<0.100	**0.302**
12/5/1995	MW-03A	not required	not required	<0.100	<0.100	**0.7**	<0.100	**16.2**	<0.100	**0.02**	<0.100	**12**	**6.5**	**0.9**	**0.9**	<0.100	<0.100	**1.3**	<0.100	<0.100	<0.100	**1.2**
6/27/1996	MW-03A	not required	not required	<0.100	<0.100	**0.16**	<0.100	**6.34**	<0.100	<0.200	<0.100	**5.29**	**1.24**	**0.287**	**0.233**	**0.211**	<0.100	**0.444**	**0.212**	<0.200	<0.200	**0.313**
11/1/1996	MW-03A	not required	not required	**21**	<1.000	<1.000	<1.000	**107**	<1.000	<5.000	<1.000	**110**	**55**	**8**	**7**	<5.000	<1.000	**3**	<5.000	<5.000	<5.000	**14**
4/9/1997	MW-03A	not required	not required	**26.64**	<1.530	**5.33**	<1.530	**8.74**	<1.530	<0.510	<1.530	**2.31**	**0.7**	<0.510	<0.510	<0.510	<1.530	<1.530	<0.510	<0.510	<0.510	**0.86**
8/12/1997	MW-03A	not required	not required	**9.652**	<0.400	**3.744**	<0.400	**6.731**	<0.400	<0.400	<0.400	**0.613**	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400	<0.400	**0.538**
4/8/1998	MW-03A	not required	not required	**7.368**	<0.500	**3.239**	<0.500	**9.553**	<0.500	<0.500	<0.500	**3.329**	**1.575**	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	**0.571**
10/1/1998	MW-03A	not required	not required	**3.965**	<1.000	**2.904**	<1.000	**6.829**	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000
2/22/1999	MW-03A	not required	not required	**2.466**	<0.500	**5.015**	<0.500	**9.643**	<0.500	<0.500	<0.500	**0.515**	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
10/1/1999	MW-03A	not required	not required	**12.3**	<0.200	**6.42**	<0.200	**10.8**	<0.200	<0.200	<0.200	**0.33**	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	**0.39**
4/7/2000	MW-03A	not required	not required	**0.622**	<0.200	**1.893**	<0.200	**17.035**	<0.200	<0.200	<0.200	**1.168**	**0.436**	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	**0.334**
10/5/2000	MW-03A	not required	not required	**3.069**	<0.250	**1.608**	<0.250	**14.57**	<0.250	<0.250	<0.250	**1.916**	**0.884**	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	**0.521**
4/10/2001	MW-03A	not required	not required	<0.200	<0.200	**0.433**	<0.200	**10.484**	<0.200	<0.200	<0.200	**6.689**	**3.337**	**0.535**	**0.34**	**0.202**	<0.200	**0.224**	<0.200	<0.200	<0.200	**0.713**
10/9/2001	MW-03A	not required	not required	**1.29**	<0.200	**0.74**	<0.200	**11.9**	<0.200	<0.200	<0.200	**4.7**	**1.94**	**0.308**	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	**0.566**
4/17/2002	MW-03A	not required	not required	**3.07**	<0.100	**2.71**	<0.100	**18.75**	<0.100	**3.25**	<0.100	**5.65**	**2.402**	**0.34**	**0.29**	**0.13**	<0.100	<0.100	<0.100	<0.100	<0.100	**0.795**
11/13/2002	MW-03A	not required	not required	<0.050	<0.050	**0.0999**	<0.050	**1.642**	<0.050	<0.050	<0.050	**0.196**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	**0.0685**
4/30/2003	MW-03A	not required	not required	<0.010	<0.010	**0.0936**	<0.010	<0.010	<0.010	**0.0133**	<0.010	**0.136**	**0.0319**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.145**
11/4/2003	MW-03A	not required	not required	<0.010	<0.010	**0.0303**	<0.010	**2.66**	<0.010	**0.0102**	<0.010	**0.106**	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0521**	<0.010	<0.010	<0.010	**0.0821**
5/18/2004	MW-03A	not required	not required	**0.536**	<0.100	**1.467**	<0.100	**3.469**	<0.100	<0.100	<0.100	**0.61**	**0.139**	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	**0.2**
11/18/2004	MW-03A	not required	not required	**0.0259**	<0.010	**0.686**	<0.010	**2.415**	<0.010	**0.031**	<0.010	**1.177**	**0.722**	**0.0954**	**0.0911**	**0.0507**	<0.010	<0.010	**0.0325**	<0.010	<0.010	**0.237**
5/24/2005	MW-03A	not required	not required	**1.135**	<0.010	**2.018**	<0.010	**6.33**	<0.010	**0.0124**	<0.010	**1.306**	**0.55**	**0.0815**	**0.0642**	**0.0295**	<0.010	<0.010	**0.0205**	<0.010	<0.010	**0.057**

Baldwin Pole & Piling Co., Inc.

Bay Minette, Alabama

Groundwater Monitoring Analytical Results

All analytical data is in mg/l (ppm) Sample Date	Monitor Well Number	Acenaphthene	Fluorene	Phenol	2-Chlorophenol	2,4-Dimethylphenol	p-Chloro-m-cresol (4-Chloro-3-Methylphenol)	Naphthalene	2,4-Dinitrophenol	Acenaphthylene	Trichlorophenols (2,4,6-/2,4,5-)	Phenanthrene	Fluoranthene	Benzo(a)anthracene	Chrysene	Benzo(b)fluoranthene	Tetrachlorophenols (2,3,5,6-/2,3,4,5-/2,3,4,6-)	Pentachlorophenol	Benzo(a)pyrene	Indeno (1,2,3-c,d) pyrene	Dibenz (a.h) anthracene	Carbazole
11/7/2005	MW-03A	not required	not required	**0.733**	<0.050	**1.786**	<0.050	**3.914**	<0.050	<0.050	<0.050	**0.468**	**0.119**	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	**0.229**
6/23/2006	NW-03A	not required	not required	**4.583**	<0.100	**4.797**	<0.100	**5.882**	<0.100	<0.100	<0.100	**0.256**	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	**0.432**
10/24/2006	MW-03A	not required	not required	**1.05**	<0.050	**2.62**	<0.050	**9.58**	<0.050	**0.0654**	<0.050	**1.89**	**0.674**	**0.0951**	**0.0845**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.539**
4/19/2007	MW-03A	not required	not required	**3.73**	<0.010	**2.71**	<0.010	**13.3**	<0.010	**0.0128**	<0.010	**4.72**	**1.97**	**0.235**	**0.214**	**0.0958**	<0.010	<0.010	**0.069**	**0.0167**	<0.010	**0.531**
8/2/2007	MW-03A	not required	not required	**5.71**	<0.050	**3.38**	<0.050	**5.08**	<0.050	<0.050	<0.050	**0.335**	**0.149**	<0.050	<0.050	<0.050	<0.050	<0.010	<0.050	<0.050	<0.050	**0.215**
4/29/2008	MW-03A	not required	not required	**1.21**	<0.050	**2.75**	<0.050	**5.43**	<0.050	<0.050	<0.050	**1.44**	**0.516**	**0.0768**	**0.0606**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.225**
10/22/2008	MW-03A	not required	not required	**1.66**	<0.050	**3.9**	<0.050	**10.8**	<0.050	<0.050	<0.050	**0.278**	**0.0581**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.348**
5/13/2009	MW-03A	not required	not required	**4.41**	<0.050	**4.88**	<0.050	**10.8**	<0.050	<0.050	<0.050	**0.533**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.636**
11/5/2009	MW-03A	not required	not required	**6.25**	<0.010	**4.04**	<0.010	**9.74**	<0.010	**0.041**	<0.010	**0.302**	**0.0939**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.263**
5/18/2010	MW-03A	not required	not required	**4.35**	<0.101	**3.36**	<0.101	**8.95**	<0.101	<0.101	<0.101	**0.419**	**0.126**	<0.101	<0.101	<0.101	<0.101	<0.101	<0.101	<0.101	<0.101	**0.373**
11/5/2010	MW-03A	not required	not required	**0.239**	<0.101	**2.51**	<0.101	**7.24**	<0.101	<0.101	<0.101	**0.228**	<0.101	<0.101	<0.101	<0.101	<0.101	<0.101	<0.101	<0.101	<0.101	**0.389**
3/23/2011	MW-03A	not required	not required	<0.102	<0.102	**0.231**	<0.102	**2.51**	<0.102	<0.102	<0.102	**0.151**	<0.102	<0.102	<0.102	<0.102	<0.102	<0.102	<0.102	<0.102	<0.102	<0.102
10/24/2011	MW-03A	not required	not required	**0.355**	<0.102	**1.17**	<0.102	**4.73**	<0.102	<0.102	<0.102	**0.191**	<0.102	<0.102	<0.102	<0.102	<0.102	<0.102	<0.102	<0.102	<0.102	**0.202**
5/4/2012	MW-03A	not required	not required	**1.17**	<0.101	**1.4**	<0.101	**5.95**	<0.101	<0.101	<0.101	**0.222**	<0.101	<0.101	<0.101	<0.101	<0.101	<0.101	<0.101	<0.101	<0.101	**0.258**
10/25/2012	MW-03A	not required	not required	**0.591**	<0.010	**0.772**	<0.010	**3.01**	<0.010	**0.0107**	<0.010	**0.12**	**0.0149**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.152**
6/21/2013	MW-03A	not required	not required	**0.168**	<0.050	**1.35**	<0.050	**3.87**	<0.050	<0.050	<0.050	**0.199**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.203**
11/25/2013	MW-03A	not required	not required	**0.284**	<0.010	**1.54**	<0.010	**3.99**	<0.010	**0.0175**	<0.010	**0.144**	**0.0145**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.232**
6/30/2014	MW-03A	not required	not required	**0.719**	<0.010	**2.04**	<0.010	**4.46**	<0.010	**0.026**	<0.010	**0.301**	**0.0389**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.295**
12/10/2014	MW-03A	**0.485**	**0.182**	**0.851**	<0.010	**0.238**	<0.010	<0.010	<0.010	**0.0276**	<0.010	**0.195**	**0.0278**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.511**
6/25/2015	MW-03A	**0.651**	**0.275**	**2.63**	<0.100	**2.73**	<0.100	**6.06**	<0.100	<0.100	<0.100	**0.316**	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	**0.36**
11/19/2015	MW-03A	**0.321**	**0.154**	<0.010	<0.010	**0.0773**	<0.010	**2.45**	<0.010	**0.0165**	<0.010	**0.197**	**0.0284**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.109**
6/8/2016	MW-03A	**0.684**	**0.218**	**0.839**	<0.010	**2.28**	<0.010	**3.69**	<0.010	<0.010	<0.010	**0.223**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.258**
12/16/2016	MW-03A	**0.246**	**0.188**	<0.102	<0.102	**0.267**	<0.102	**1.54**	<0.102	<0.102	<0.102	**0.492**	**0.204**	<0.102	<0.102	<0.102	<0.102	<0.102	<0.102	<0.102	<0.102	<0.102
6/15/2017	MW-03A	**0.0935**	**0.0755**	**0.0252**	<0.010	**0.0444**	<0.010	**0.382**	<0.010	<0.010	<0.010	**0.304**	**0.353**	**0.109**	**0.093**	**0.0503**	<0.010	<0.010	**0.0298**	<0.010	<0.010	**0.0418**
12/12/2017	MW-03A	**0.165**	**0.0579**	**0.0581**	<0.010	**0.847**	<0.010	**2.01**	<0.010	<0.010	<0.010	**0.0936**	**0.0487**	**0.0128**	**0.0161**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.113**
5/30/2018	MW-03A	**0.152**	**0.0596**	**0.0195**	<0.010	**0.882**	<0.010	**2.74**	<0.010	<0.010	<0.010	**0.0992**	**0.0449**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.137**
11/29/2018	MW-03A	**0.0691**	**0.0285**	**0.043**	<0.010	**0.147**	<0.010	**0.594**	<0.010	<0.010	<0.010	**0.0682**	**0.0256**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.842**
4/24/2019	MW-03A	**0.107**	<0.102	**0.34**	<0.102	**1.99**	<0.102	**1.17**	<0.102	<0.102	<0.102	<0.102	<0.102	<0.102	<0.102	<0.102	<0.102	<0.102	<0.102	<0.102	<0.102	<0.102
12/4/2019	MW-03A	**0.307**	**0.101**	**1.19**	<0.010	**3.77**	<0.010	**7.38**	<0.101	<0.101	<0.101	**0.104**	<0.101	<0.010	<0.010	<0.010	<0.101	<0.010	<0.010	<0.010	<0.010	**0.347**
3/11/2020	MW-03A	**0.246**	<0.102	**0.281**	<0.010	**2.09**	<0.102	**4.41**	<0.102	<0.102	<0.102	**0.0476**	**0.0232**	<0.010	<0.010	<0.010	<0.102	<0.010	<0.010	<0.010	<0.010	**0.201**
12/11/2020	MW-03A	**0.0438**	**0.0184**	**0.0328**	<0.010	**0.344**	<0.010	**0.511**	<0.010	<0.010	<0.010	**0.0333**	**0.0147**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0442**
3/30/2021	MW-03A	**0.0449**	**0.0166**	**0.103**	<0.010	**0.688**	<0.010	**0.76**	<0.010	<0.010	<0.010	**0.026**	**0.0106**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0422**
8/20/2021	MW-03A	**0.0941**	**0.0496**	**0.116**	<0.011	**1.64**	<0.011	**3.13**	<0.010	<0.010	<0.010	**0.0378**	**0.0195**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.119**
4/20/2022	MW-03A	**0.0172**	<0.00976	**0.0114**	<0.00976	**0.118**	<0.00976	**0.131**	<0.00976	<0.00976	<0.00976	**0.0148**	<0.00976	<0.00976	<0.00976	<0.00976	<0.00976	<0.00976	<0.00976	<0.00976	<0.00976	**0.0129**
10/26/2022	MW-03A	**0.321**	**0.122**	**0.224**	<0.0948	**2.83**	<0.0948	**7.36**	<0.0948	**0.0372**	<0.0948	**0.236**	**0.295**	**0.17**	**0.185**	**0.115**	<0.0948	<0.00948	**0.0701**	**0.0165**	<0.00948	**0.357**
3/29/2023	MW-03A	**0.0269**	**0.0144**	<0.0957	<0.0957	**0.0418**	<0.0957	**0.095**	<0.0957	<0.0957	<0.0957	**0.0216**	**0.0206**	<0.0957	**0.0127**	<0.0957	<0.0957	<0.00957	<0.0957	<0.0957	<0.00957	**0.0123**
10/26/2023	MW-03A	**0.37**	**0.11**	**0.106**	<0.00952	**3.89**	<0.0952	**5.32**	<0.0952	<0.0952	<0.0952	<0.0952	<0.0952	<0.00952	<0.00952	<0.00952	<0.0952	<0.0952	<0.00952	<0.00952	<0.00952	**0.447**
5/22/1986	MW-04A	not required	not required	**1.935**	**2.3**	**1.25**	**0.735**	**0.1[illegible]**	**0.25**	**0.93**	**0.5**	**0.375**	**0.115**	NA	<0.010	NA	**0.955**	**0.275**	<0.010	NA	NA	**0.075**
5/31/1988	MW-04A	not required	not required	**0.01**	<0.010	**0.053**	**0.02**	<0.010	<0.010	**0.047**	<0.010	**0.036**	<0.010	<0.010	<0.010	<0.010	<0.010	**0.128**	<0.010	<0.010	<0.010	**0.077**
5/31/1990	MW-04A	not required	not required	<0.010	**0.015**	<0.010	**0.013**	<0.010	**0.061**	**0.019**	**0.011**	**0.088**	**0.015**	<0.010	<0.010	<0.010	<0.010	**0.763**	<0.010	<0.010	<0.010	<0.010
10/5/1990	MW-04A	not required	not required	**0.28**	**0.062**	**0.168**	**0.018**	**8.69**	**0.168**	**0.029**	**0.039**	**0.25**	**0.101**	<0.010	**0.023**	**0.016**	**0.101**	**0.537**	<0.010	<0.010	**0.015**	**0.092**
4/17/1991	MW-04A	not required	not required	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	**4.919**	**3.331**	**0.523**	**0.568**	**0.21**	<0.100	**0.93**	**0.123**	<0.100	<0.100	**0.391**
11/14/1991	MW-04A	not required	not required	**0.178**	**0.103**	**0.237**	**0.813**	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	**0.172**	**0.886**	<0.100	<0.100	<0.100	**0.447**
4/15/1992	MW-04A	not required	not required	**0.036**	<0.010	**0.084**	<0.010	**2.96**	<0.010	**0.012**	<0.010	**0.064**	**0.046**	**0.01**	**0.012**	<0.010	**0.033**	**0.126**	<0.010	**0.016**	<0.010	**0.093**
12/10/1992	MW-04A	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.394**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.012**	**0.062**	**0.032**	**0.021**	<0.010	<0.010
7/22/1993	MW-04A	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.023**	<0.010	<0.010	<0.010	<0.010	**0.036**	<0.010	<0.010	<0.010	<0.010
10/21/1993	MW-04A	not required	not required	**0.235**	<0.090	**0.293**	<0.090	**9.766**	<0.090	<0.090	<0.090	**0.136**	<0.090	<0.090	<0.090	<0.090	**0.188**	**0.298**	<0.090	<0.090	<0.090	**0.357**
6/2/1994	MW-04A	not required	not required	**0.156**	<0.020	**0.277**	**0.084**	**6.138**	<0.020	<0.020	<0.020	**0.048**	<0.020	<0.020	<0.020	<0.020	**0.087**	**0.276**	<0.020	<0.020	<0.020	**0.274**
12/1/1994	MW-04A	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.011**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.012**	<0.010	<0.010	<0.010	<0.010
4/11/1995	MW-04A	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
12/5/1995	MW-04A	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.084**	<0.010	<0.010	<0.010	**0.013**	**0.019**	<0.010	<0.010	<0.010	<0.010	**0.012**	<0.010	<0.010	<0.010	<0.010

Baldwin Pole & Piling Co., Inc.

Bay Minette, Alabama

Groundwater Monitoring Analytical Results

All analytical data is in mg/l (ppm) Sample Date	Monitor Well Number	Acenaphthene	Fluorene	Phenol	2-Chlorophenol	2,4-Dimethylphenol	p-Chloro-m-cresol (4-Chloro-3-Methylphenol)	Naphthalene	2,4-Dinitrophenol	Acenaphthylene	Trichlorophenols (2,4,6-/2,4,5-)	Phenanthrene	Fluoranthene	Benzo(a)anthracene	Chrysene	Benzo(b)fluoranthene	Tetrachlorophenols (2,3,5,6-/2,3,4,5-/2,3,4,6-)	Pentachlorophenol	Benzo(a)pyrene	Indeno (1,2,3-c,d) pyrene	Dibenz (a,h) anthracene	Carbazole
6/27/1996	MW-04A	not required	not required	<0.010	<0.010	<0.010	<0.010	**1.14**	<0.010	<0.010	<0.010	**0.027**	**0.01**	<0.010	<0.010	<0.010	<0.010	**0.021**	<0.010	<0.010	<0.010	**0.067**
11/1/1996	MW-04A	not required	not required	<0.010	**0.018**	**0.016**	<0.010	**1.332**	**0.023**	<0.050	<0.010	<0.050	<0.050	<0.050	<0.050	<0.050	<0.010	**0.048**	<0.050	<0.050	<0.050	**0.246**
4/9/1997	MW-04A	not required	not required	<0.010	<0.010	**0.015**	<0.010	**0.475**	<0.010	<0.020	<0.010	<0.020	<0.020	<0.020	<0.020	<0.020	**0.02**	**0.098**	<0.020	<0.020	<0.020	**0.09**
8/12/1997	MW-04A	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/8/1998	MW-04A	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/1/1998	MW-04A	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
2/22/1999	MW-04A	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.021**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/1/1999	MW-04A	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.242**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/7/2000	MW-04A	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/5/2000	MW-04A	not required	not required	<0.020	<0.020	**0.0908**	<0.020	**2.955**	<0.020	<0.020	<0.020	**0.0217**	<0.020	<0.020	<0.020	<0.020	<0.020	**0.128**	<0.020	<0.020	<0.020	**0.124**
4/10/2001	MW-04A	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/9/2001	MW-04A	not required	not required	<0.010	<0.010	**0.0425**	<0.010	**1.93**	<0.010	**0.0124**	<0.010	**0.0523**	<0.010	<0.010	<0.010	<0.010	<0.010	**0.105**	<0.010	<0.010	<0.010	**0.0893**
4/17/2002	MW-04A	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
11/13/2002	MW-04A	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/30/2003	MW-04A	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
11/4/2003	MW-04A	not required	not required	<0.010	<0.010	**0.0303**	<0.010	**2.667**	<0.010	**0.0102**	<0.010	**0.106**	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0521**	<0.010	<0.010	<0.010	**0.0821**
5/18/2004	MW-04AR	not required	not required	<0.010	<0.010	**0.147**	<0.010	**1.87**	<0.010	<0.010	<0.010	**0.158**	<0.010	<0.010	<0.010	<0.010	**0.0239**	**0.215**	<0.010	<0.010	<0.010	**0.102**
11/18/2004	MW-04AR	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.0603**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0119**	<0.010	<0.010	<0.010	<0.010
5/24/2005	MW-04AR	not required	not required	<0.010	<0.010	**0.0636**	<0.010	**3.138**	<0.010	**0.0113**	<0.010	**0.12**	<0.010	<0.010	<0.010	<0.010	**0.0412**	**0.205**	<0.010	<0.010	<0.010	**0.114**
11/7/2005	MW-04AR	not required	not required	<0.010	<0.010	**0.111**	<0.010	**4.389**	<0.010	<0.010	<0.010	**0.318**	**0.0171**	<0.010	<0.010	<0.010	**0.0781**	**0.579**	<0.010	<0.010	<0.010	**0.253**
6/23/2006	MW-04AR	not required	not required	<0.010	<0.010	**0.13**	<0.010	**3.463**	<0.010	**0.02**	**0.0147**	**0.193**	**0.0106**	<0.010	<0.010	<0.010	**0.0787**	**0.289**	<0.010	<0.010	<0.010	**0.268**
10/24/2006	MW-04AR	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/19/2007	MW-04AR	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.532**	<0.010	<0.010	<0.010	**0.016**	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0249**	<0.010	<0.010	<0.010	**0.0202**
8/2/2007	MW-04AR	not required	not required	<0.010	<0.010	**0.0285**	<0.010	**1.46**	<0.010	**0.0102**	<0.010	**0.195**	**0.0113**	<0.010	<0.010	<0.010	**0.056**	**0.173**	<0.010	<0.010	<0.010	**0.0959**
4/29/2008	MW-04AR	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.0424**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/22/2008	MW-04AR	not required	not required	<0.010	<0.010	<0.010	<0.010	**1.22**	<0.010	<0.010	<0.010	**0.0786**	<0.010	<0.010	<0.010	<0.010	**0.0297**	**0.0345**	<0.010	<0.010	<0.010	**0.0682**
5/13/2009	MW-04AR	not required	not required	<0.010	<0.010	<0.010	<0.010	**1.1**	<0.010	**0.0119**	<0.010	**0.0684**	<0.010	<0.010	<0.010	<0.010	<0.010	**0.109**	<0.010	<0.010	<0.010	**0.0783**
11/5/2009	MW-04AR	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.509**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0372**	<0.010	<0.010	<0.010	**0.0269**
5/18/2010	MW-04AR	not required	not required	<0.010	<0.010	**0.0115**	<0.010	**1.01**	<0.010	<0.010	<0.010	**0.0366**	<0.010	<0.010	<0.010	<0.010	**0.0124**	**0.0975**	<0.010	<0.010	<0.010	**0.0487**
11/5/2010	MW-04AR	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
3/23/2011	MW-04AR	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.487**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0238**	<0.010	<0.010	<0.010	**0.0185**
10/24/2011	MW-04AR	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.501**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0309**	<0.010	<0.010	<0.010	**0.0283**
5/4/2012	MW-04AR	not required	not required	<0.010	<0.010	<0.010	<0.010	**1.23**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0214**	<0.010	<0.010	<0.010	**0.0156**
10/25/2012	MW-04AR	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.382**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0208**
6/21/2013	MW-04AR	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
11/25/2013	MW-04AR	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.686**	<0.010	<0.010	<0.010	**0.0107**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0576**
6/30/2014	MW-04AR	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.21**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0166**
12/10/2014	MW-04AR	**0.297**	**0.11**	<0.010	<0.010	<0.010	<0.010	**0.751**	<0.010	<0.010	<0.010	**0.056**	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0219**	<0.010	<0.010	<0.010	**0.119**
6/25/2015	MW-04AR	**0.238**	**0.0751**	<0.010	<0.010	<0.010	<0.010	**0.698**	<0.010	<0.010	<0.010	**0.0302**	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0576**	<0.010	<0.010	<0.010	**0.0404**
11/19/2015	MW-04AR	**0.0445**	**0.0135**	<0.010	<0.010	<0.010	<0.010	**0.097**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/8/2016	MW-04AR	**0.0478**	**0.0176**	<0.010	<0.010	<0.010	<0.010	**0.0634**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
12/16/2016	MW-04AR	**0.441**	**0.21**	<0.010	<0.010	<0.010	<0.010	**2.77**	<0.010	**0.0148**	**0.0259**	**0.0901**	<0.010	<0.010	<0.010	<0.010	**0.0165**	**0.0866**	<0.010	<0.010	<0.010	**0.309**
6/15/2017	MW-04AR	**0.1**	**0.0372**	<0.010	<0.010	<0.010	<0.010	**0.392**	<0.010	<0.010	<0.010	**0.0153**	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0369**	<0.010	<0.010	<0.010	**0.0372**
12/12/2017	MW-04AR	**0.0907**	**0.084**	<0.010	<0.010	<0.010	<0.010	**0.239**	<0.010	<0.010	<0.010	**0.0591**	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0329**	<0.010	<0.010	<0.010	**0.0492**
5/30/2018	MW-04AR	**0.228**	**0.111**	<0.010	<0.010	**0.0173**	<0.010	**1.15**	<0.010	<0.010	**0.0252**	**0.0848**	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0614**	<0.010	<0.010	<0.010	**0.104**
11/29/2018	MW-04AR	**0.199**	**0.114**	<0.010	<0.010	<0.010	<0.010	**1.11**	<0.010	<0.010	<0.010	**0.069**	<0.010	<0.010	<0.010	<0.010	**0.0328**	**0.076**	<0.010	<0.010	<0.010	**0.0879**
4/24/2019	MW-04AR	**0.0506**	**0.0207**	<0.010	<0.010	<0.010	<0.010	**0.0636**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
12/4/2019	MW-04AR	**0.099**	**0.0498**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0244**	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0108**	<0.010	<0.010	<0.010	**0.0116**
3/11/2020	MW-04AR	**0.103**	**0.0509**	<0.010	<0.010	<0.010	<0.010	**0.0413**	<0.010	<0.010	<0.010	**0.0273**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
12/11/2020	MW-04AR	**0.0691**	**0.0347**	<0.010	<0.010	<0.010	<0.010	**0.13**	<0.010	<0.010	<0.010	**0.02**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0364**
3/30/2021	MW-04AR	**0.155**	**0.0698**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0387**	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0205**	<0.010	<0.010	<0.010	**0.0281**

Baldwin Pole & Piling Co., Inc.

Bay Minette, Alabama

Groundwater Monitoring Analytical Results

All analytical data is in mg/l (ppm) Sample Date	Monitor Well Number	Acenaphthene	Fluorene	Phenol	2-Chlorophenol	2,4-Dimethylphenol	p-Chloro-m-cresol (4-Chloro-3-Methylphenol)	Naphthalene	2,4-Dinitrophenol	Acenaphthylene	Trichlorophenols (2,4,6-/2,4,5-)	Phenanthrene	Fluoranthene	Benzo(a)anthracene	Chrysene	Benzo(b)fluoranthene	Tetrachlorophenols (2,3,5,6-/2,3,4,5-/2,3,4,6-)	Pentachlorophenol	Benzo(a)pyrene	Indeno (1,2,3-c,d) pyrene	Dibenz (a,h) anthracene	Carbazole
8/20/2021	MW-04AR	**0.0941**	**0.0504**	<0.010	<0.010	<0.010	<0.010	6.52	<0.010	<0.010	<0.010	**0.0271**	<0.010	<0.010	<0.010	<0.010	**0.0108**	**0.0157**	<0.010	<0.010	<0.010	**0.0385**
8/20/2021	MW-04AR	**0.132**	**0.0505**	<0.010	<0.010	<0.010	<0.010	**0.46**	<0.010	<0.010	<0.010	**0.0232**	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0177**	<0.010	<0.010	<0.010	**0.0411**
4/20/2022	MW-04AR	**0.111**	**0.0572**	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	**0.0316**	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	**0.0353**	<0.00971	<0.00971	<0.00971	**0.0157**
10/26/2022	MW-04AR	**0.268**	**0.125**	<0.00966	<0.00966	**0.014**	<0.00966	**1.06**	<0.00966	<0.00966	<0.00966	**0.0859**	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	**0.0195**	<0.00966	<0.00966	<0.00966	**0.0851**
3/29/2023	MW-04AR	**0.0124**	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966
10/26/2023	MW-04AR	**0.231**	**0.0725**	<0.00971	<0.00971	<0.00971	<0.00971	**0.569**	<0.00971	<0.00971	<0.00971	**0.0475**	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	**0.0857**
5/31/1990	MW-08	not required	not required	**0.212**	**0.03**	**2.016**	**0.042**	**0.123**	**1.729**	**0.049**	**0.062**	**0.304**	**1.082**	**0.23**	**0.317**	**0.065**	**1.022**	**1.974**	**0.05**	<0.010	**0.013**	**0.373**
10/5/1990	MW-08	not required	not required	NOT SAMPLED DUE TO FREE OIL																		
4/17/1991	MW-08	not required	not required	NOT SAMPLED DUE TO FREE OIL																		
11/13/1991	MW-08	not required	not required	NOT SAMPLED DUE TO FREE OIL																		
4/15/1992	MW-08	not required	not required	NOT SAMPLED DUE TO FREE OIL																		
12/10/1992	MW-08	not required	not required	NOT SAMPLED DUE TO FREE OIL																		
7/22/1993	MW-08	not required	not required	**0.398**	<0.170	**2.692**	<0.170	**16.943**	<0.170	<0.170	<0.170	**1.274**	**0.435**	<0.170	<0.170	<0.170	<0.170	**0.991**	<0.170	<0.170	<0.170	**0.327**
10/21/1993	MW-08	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.432**	<0.010	<0.010	<0.010	**0.465**	**0.232**	**0.051**	**0.047**	**0.024**	<0.010	**0.017**	**0.017**	<0.010	<0.010	**0.014**
6/2/1994	MW-08	not required	not required	**0.069**	NA	**0.97**	NA	**4.37**	NA	NA	NA	**1.479**	**0.663**	**0.258**	**0.102**	NA	NA	**0.181**	NA	**0.035**	NA	**0.191**
12/1/1994	MW-08	not required	not required	<0.333	<0.333	**1.61**	**1.86**	**9.41**	<0.333	<0.333	<0.333	**8.69**	**4.41**	**0.944**	**0.896**	**0.522**	<0.333	<0.333	<0.333	<0.333	<0.333	**1.16**
4/11/1995	MW-08	not required	not required	NOT SAMPLED DUE TO FREE OIL																		
12/5/1995	MW-08	not required	not required	<0.333	<0.333	**3.8**	<0.333	**36.9**	<0.333	<0.333	<0.333	**34**	**18.8**	**2.8**	**2.8**	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333	<0.333
6/27/1996	MW-08	not required	not required	**0.133**	<0.050	**0.096**	<0.050	**16.7**	<0.050	**0.1**	<0.050	**5.42**	**1.41**	**0.261**	**0.221**	<0.100	<0.050	<0.050	<0.100	<0.100	<0.100	**0.651**
11/1/1996	MW-08	not required	not required	**0.12**	<0.040	**0.13**	**0.09**	**10.9**	<0.040	<1.140	**0.07**	**8.22**	**4.09**	<1.140	<1.140	<1.140	**0.07**	**0.05**	<1.140	<1.140	<1.140	**1.44**
4/9/1997	MW-08	not required	not required	**0.154**	<0.010	**3.11**	<0.010	**4.365**	<0.010	<0.197	<0.010	**1.61**	**0.687**	<0.197	<0.197	<0.197	<0.010	<0.010	<0.197	<0.197	<0.197	**0.932**
8/12/1997	MW-08	not required	not required	<0.500	<0.500	**3.81**	<0.500	**11.08**	<0.500	<0.500	<0.500	**2.83**	**1.14**	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	**1.19**
4/8/1998	MW-08	not required	not required	<0.500	<0.500	**0.623**	<0.500	**6.245**	<0.500	<0.500	<0.500	**1.055**	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
10/1/1998	MW-08	not required	not required	<1.000	<1.000	**3.6**	<1.000	**11.6**	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000
2/22/1999	MW-08	not required	not required	<1.000	<1.000	**3.26**	<1.000	**12.3**	<1.000	<1.000	<1.000	**2.56**	**1.32**	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000
10/1/1999	MW-08	not required	not required	<0.200	<0.200	**2.553**	<0.200	**9.964**	<1.000	<1.000	<1.000	**0.341**	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200
4/7/2000	MW-08	not required	not required	**0.209**	<0.100	**3.059**	<0.100	**12.082**	<0.100	<0.100	<0.100	**0.451**	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	**0.341**
10/5/2000	MW-08	not required	not required	<0.050	<0.050	**0.611**	<0.050	**7.389**	<0.050	<0.050	<0.050	**0.27**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.316**
4/10/2001	MW-08	not required	not required	<0.200	<0.200	**0.629**	<0.200	**11.27**	<0.200	<0.200	<0.200	**1.29**	**0.546**	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	**0.468**
10/9/2001	MW-08	not required	not required	<0.100	<0.100	**0.694**	<0.100	**8.57**	<0.100	<0.100	<0.100	**1.28**	**0.56**	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	**0.34**
4/17/2002	MW-08	not required	not required	<0.104	<0.104	**0.505**	<0.104	**5.3**	<0.104	<0.104	<0.104	**1.44**	**0.62**	<0.104	<0.104	<0.104	<0.104	<0.104	<0.104	<0.104	<0.104	**0.33**
11/13/2002	MW-08	not required	not required	<0.050	<0.050	**0.6815**	<0.050	**8.185**	<0.050	**0.0576**	<0.050	**2.481**	**1.155**	**0.173**	**0.155**	**0.0517**	<0.050	<0.050	<0.050	<0.050	<0.050	**0.42**
4/30/2003	MW-08	not required	not required	**0.049**	<0.010	**1.109**	<0.010	**7.163**	<0.010	**0.0259**	<0.010	**0.334**	**0.0318**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.406**
11/4/2003	MW-08	not required	not required	NOT SAMPLED DUE TO INSUFFICIENT RECHARGE																		
5/18/2004	MW-08R	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.0781**	<0.010	<0.010	<0.010	**0.0273**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0125**
11/18/2004	MW-08R	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.158**	<0.010	<0.010	<0.010	**0.0658**	**0.0326**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0173**
5/24/2005	MW-08R	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.0157**	<0.010	<0.010	<0.010	<0.010	**0.0103**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
11/7/2005	MW-08R	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.283**	<0.010	<0.010	<0.010	**0.0479**	**0.0179**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0139**
6/23/2006	MW-08R	not required	not required	<0.010	<0.010	**0.0908**	<0.010	**1.447**	<0.010	<0.010	<0.010	**0.199**	**0.0456**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.101**
10/24/2006	MW-08R	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.0578**	<0.010	<0.010	<0.010	**0.0726**	**0.0286**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0201**
4/19/2007	MW-08R	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.292**	<0.010	<0.010	<0.010	**0.0509**	**0.0128**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
8/2/2007	MW-08R	not required	not required	<0.010	<0.010	**0.0179**	<0.010	**0.961**	<0.010	<0.010	<0.010	**0.397**	**0.114**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0587**
4/29/2008	MW-08R	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.345**	<0.010	<0.010	<0.010	**0.0492**	**0.0157**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0191**
10/22/2008	MW-08R	not required	not required	<0.010	<0.010	<0.010	<0.010	**1.2**	<0.010	<0.010	<0.010	**0.173**	**0.0388**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0523**
5/13/2009	MW-08R	not required	not required	<0.010	<0.010	**0.0179**	<0.010	**1.79**	<0.010	<0.010	<0.010	**0.487**	**0.149**	**0.0186**	**0.0155**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0877**
11/5/2009	MW-08R	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.329**	<0.010	<0.010	<0.010	**0.0337**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0125**
5/18/2010	MW-08R	not required	not required	<0.010	<0.010	**0.0148**	<0.010	**1.68**	<0.010	<0.010	<0.010	**0.439**	**0.0539**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0431**
11/5/2010	MW-08R	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.998**	<0.010	<0.010	<0.010	**0.161**	**0.0378**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0591**
3/23/2011	MW-08R	not required	not required	<0.010	<0.010	<0.010	<0.010	**1.02**	<0.010	<0.010	<0.010	**0.166**	**0.0369**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.017**
10/24/2011	MW-08R	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.219**	<0.010	<0.010	<0.010	**0.069**	**0.0181**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
5/4/2012	MW-08R	not required	not required	<0.010	<0.010	<0.010	<0.010	**1.22**	<0.010	<0.010	<0.010	**0.118**	**0.0268**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0412**

Baldwin Pole & Piling Co., Inc.

Bay Minette, Alabama

Groundwater Monitoring Analytical Results

All analytical data is in mg/l (ppm) Sample Date	Monitor Well Number	Acenaphthene	Fluorene	Phenol	2-Chlorophenol	2,4-Dimethylphenol	p-Chloro-m-cresol (4-Chloro-3-Methylphenol)	Naphthalene	2,4-Dinitrophenol	Acenaphthylene	Trichlorophenols (2,4,6-/2,4,5-)	Phenanthrene	Fluoranthene	Benzo(a)anthracene	Chrysene	Benzo(b)fluoranthene	Tetrachlorophenols (2,3,5,6-/2,3,4,5-/2,3,4,6-)	Pentachlorophenol	Benzo(a)pyrene	Indeno (1,2,3-c,d) pyrene	Dibenz (a,h) anthracene	Carbazole
10/25/2012	MW-08R	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.903**	<0.010	<0.010	<0.010	**0.108**	**0.0318**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0186**
6/21/2013	MW-08R	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.482**	<0.010	<0.010	<0.010	**0.0807**	**0.0164**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0174**
11/25/2013	MW-08R	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.307**	<0.010	<0.010	<0.010	**0.0981**	**0.0248**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0178**
6/30/2014	MW-08R	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.362**	<0.010	<0.010	<0.010	**0.103**	**0.0318**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
12/10/2014	MW-08R	**0.116**	**0.0697**	<0.010	<0.010	<0.010	<0.010	**0.241**	<0.010	<0.010	<0.010	**0.084**	**0.025**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/25/2015	MW-08R	**0.197**	**0.117**	<0.010	<0.010	<0.010	<0.010	**0.535**	<0.010	<0.010	<0.010	**0.145**	**0.0382**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0123**
11/19/2015	MW-08R	**0.178**	**0.088**	<0.010	<0.010	<0.010	<0.010	**0.393**	<0.010	<0.010	<0.010	**0.109**	**0.0251**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.013**
6/8/2016	MW-08R	**0.0875**	**0.0696**	<0.010	<0.010	<0.010	<0.010	**0.0959**	<0.010	<0.010	<0.010	**0.0752**	**0.0256**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
12/16/2016	MW-08R	**0.0985**	**0.0643**	<0.010	<0.010	<0.010	<0.010	**0.117**	<0.010	<0.010	<0.010	**0.0518**	**0.0143**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0199**
6/15/2017	MW-08R	**0.134**	**0.0646**	<0.010	<0.010	<0.010	<0.010	**0.429**	<0.010	<0.010	<0.010	**0.0385**	**0.0103**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0186**
12/12/2017	MW-08R	**0.112**	**0.072**	<0.010	<0.010	<0.010	<0.010	**0.0754**	<0.010	<0.010	<0.010	**0.0844**	**0.0243**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
5/30/2018	MW-08R	**0.0824**	**0.0531**	<0.010	<0.010	<0.010	<0.010	**0.143**	<0.010	<0.010	<0.010	**0.0363**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
11/29/2018	MW-08R	**0.186**	**0.12**	<0.010	<0.010	<0.010	<0.010	**0.797**	<0.010	<0.010	<0.010	**0.0777**	**0.0171**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.048**
4/24/2019	MW-08R	**0.103**	**0.0654**	<0.010	<0.010	<0.010	<0.010	**0.354**	<0.010	<0.010	<0.010	**0.0563**	**0.0134**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
12/4/2019	MW-08R	**0.0855**	**0.0566**	<0.010	<0.010	<0.010	<0.010	**0.206**	<0.010	<0.010	<0.010	**0.0329**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
3/11/2020	MW-08R	**0.112**	**0.0662**	<0.010	<0.010	<0.010	<0.010	**0.0581**	<0.010	<0.010	<0.010	**0.0473**	**0.0123**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
12/11/2020	MW-08R	**0.116**	**0.073**	<0.010	<0.010	<0.010	<0.010	**0.117**	<0.010	<0.010	<0.010	**0.0517**	**0.0123**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
3/30/2021	MW-08R	**0.076**	**0.0518**	<0.010	<0.010	<0.010	<0.010	**0.0796**	<0.010	<0.010	<0.010	**0.0393**	**0.0218**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
8/20/2021	MW-08R	**0.0929**	**0.0688**	<0.010	<0.010	<0.010	<0.010	**0.0415**	<0.010	<0.010	<0.010	**0.0613**	**0.0205**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/20/2022	MW-08R	**0.118**	**0.0758**	<0.00962	<0.00962	<0.00962	<0.00962	**0.0761**	<0.00962	<0.00962	<0.00962	**0.0745**	**0.0258**	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962
10/26/2022	MW-08R	**0.111**	**0.0845**	<0.00976	<0.00976	<0.00976	<0.00976	**0.0862**	<0.00976	<0.00976	<0.00976	**0.0867**	**0.0433**	**0.013**	**0.0151**	<0.00976	<0.00976	<0.00976	<0.00976	<0.00976	<0.00976	<0.00976
3/29/2023	MW-08R	**0.105**	**0.0767**	<0.00971	<0.00971	<0.00971	<0.00971	**0.0362**	<0.00971	<0.00971	<0.00971	**0.0653**	**0.0299**	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971
10/26/2023	MW-08R	**0.18**	**0.0844**	<0.00966	<0.00966	<0.00966	<0.00966	**0.0306**	<0.00966	<0.00966	<0.00966	**0.0601**	**0.0282**	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966
5/31/1988	MW-10	not required	not required	**0.034**	<0.010	<0.010	**0.024**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.023**
5/31/1990	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/5/1990	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/17/1991	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
11/13/1991	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/15/1992	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
12/10/1992	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
7/22/1993	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/21/1993	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/2/1994	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
12/1/1994	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/11/1995	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
12/5/1995	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/27/1996	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
11/1/1996	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
8/12/1997	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/1/1998	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/1/1999	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/5/2000	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/9/2001	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
11/13/2002	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	**0.0162**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
11/13/2002	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
11/4/2003	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
5/18/2004	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
5/24/2005	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/23/2006	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/19/2007	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/29/2008	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010

Baldwin Pole & Piling Co., Inc.

Bay Minette, Alabama

Groundwater Monitoring Analytical Results

All analytical data is in mg/l (ppm) Sample Date	Monitor Well Number	Acenaphthene	Fluorene	Phenol	2-Chlorophenol	2,4-Dimethylphenol	p-Chloro-m-cresol (4-Chloro-3-Methylphenol)	Naphthalene	2,4-Dinitrophenol	Acenaphthylene	Trichlorophenols (2,4,6-/2,4,5-)	Phenanthrene	Fluoranthene	Benzo(a)anthracene	Chrysene	Benzo(b)fluoranthene	Tetrachlorophenols (2,3,5,6-/2,3,4,5-/2,3,4,6-)	Pentachlorophenol	Benzo(a)pyrene	Indeno (1,2,3-c,d) pyrene	Dibenz (a,h) anthracene	Carbazole
5/13/2009	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
5/18/2010	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
3/23/2011	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
5/4/2012	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/21/2013	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/30/2014	MW-10	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/25/2015	MW-10	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/8/2016	MW-10	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/15/2017	MW-10	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
5/30/2018	MW-10	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/24/2019	MW-10	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
3/11/2020	MW-10	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
3/30/2021	MW-10	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/20/2022	MW-10	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957
3/29/2023	MW-10	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952
4/1/1987	P-1	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
5/31/1990	P-1	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/5/1990	P-1	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/17/1991	P-1	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/7/1991	P-1	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
11/13/1991	P-1	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/15/1992	P-1	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
12/10/1992	P-1	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
7/22/1993	P-1	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/21/1993	P-1	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/2/1994	P-1	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
12/1/1994	P-1	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/11/1995	P-1	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
12/5/1995	P-1	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/27/1996	P-1	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
11/1/1996	P-1	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
8/12/1997	P-1	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/1/1998	P-1	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/1/1999	P-1	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/5/2000	P-1	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/9/2001	P-1	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
11/13/2002	P-1	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
11/4/2003	P-1	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
5/18/2004	P-1R	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
5/24/2005	P-1R	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/23/2006	P-1R	not required	not required	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
4/19/2007	P-1R	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/29/2008	P-1R	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
5/13/2009	P-1R	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
5/18/2010	P-1R	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
3/23/2011	P-1R	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
5/4/2012	P-1R	not required	not required	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012
6/21/2013	P-1R	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/30/2014	P-1R	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/25/2015	P-1R	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/8/2016	P-1R	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010

Baldwin Pole & Piling Co., Inc.

Bay Minette, Alabama

Groundwater Monitoring Analytical Results

All analytical data is in mg/l (ppm) Sample Date	Monitor Well Number	Acenaphthene	Fluorene	Phenol	2-Chlorophenol	2,4-Dimethylphenol	p-Chloro-m-cresol (4-Chloro-3-Methylphenol)	Naphthalene	2,4-Dinitrophenol	Acenaphthylene	Trichlorophenols (2,4,6-/2,4,5-)	Phenanthrene	Fluoranthene	Benzo(a)anthracene	Chrysene	Benzo(b)fluoranthene	Tetrachlorophenols (2,3,5,6-/2,3,4,5-/2,3,4,6-)	Pentachlorophenol	Benzo(a)pyrene	Indeno (1,2,3-c,d) pyrene	Dibenz (a,h) anthracene	Carbazole
6/15/2017	P-1R	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
5/30/2018	P-1R	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/24/2019	P-1R	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
3/11/2020	P-1R	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
3/30/2021	P-1R	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/20/2022	P-1R	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957	<0.00957
3/29/2023	P-1R	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966
4/1/1987	P-2	not required	not required	**0.08**	<0.010	**0.225**	<0.010	**0.98**	**0.092**	**0.142**	<0.010	**0.05**	<0.010	NA	<0.010	NA	<0.010	<0.010	<0.010	NA	NA	**0.08**
5/31/1990	P-2	not required	not required	**0.085**	**0.011**	<0.010	**0.08**	**0.654**	**0.077**	**0.035**	<0.010	<0.010	**0.095**	<0.010	**0.038**	**0.013**	<0.010	**0.095**	**0.012**	<0.010	<0.010	<0.010
10/5/1990	P-2	not required	not required	**0.48**	<0.010	**0.239**	**0.043**	**2.349**	**1.057**	**0.046**	**0.054**	<0.010	**0.512**	**0.122**	**0.11**	**0.063**	<0.010	**1.069**	**0.038**	**0.013**	<0.010	**0.308**
4/17/1991	P-2	not required	not required	NOT SAMPLED																		
11/13/1991	P-2	not required	not required	<0.500	<0.500	**1.62**	**5.519**	<0.500	<0.500	<0.500	<0.500	**5.298**	<0.500	**1.942**	**2.01**	<0.500	<0.500	**6.906**	<0.500	<0.500	<0.500	**1.929**
4/15/1992	P-2	not required	not required	**0.331**	<0.100	**2.42**	<0.100	**15.5**	**2.11**	<0.100	<0.100	**3.91**	**1.77**	**0.276**	**0.237**	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	**0.434**
12/10/1992	P-2	not required	not required	**0.168**	<0.100	**0.74**	<0.100	**9.69**	<0.100	<0.100	<0.100	**0.156**	<0.100	<0.100	<0.100	<0.100	<0.100	**0.196**	<0.100	<0.100	<0.100	**0.29**
7/22/1993	P-2	not required	not required	**0.489**	<0.160	**3.187**	<0.160	**20.25**	<0.160	<0.160	<0.160	**0.655**	<0.160	<0.160	<0.160	<0.160	<0.160	**1.451**	<0.160	<0.160	<0.160	<0.160
10/21/1993	P-2	not required	not required	<0.250	<0.250	**1.792**	<0.250	**13.98**	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	**0.628**	<0.250	<0.250	<0.250	**0.313**
6/2/1994	P-2	not required	not required	<0.400	<0.400	**2.92**	<0.400	**12.9**	<0.400	<0.400	**0.476**	<0.400	<0.400	<0.400	<0.400	<0.400	**0.425**	**0.755**	<0.400	<0.400	<0.400	**0.668**
12/1/1994	P-2	not required	not required	**0.184**	<0.100	**3.23**	**1.64**	**18.5**	<0.100	<0.100	<0.100	**1.03**	**0.276**	<0.100	<0.100	<0.100	**0.492**	**1.39**	<0.100	<0.100	<0.100	**0.738**
4/11/1995	P-2	not required	not required	<0.100	<0.100	**2.906**	<0.100	**13.138**	<0.100	<0.100	<0.100	**0.324**	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
12/5/1995	P-2	not required	not required	**0.119**	<0.100	**2.149**	<0.100	**3.604**	<0.100	<0.100	<0.100	**0.247**	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	**0.509**
6/27/1996	P-2	not required	not required	**0.137**	<0.010	**0.374**	**0.029**	**9.3**	<0.010	<0.010	<0.010	**1.95**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.052**
11/1/1996	P-2	not required	not required	<0.010	**0.092**	**0.101**	**0.011**	**5.42**	**0.011**	<0.040	**0.024**	<0.040	<0.040	<0.040	<0.040	<0.040	**0.019**	**0.12**	<0.040	<0.040	<0.040	**0.649**
4/9/1997	P-2	not required	not required	<0.052	<0.052	**3.95**	<0.052	**4.78**	<0.052	<0.206	<0.052	<0.206	<0.206	<0.206	<0.206	<0.206	<0.206	<0.206	<0.052	<0.052	<0.052	**0.958**
8/12/1997	P-2	not required	not required	<0.402	<0.402	**3.066**	<0.402	**8.94**	<0.402	<0.402	<0.402	<0.402	<0.402	<0.402	<0.402	<0.402	<0.402	<0.402	<0.402	<0.402	<0.402	**0.81**
4/8/1998	P-2	not required	not required	<1.000	<1.000	<1.000	<1.000	**15.7**	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000
10/1/1998	P-2	not required	not required	<1.000	<1.000	**2.1**	<1.000	**11.2**	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000
2/22/1999	P-2	not required	not required	<1.000	<1.000	**3.74**	<1.000	**15.4**	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000
10/1/1999	P-2	not required	not required	<0.200	<0.200	**2.83**	<0.200	**15.3**	<0.200	<0.200	<0.200	**0.34**	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	**0.54**
4/7/2000	P-2	not required	not required	<0.100	<0.100	**1.279**	<0.100	**19.132**	<0.100	<0.100	<0.100	**0.229**	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	**0.457**
10/5/2000	P-2	not required	not required	<0.200	<0.200	**3.116**	<0.200	**13.442**	<0.200	<0.200	<0.200	**0.336**	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	**0.555**
4/10/2001	P-2	not required	not required	<0.500	<0.500	**3.012**	<0.500	**14.79**	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
10/9/2001	P-2	not required	not required	<0.100	<0.100	**2.16**	<0.100	**12.88**	<0.100	<0.100	<0.100	**0.225**	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	**0.400**
4/17/2002	P-2	not required	not required	<0.010	<0.010	**2.524**	<0.010	**14.112**	<0.010	**0.0276**	<0.010	**0.22**	**0.0177**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.416**
11/13/2002	P-2	not required	not required	<0.010	<0.010	**1.626**	<0.010	**9.517**	<0.010	**0.0173**	<0.010	**0.187**	**0.0167**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.361**
4/30/2003	P-2	not required	not required	<0.010	<0.010	**1.168**	<0.010	**10.378**	<0.010	**0.0157**	<0.010	**0.173**	**0.0141**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.309**
11/4/2003	P-2	not required	not required	**0.0111**	<0.010	**1.632**	<0.010	**13.199**	<0.010	**0.0193**	<0.010	**0.211**	**0.0126**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.333**
5/18/2004	P-2	not required	not required	<0.010	<0.010	**0.438**	<0.010	**3.637**	<0.010	<0.010	<0.010	**0.123**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.200**
11/18/2004	P-2	not required	not required	<0.010	<0.010	**1.136**	<0.010	**4.072**	<0.010	<0.010	<0.010	**0.128**	**0.21**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.169**
5/24/2005	P-2	not required	not required	**0.0228**	<0.010	**1.593**	<0.010	**8.378**	<0.010	**0.0167**	<0.010	**0.191**	**0.0205**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.389**
11/7/2005	P-2	not required	not required	<0.500	<0.500	**2.189**	<0.500	**12.795**	<0.500	<0.500	<0.500	**0.229**	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	**0.446**
6/23/2006	P-2	not required	not required	**0.0204**	<0.020	**1.824**	<0.020	**13.108**	<0.020	**0.0256**	<0.020	**0.231**	**0.0233**	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	**0.702**
10/24/2006	P-2	not required	not required	<0.050	<0.050	**1.66**	<0.050	**11.9**	<0.050	<0.050	<0.050	**0.231**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	**0.423**
4/19/2007	P-2	not required	not required	<0.010	<0.010	**0.822**	<0.010	**11.2**	<0.010	**0.0118**	<0.010	**0.204**	**0.0194**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.342**
8/2/2007	P-2	not required	not required	<0.010	<0.010	**0.642**	<0.010	**6.37**	<0.010	**0.0119**	<0.010	**0.162**	**0.0185**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.224**
4/29/2008	P-2	not required	not required	<0.051	<0.051	**0.653**	<0.051	**6.14**	<0.051	<0.051	<0.051	**0.162**	<0.051	<0.051	<0.051	<0.051	<0.051	<0.051	<0.051	<0.051	<0.051	**0.288**
10/22/2008	P-2	not required	not required	<0.010	<0.010	**0.756**	<0.010	**9.1**	**0.0268**	<0.010	<0.010	**0.194**	**0.015**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.284**
5/13/2009	P-2	not required	not required	<0.010	<0.010	**0.777**	<0.010	**10.4**	<0.010	**0.0204**	<0.010	**0.579**	**0.0321**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.452**
11/5/2009	P-2	not required	not required	**0.0167**	<0.010	**0.88**	<0.010	**8.8**	<0.010	**0.0176**	<0.010	**0.194**	**0.0158**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.266**
5/18/2010	P-2	not required	not required	**0.0201**	<0.010	**1.14**	<0.010	**9.17**	<0.010	**0.0221**	<0.010	**0.213**	**0.0217**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.304**
11/5/2010	P-2	not required	not required	<0.010	<0.010	**0.625**	<0.010	**6.08**	<0.010	**0.0159**	<0.010	**0.196**	**0.019**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.335**
3/23/2011	P-2	not required	not required	**0.0172**	<0.010	**1.19**	<0.010	**9.48**	<0.010	**0.019**	<0.010	**0.21**	**0.0114**	<0.010	<0.010	<0.101	<0.010	<0.010	<0.101	<0.101	<0.101	**0.265**

Baldwin Pole & Piling Co., Inc.

Bay Minette, Alabama

Groundwater Monitoring Analytical Results

All analytical data is in mg/l (ppm) Sample Date	Monitor Well Number	Acenaphthene	Fluorene	Phenol	2-Chlorophenol	2,4-Dimethylphenol	p-Chloro-m-cresol (4-Chloro-3-Methylphenol)	Naphthalene	2,4-Dinitrophenol	Acenaphthylene	Trichlorophenols (2,4,6-/2,4,5-)	Phenanthrene	Fluoranthene	Benzo(a)anthracene	Chrysene	Benzo(b)fluoranthene	Tetrachlorophenols (2,3,5,6-/2,3,4,5-/2,3,4,6-)	Pentachlorophenol	Benzo(a)pyrene	Indeno (1,2,3-c,d) pyrene	Dibenz (a,h) anthracene	Carbazole
10/24/2011	P-2	not required	not required	<0.010	<0.010	**0.334**	<0.010	**4.77**	<0.010	**0.0105**	<0.010	**0.163**	**0.0105**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.196**
5/4/2012	P-2	not required	not required	<0.010	<0.010	**0.372**	<0.010	**10.5**	<0.010	**0.015**	<0.010	**0.213**	**0.014**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.323**
10/25/2012	P-2	not required	not required	<0.010	<0.010	**0.465**	<0.010	**7.72**	<0.010	**0.014**	<0.010	**0.201**	**0.0139**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.329**
6/21/2013	P-2	not required	not required	<0.010	<0.010	**0.549**	<0.020	**7.37**	<0.010	**0.0168**	<0.010	**0.153**	**0.0111**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.224**
11/25/2013	P-2	not required	not required	<0.010	<0.010	**0.468**	<0.010	**9.46**	<0.010	**0.0164**	<0.010	**0.174**	**0.0141**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.388**
6/30/2014	P-2	not required	not required	<0.010	<0.010	**0.365**	<0.010	**7.46**	<0.010	**0.0147**	<0.010	**0.196**	**0.0131**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.261**
12/10/2014	P-2	**0.614**	**0.231**	<0.010	<0.010	**0.606**	<0.010	**8.15**	<0.010	**0.019**	<0.010	**0.216**	**0.0164**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.503**
6/25/2015	P-2	**0.740**	**0.278**	<0.010	<0.010	**0.719**	<0.010	**8.54**	<0.010	**0.0112**	<0.010	**0.253**	**0.0197**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.212**
11/19/2015	P-2	**0.560**	**0.212**	<0.010	<0.010	**0.67**	<0.010	**7.89**	<0.010	**0.0156**	<0.010	**0.199**	**0.0126**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.26**
6/8/2016	P-2	**0.472**	**0.111**	<0.010	<0.010	**0.616**	<0.010	**7.8**	<0.010	**0.017**	<0.010	**0.113**	**0.0155**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.33**
12/16/2016	P-2	**0.394**	**0.182**	<0.010	<0.010	**0.592**	<0.010	**4.05**	<0.010	<0.010	<0.010	**0.11**	**0.0133**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.363**
6/15/2017	P-2	**0.707**	**0.248**	<0.010	<0.010	**0.701**	<0.010	**9.25**	<0.010	**0.0217**	<0.010	**0.226**	**0.0184**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.428**
12/12/2017	P-2	**0.426**	**0.195**	<0.010	<0.010	**0.603**	<0.010	**4.11**	<0.010	**0.0146**	<0.010	**0.179**	**0.0136**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.287**
5/30/2018	P-2	**0.377**	**0.187**	<0.010	<0.010	**0.451**	<0.010	**4.66**	<0.010	**0.0138**	<0.010	**0.18**	**0.015**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.252**
11/29/2018	P-2	**0.511**	**0.274**	<0.010	<0.010	**0.718**	<0.010	**9.14**	<0.010	**0.0138**	<0.010	**0.305**	**0.0365**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.385**
4/24/2019	P-2	**0.143**	**0.0679**	<0.010	<0.010	<0.050	<0.050	**0.208**	<0.010	**0.0115**	<0.010	**0.0513**	**0.0144**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.126**
12/4/2019	P-2	**0.544**	**0.257**	<0.010	<0.010	**0.716**	<.102	**9.99**	<0.010	**0.0154**	<0.010	**0.233**	**0.0189**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.118**
3/11/2020	P-2	**0.695**	**0.266**	<0.010	<0.010	**0.668**	<.102	**8.38**	<0.010	**0.018**	<0.010	**0.24**	**0.0189**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.521**
12/11/2020	P-2	**0.283**	**0.145**	<0.010	<0.010	**0.298**	<0.100	**1.83**	<0.010	**0.0154**	<0.010	**0.125**	**0.0182**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.211**
3/30/2021	P-2	**0.375**	**0.186**	<0.010	<0.010	**0.199**	<0.100	**7.18**	<0.010	**0.0133**	<0.010	**0.196**	**0.0151**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.283**
8/20/2021	P-2	**0.312**	**0.131**	<0.010	<0.010	<0.100	<0.100	**0.784**	<0.010	**0.0137**	<0.010	**0.0593**	**0.0186**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.0777**
4/20/2022	P-2	**0.523**	**0.204**	<0.00985	<0.00985	**0.348**	<0.0985	**5.74**	<0.00985	**0.013**	<0.00985	**0.194**	**0.018**	<0.00985	<0.00985	<0.00985	<0.00985	<0.00985	<0.00985	<0.00985	<0.00985	**0.209**
10/26/2022	P-2	**0.427**	**0.191**	<0.00966	<0.00966	**0.306**	<0.0966	**7.27**	<0.00966	**0.0167**	<0.00966	**0.194**	**0.0198**	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	**0.231**
3/29/2023	P-2	**0.519**	**0.14**	<0.00966	<0.00966	**0.226**	<0.0966	**8.21**	<0.00966	**0.014**	<0.00966	**0.122**	**0.0178**	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	**0.168**
10/26/2023	P-2	**0.134**	**0.268**	<0.00962	<0.00962	**0.644**	<0.0962	**6.78**	<0.00962	**0.0156**	<0.00962	**0.254**	**0.02**	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	**0.491**
4/1/1987	P-3	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	NA	<0.010	NA	<0.010	<0.010	<0.010	NA	NA	<0.010
4/1/2004	P-3	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/1/1987	P-4	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	NA	<0.010	NA	<0.010	<0.010	<0.010	NA	NA	<0.010
4/1/1987	P-5	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	NA	<0.010	NA	<0.010	<0.010	<0.010	NA	NA	<0.010
4/1/2004	P-5	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/1/1987	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	NA	<0.010	NA	<0.010	<0.010	<0.010	NA	NA	<0.010
5/31/1990	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.018**	<0.010	<0.010	<0.010	<0.010
10/5/1990	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	**0.035**	<0.010	<0.010	<0.010	<0.010
4/17/1991	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
11/13/1991	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/15/1992	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
12/10/1992	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
7/22/1993	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/21/1993	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/2/1994	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
12/1/1994	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/11/1995	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
12/5/1995	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/27/1996	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
11/1/1996	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
8/12/1997	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/1/1998	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/1/1999	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/5/2000	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/9/2001	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
11/13/2002	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010

Baldwin Pole & Piling Co., Inc.

Bay Minette, Alabama

Groundwater Monitoring Analytical Results

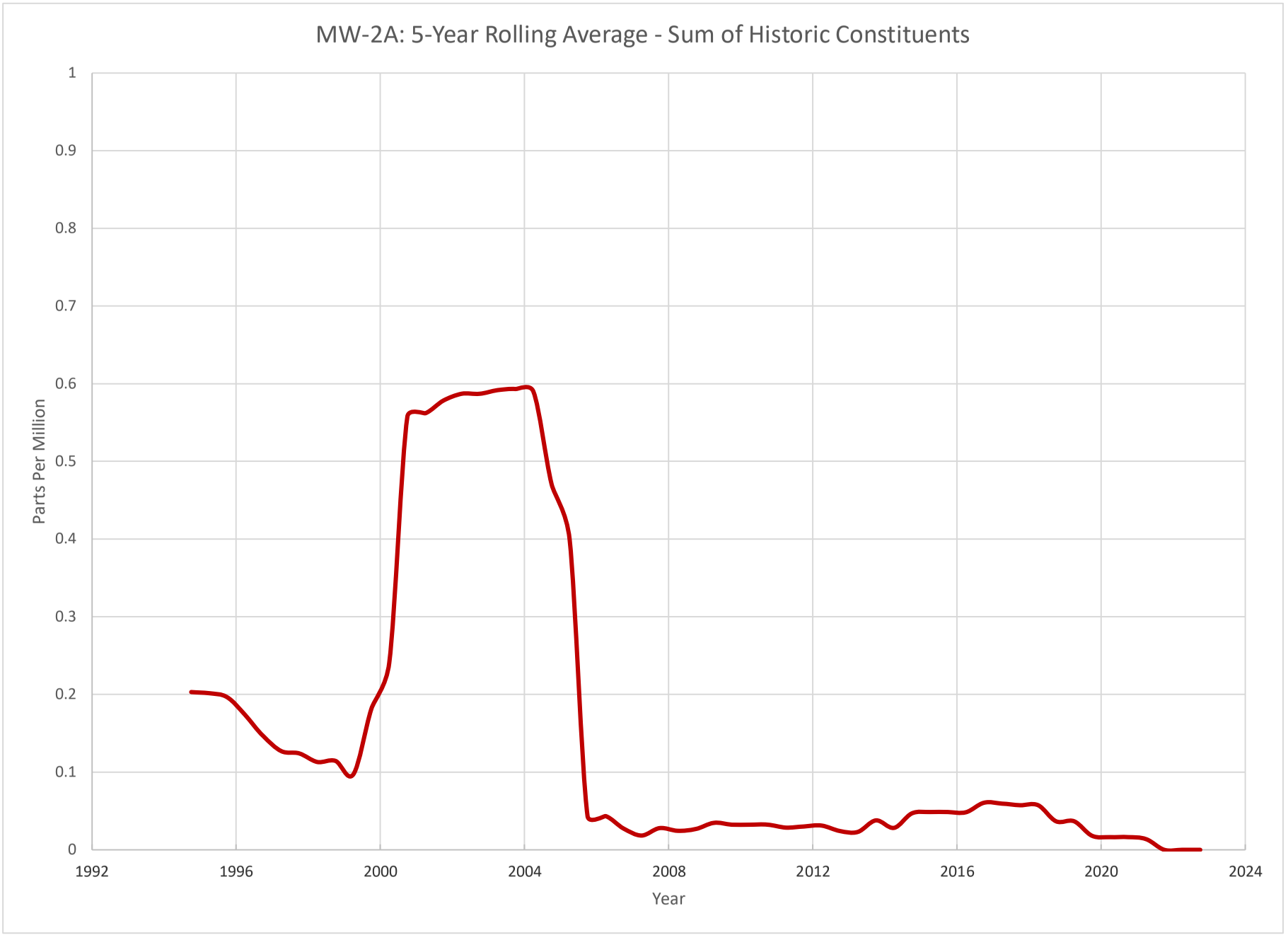
All analytical data is in mg/l (ppm) Sample Date	Monitor Well Number	Acenaphthene	Fluorene	Phenol	2-Chlorophenol	2,4-Dimethylphenol	p-Chloro-m-cresol (4-Chloro-3-Methylphenol)	Naphthalene	2,4-Dinitrophenol	Acenaphthylene	Trichlorophenols (2,4,6-/2,4,5-)	Phenanthrene	Fluoranthene	Benzo(a)anthracene	Chrysene	Benzo(b)fluoranthene	Tetrachlorophenols (2,3,5,6-/2,3,4,5-/2,3,4,6-)	Pentachlorophenol	Benzo(a)pyrene	Indeno (1,2,3-c,d) pyrene	Dibenz (a.h) anthracene	Carbazole
11/4/2003	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
5/18/2004	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
5/24/2005	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/23/2006	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/19/2007	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/29/2008	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
5/13/2009	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
5/18/2010	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
3/23/2011	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
5/4/2012	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/21/2013	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/30/2014	P-6	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/25/2015	P-6	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/8/2016	P-6	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/15/2017	P-6	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
5/30/2018	P-6	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/24/2019	P-6	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
3/11/2020	P-6	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
3/30/2021	P-6	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/20/2022	P-6	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962
3/29/2023	P-6	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966
5/31/1990	TP-9	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/5/1990	TP-9	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/17/1991	TP-9	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
11/13/1991	TP-9	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/15/1992	TP-9	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
12/10/1992	TP-9	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
7/22/1993	TP-9	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/21/1993	TP-9	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/2/1994	TP-9	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
12/1/1994	TP-9	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/11/1995	TP-9	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
12/5/1995	TP-9	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/27/1996	TP-9	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
11/1/1996	TP-9	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
8/12/1997	TP-9	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/1/1998	TP-9	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/1/1999	TP-9	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/5/2000	TP-9	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
10/9/2001	TP-9	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
11/13/2002	TP-9	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
11/4/2003	TP-9	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
5/18/2004	TP-9	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
5/24/2005	TP-9	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/23/2006	TP-9	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/19/2007	TP-9	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/29/2008	TP-9	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
5/13/2009	TP-9	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
5/18/2010	TP-9	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
3/23/2011	TP-9	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
5/4/2012	TP-9	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010

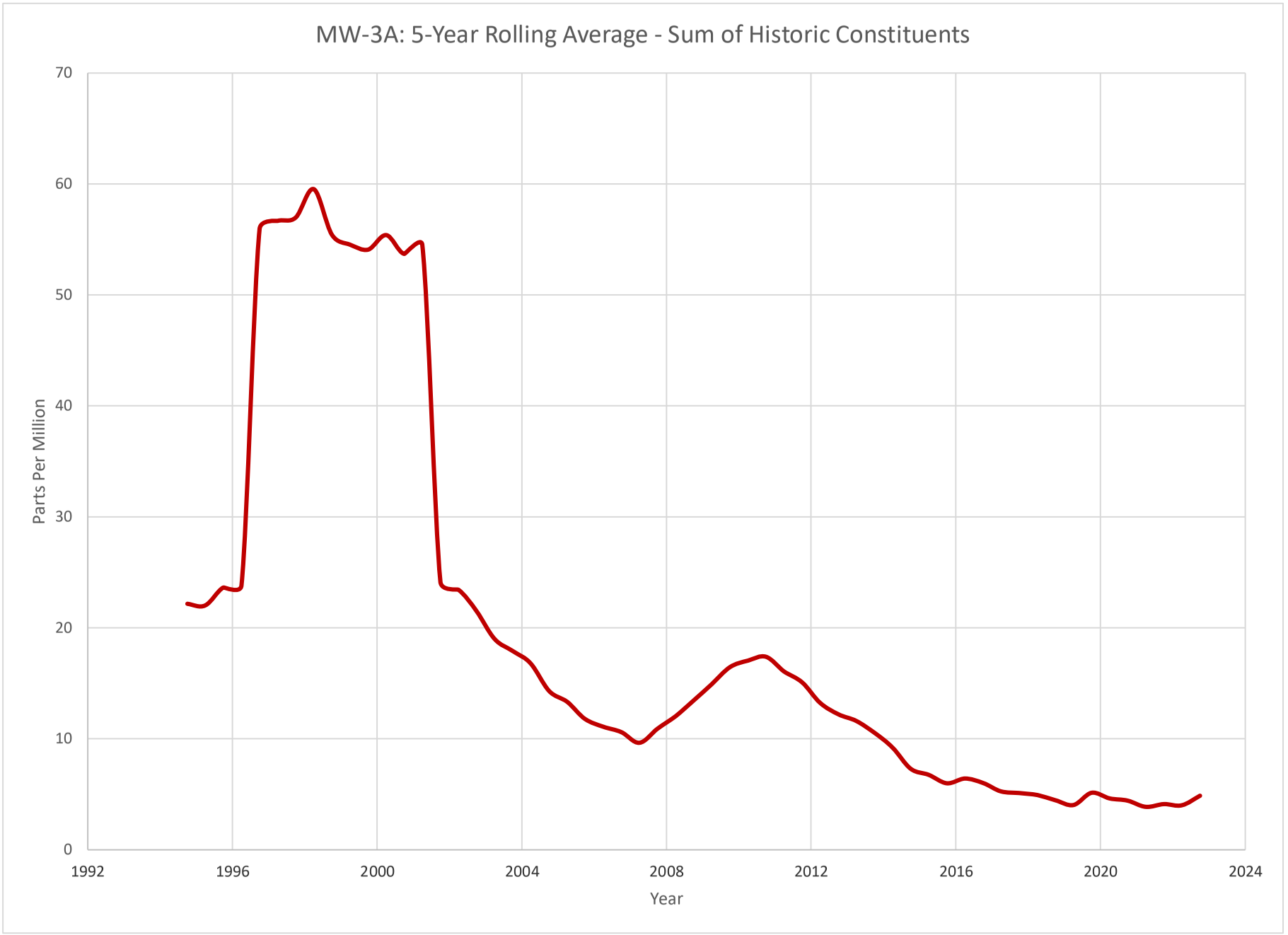
Baldwin Pole & Piling Co., Inc.

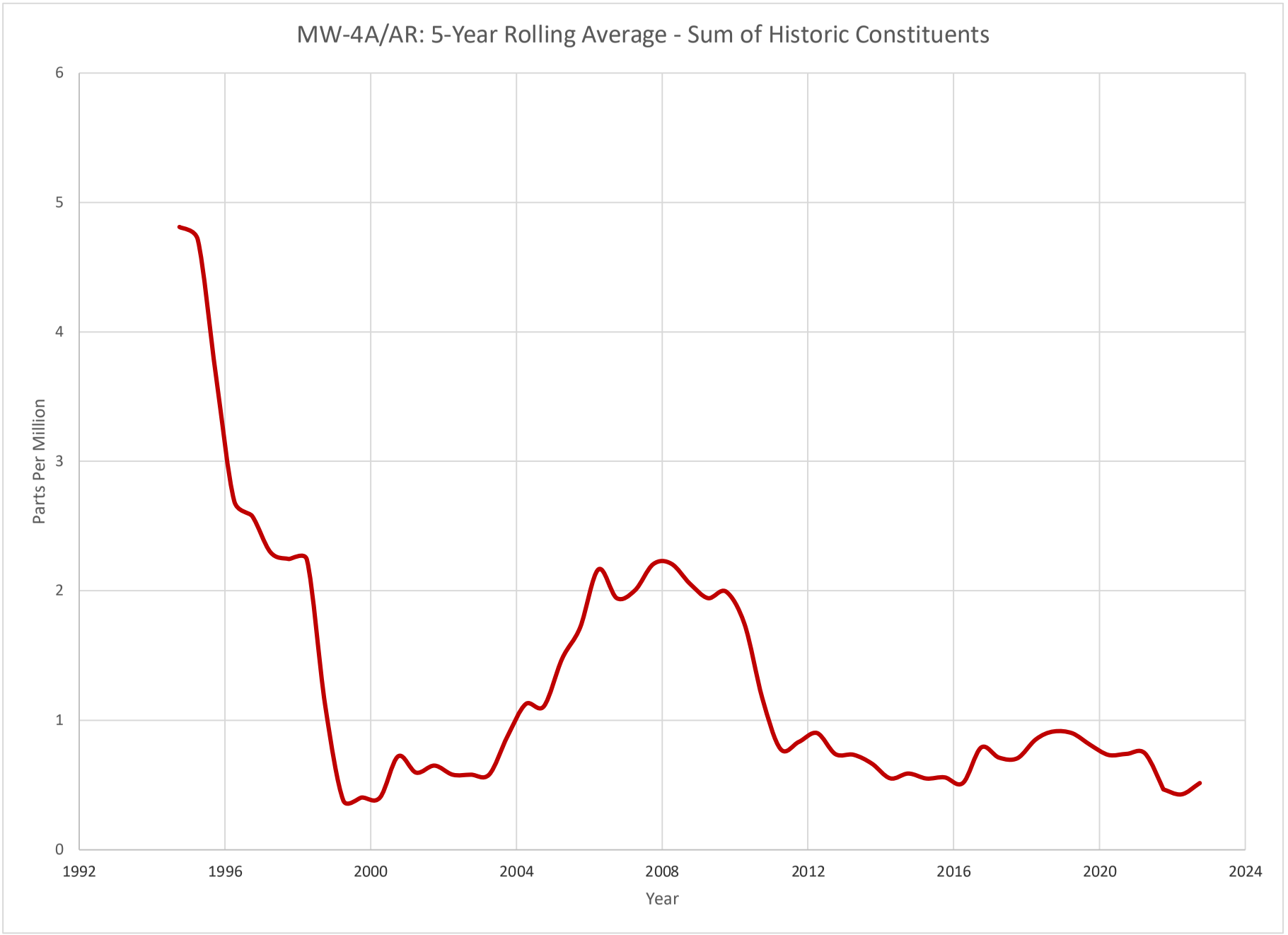
Bay Minette, Alabama

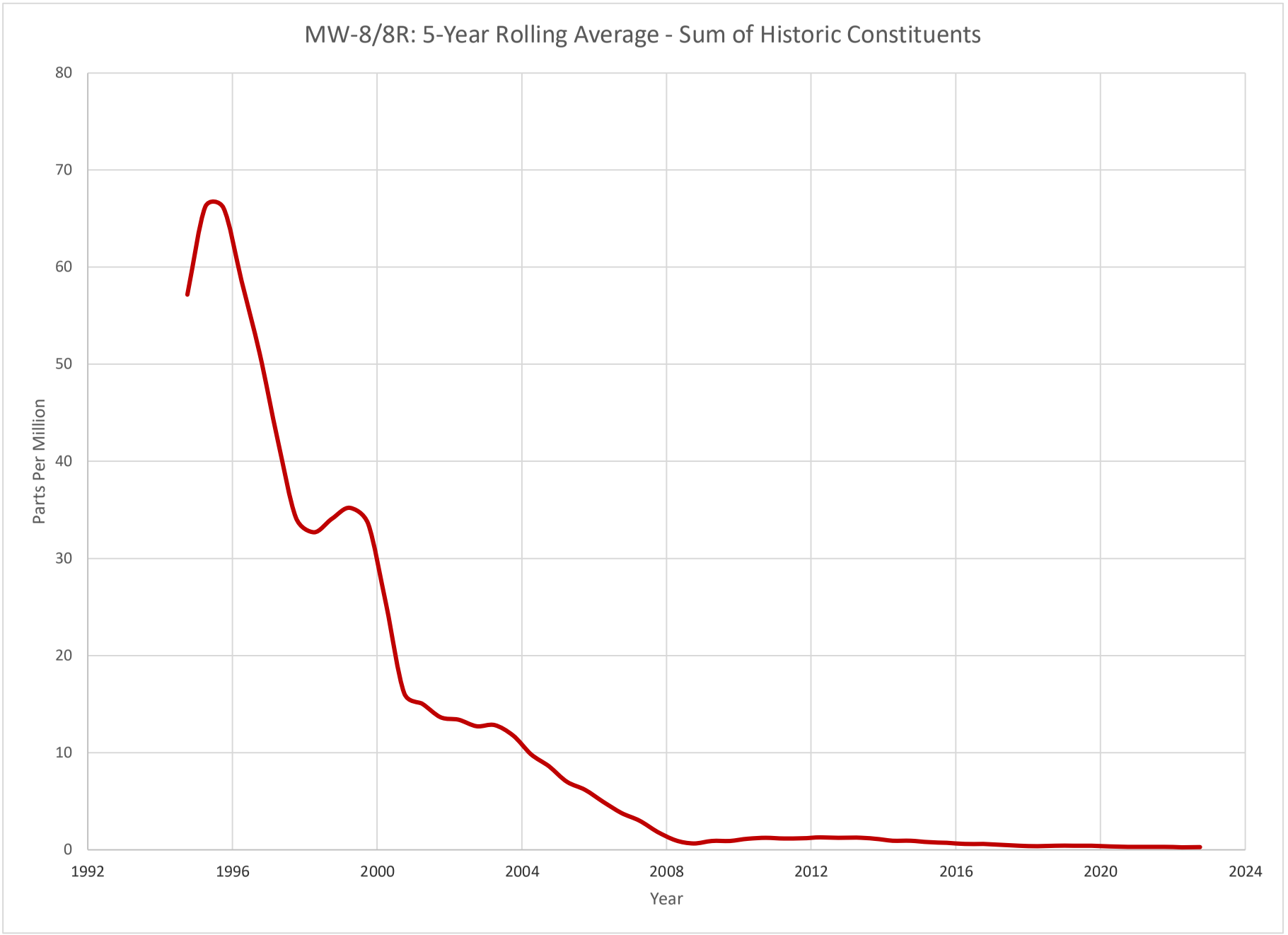
Groundwater Monitoring Analytical Results

All analytical data is in mg/l (ppm) Sample Date	Monitor Well Number	Acenaphthene	Fluorene	Phenol	2-Chlorophenol	2,4-Dimethylphenol	p-Chloro-m-cresol (4-Chloro-3-Methylphenol)	Naphthalene	2,4-Dinitrophenol	Acenaphthylene	Trichlorophenols (2,4,6-/2,4,5-)	Phenanthrene	Fluoranthene	Benzo(a)anthracene	Chrysene	Benzo(b)fluoranthene	Tetrachlorophenols (2,3,5,6-/2,3,4,5-/2,3,4,6-)	Pentachlorophenol	Benzo(a)pyrene	Indeno (1,2,3-c,d) pyrene	Dibenz (a.h) anthracene	Carbazole
6/21/2013	TP-9	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/30/2014	TP-9	not required	not required	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/25/2015	TP-9	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/8/2016	TP-9	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6/15/2017	TP-9	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
5/30/2018	TP-9	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/24/2019	TP-9	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
3/11/2020	TP-9	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
3/30/2021	TP-9	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
4/20/2022	TP-9	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966	<0.00966
3/29/2023	TP-9	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971


MW-2A: 5-Year Rolling Average - Sum of Historic Constituents
Parts Per Million
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
1992
1996
2000
2004
2008
2012
2016
2020
2024
Year


MW-3A: 5-Year Rolling Average - Sum of Historic Constituents
Parts Per Million
70
60
50
40
30
20
10
0
1992
1996
2000
2004
2008
2012
2016
2020
2024
Year


MW-4A/AR: 5-Year Rolling Average - Sum of Historic Constituents
Parts Per Million
0
1
2
3
4
5
6
1992
1996
2000
2004
2008
2012
2016
2020
2024
Year


MW-8/8R: 5-Year Rolling Average - Sum of Historic Constituents
Parts Per Million
80
70
60
50
40
30
20
10
0
1992
1996
2000
2004
2008
2012
2016
2020
2024
Year

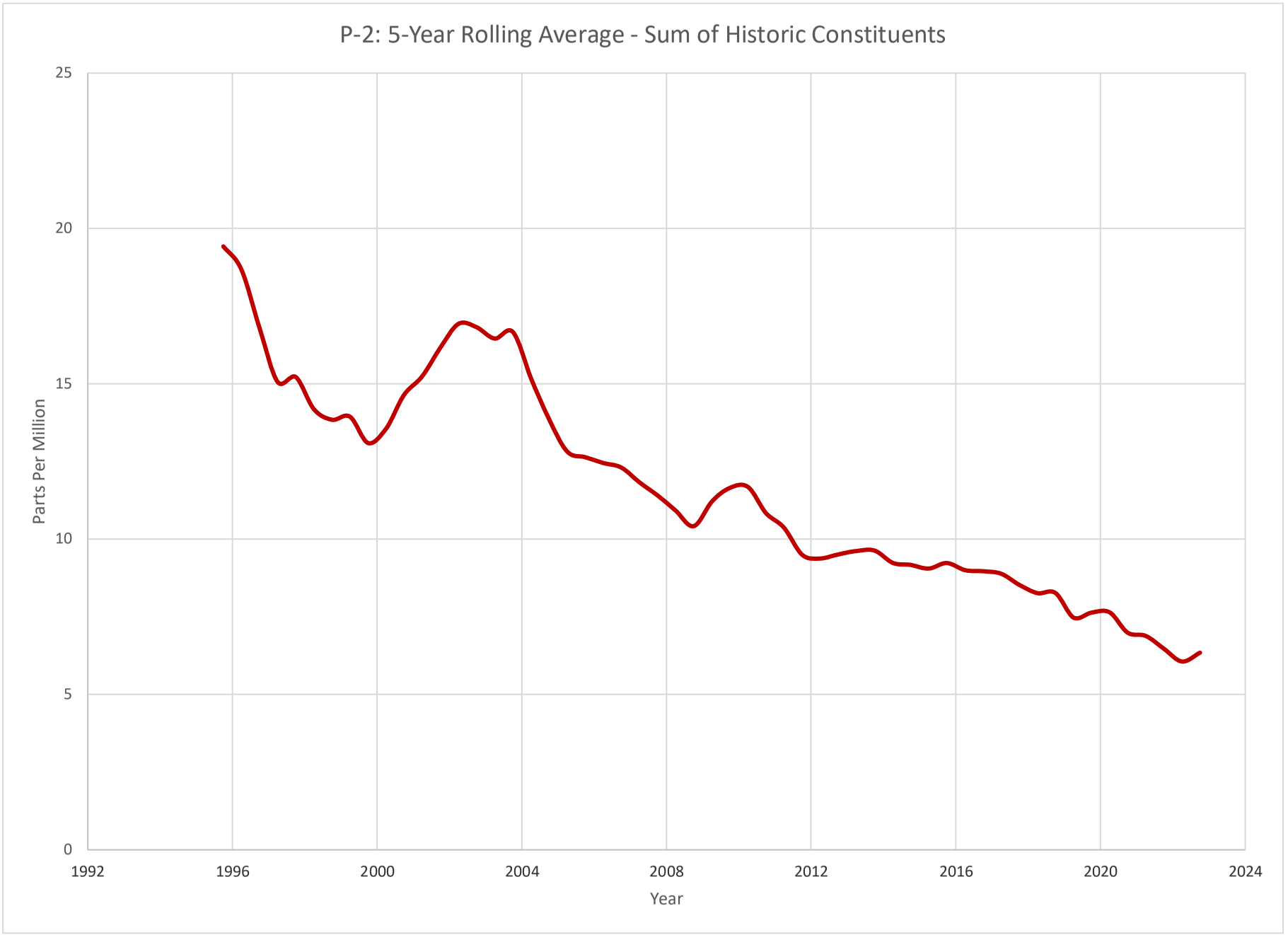
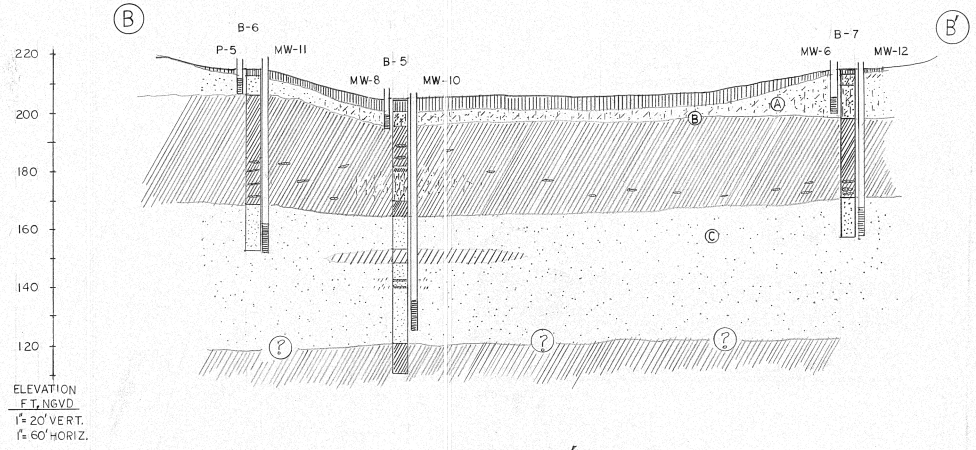
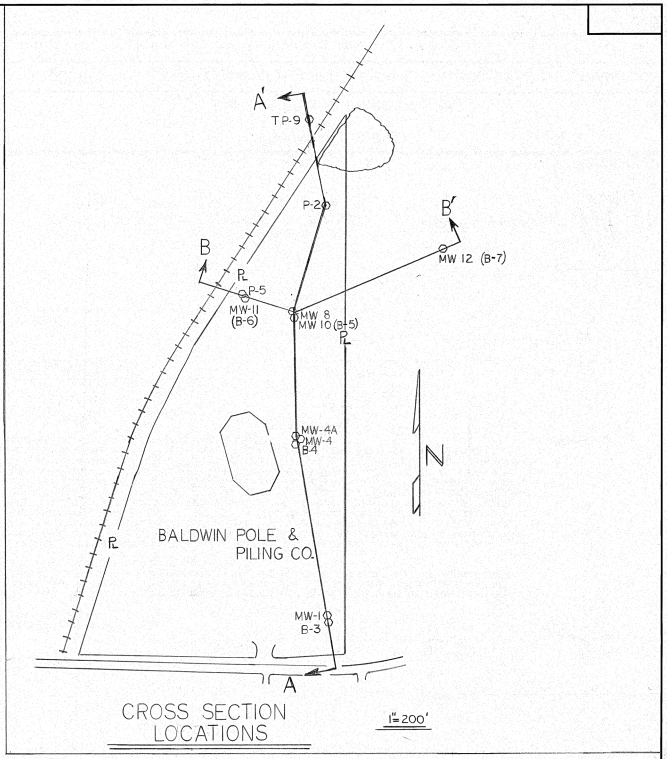

P-2: 5-Year Rolling Average - Sum of Historic Constituents
25
20
15
10
5
0
Parts Per Million
1992
1996
2000
2004
2008
2012
2016
2020
2024
Year

EXHIBIT 17

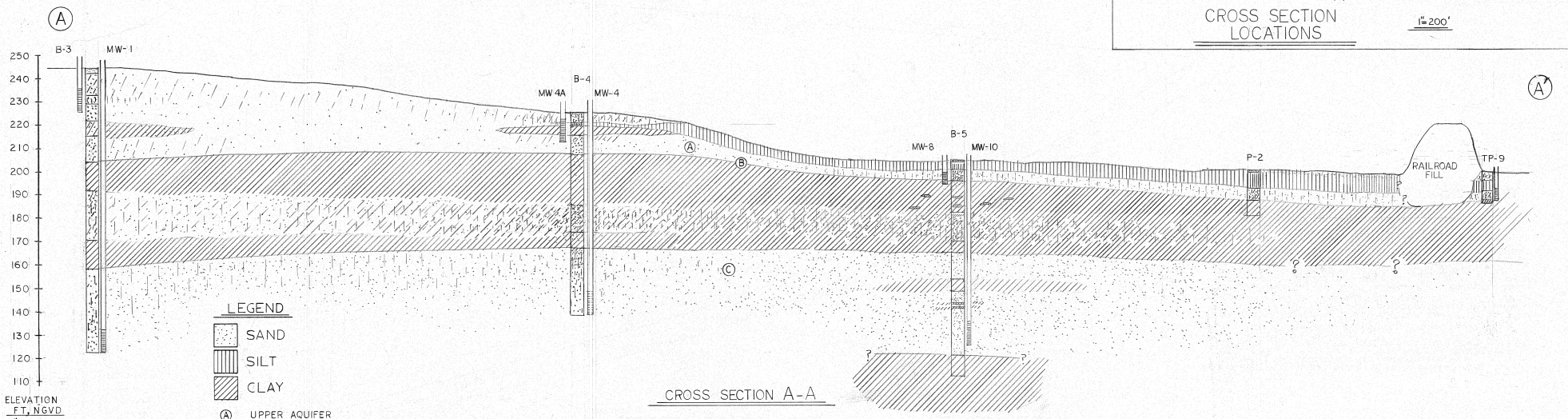


CROSS SECTION B-B'



CROSS SECTION LOCATIONS

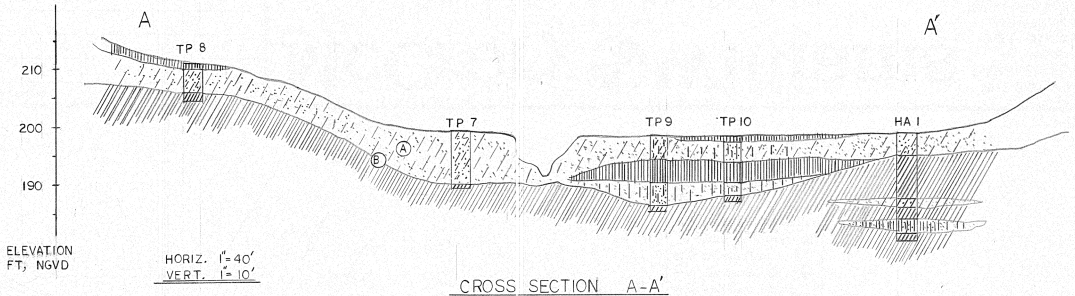
1"= 200'



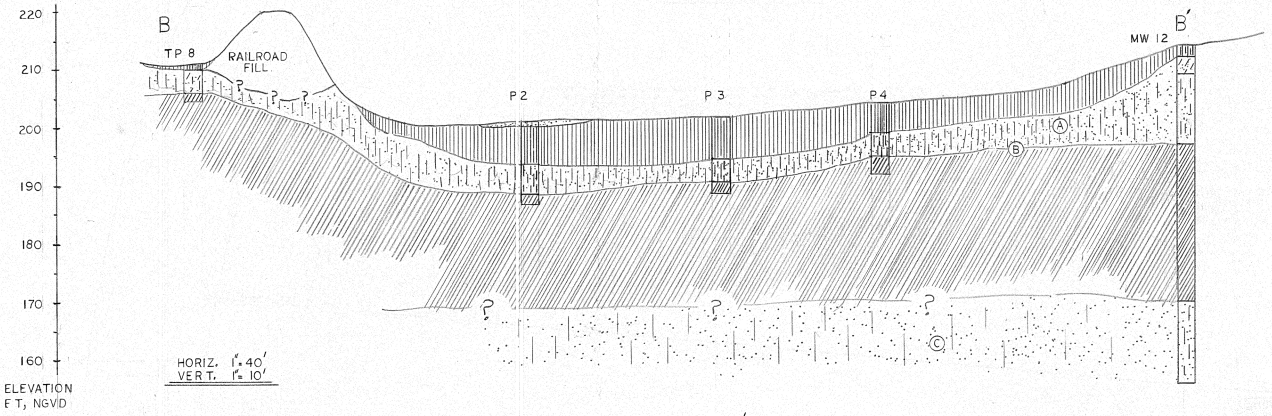
CROSS SECTION A-A

BALDWIN POLE & PILING CO. BAY MINETTE, AL.	
SCALE: As Shown	APPROVED BY: HMR
DATE: 10-1-87	DRAWN BY: ZHR
GEOLOGIC CROSS SECTIONS	
H.M. ROLLINS CO.	DRAWING NUMBER: 290 87

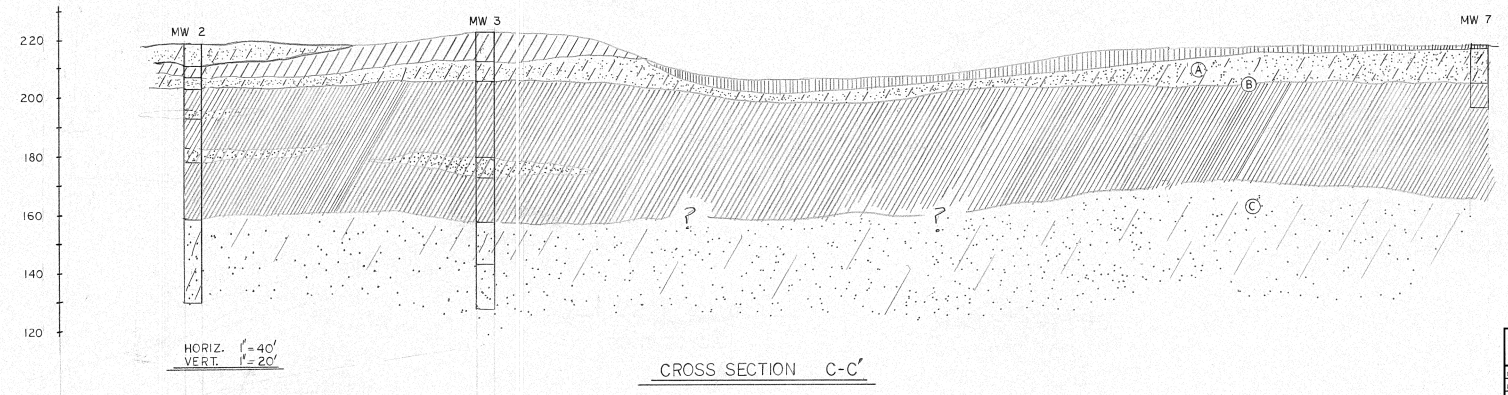
DIETZGEN MASTER FORM 19MM



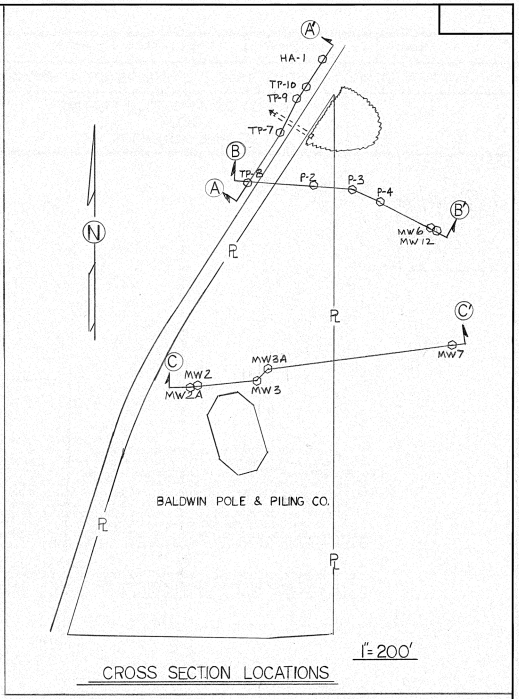
CROSS SECTION A-A'



CROSS SECTION B-B'



CROSS SECTION C-C'



CROSS SECTION LOCATIONS

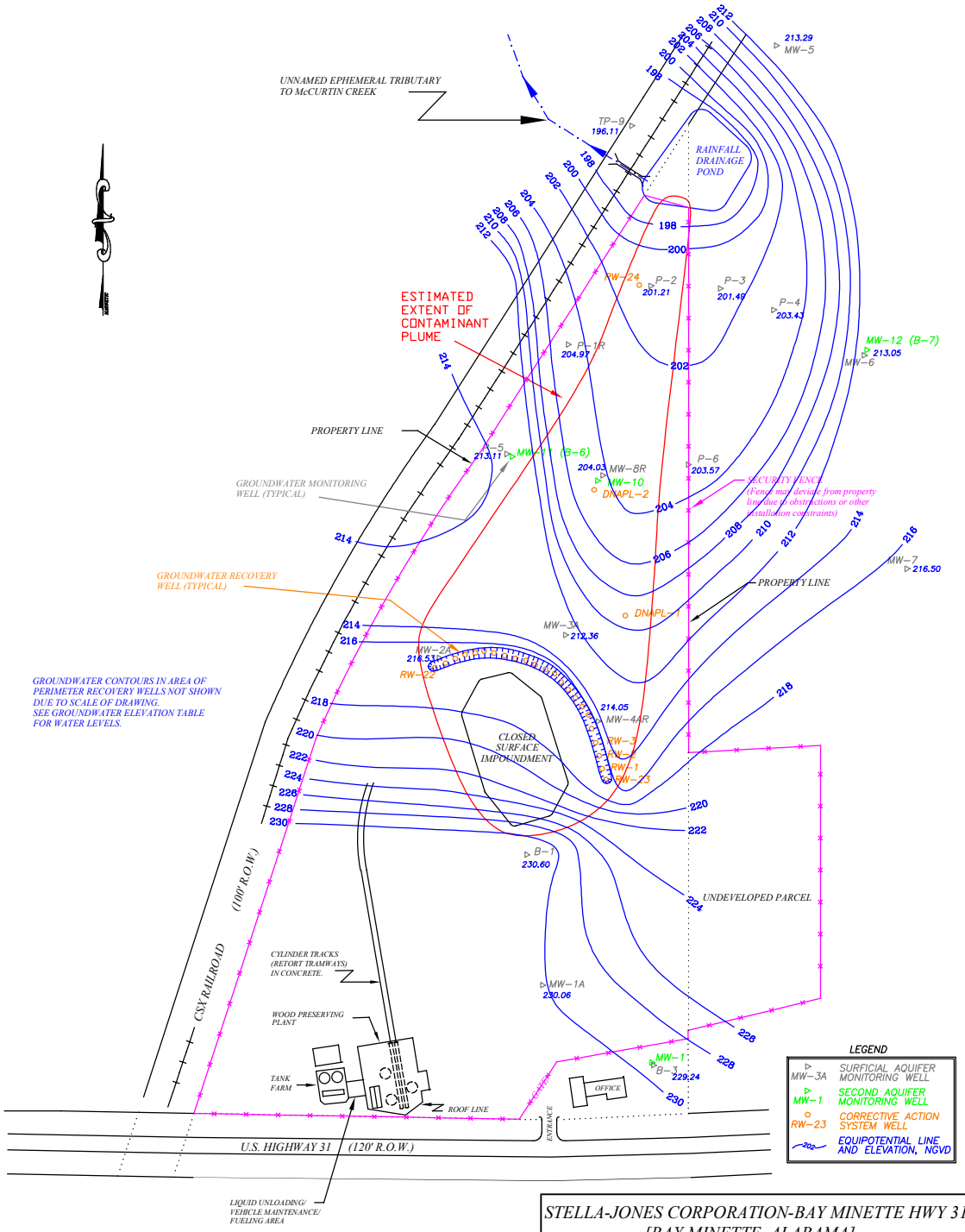
LEGEND

- SAND
- SILT
- CLAY
- (A) UPPER AQUIFER
- (B) TOP OF CONFINING CLAY
- (C) LOWER AQUIFER

BALDWIN POLE & PILING CO.	
BAY MINETTE AL	
SCALE: AS SHOWN	APPROVED BY: AMR
DATE: 10 14 87	DRAWN BY: CHR
GEOLOGIC CROSS SECTIONS	
H M ROLLINS CO GULFPORT MS	DRAWING NUMBER: 291 87

DIETZGEN MASTER FORM 1986MF

EXHIBIT 18



NOTE:
THIS DRAWING BASED ON WORK OF McCRORY & WILLIAMS, CONSULTING ENGINEERS AND LAND SURVEYORS, DAPHNE, AL, OCTOBER 30, 1986.

LOCATIONS OF SITE FEATURES ARE APPROXIMATE

STELLA-JONES CORPORATION-BAY MINETTE HWY 31 [BAY MINETTE, ALABAMA]		
SCALE: 1" = 200'	APPROVED BY:	DRAWN BY: JMR
DATE: 2/15/24		
SURFICIAL AQUIFER GROUNDWATER EQUIPOTENTIALS BASED OF MEASUREMENTS TAKEN 3/30/23		
H. M. ROLLINS CO., INC. GULFPORT, MISSISSIPPI		DRAWING NUMBER 240215

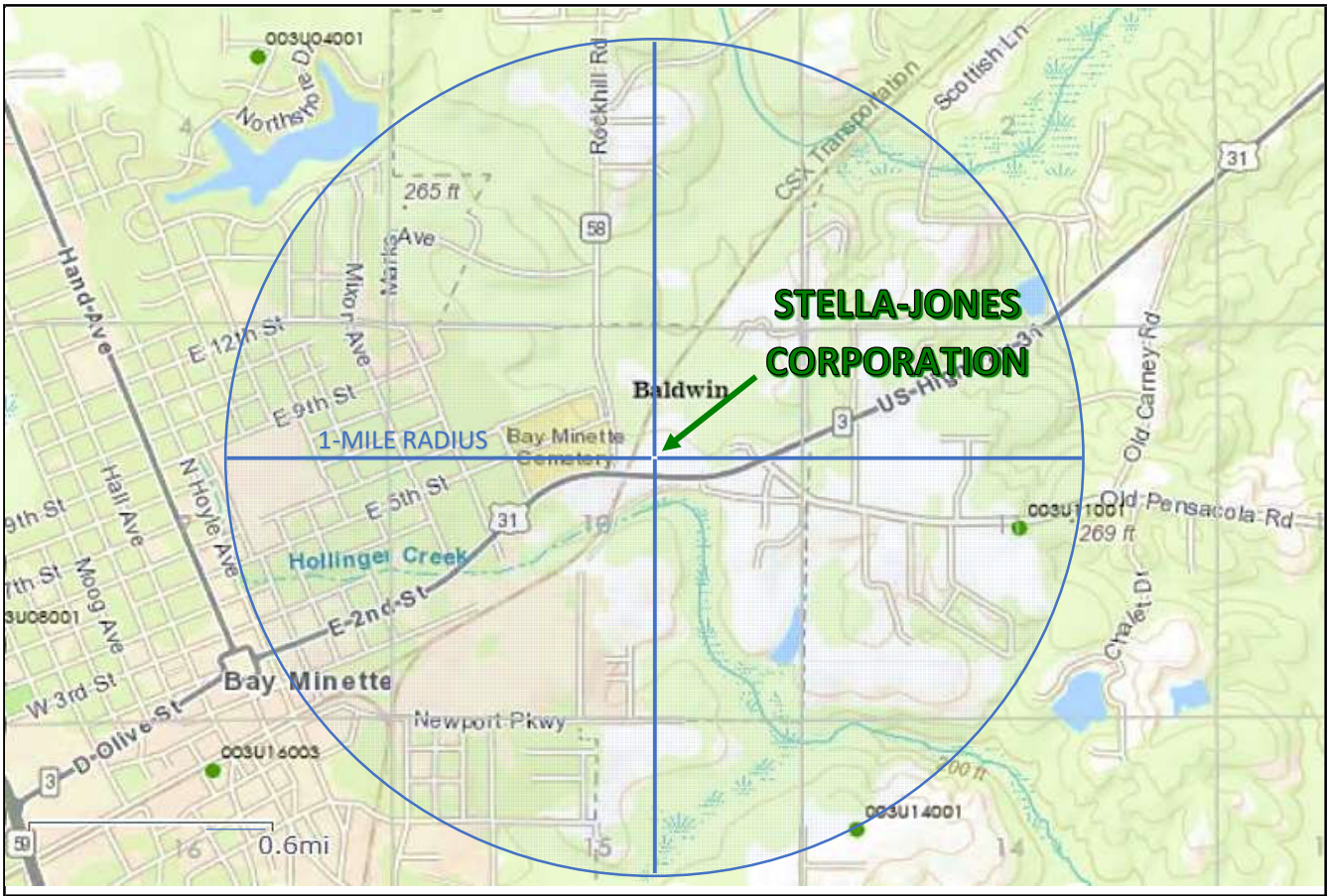
Stella-Jones Corporation

Bay Minette, Alabama

Historic Groundwater Elevations in Monitoring Wells

WELL	WELL ELEVATION	1/16/2019 WATER LEVEL	4/25/2019 WATER LEVEL	12/5/2019 WATER LEVEL	4/3/2020 WATER LEVEL	7/15/2020 WATER LEVEL	10/2/2020 WATER LEVEL	12/14/2020 WATER LEVEL	4/2/2021 WATER LEVEL	7/23/2021 WATER LEVEL	10/8/2021 WATER LEVEL	1/13/2022 WATER LEVEL	4/21/2022 WATER LEVEL	10/27/2022 WATER LEVEL	3/30/2023 WATER LEVEL	10/26/2023 WATER LEVEL	WELL
MW-1	244.99	185.43	185.55	184.20	184.38	184.47	184.60	184.58	184.60	184.32	184.41	187.46	186.90	186.71	186.83	183.68	MW-1
MW-10	209.66	186.25	186.58	185.20	185.15	185.21	185.35	185.50	186.07	185.15	185.54	185.77	187.85	187.60	187.71	184.64	MW-10
MW-11	216.50	185.92	185.78	184.99	185.08	185.12	185.32	185.44	185.49	185.08	185.19	185.28	187.72	187.43	187.49	184.42	MW-11
MW-12	215.25	185.62	185.51	184.57	184.79	184.83	184.99	185.07	185.07	184.80	184.97	185.19	185.37	185.14	185.20	184.07	MW-12
B-1	242.39	231.07	230.98	229.88	229.91	229.98	230.51	230.53	230.57	229.95	230.13	231.26	231.57	230.53	230.60	229.43	B-1
B-3	244.93	229.85	229.68	227.81	227.84	227.92	229.02	228.52	228.56	227.85	228.34	229.52	229.88	229.19	229.24	227.48	B-3
MW-1A	246.14	230.18	230.32	229.30	229.48	229.59	229.66	229.72	229.83	229.53	229.72	229.85	230.06	NM	230.06	NM	MW-1A
MW-2A	219.52	216.30	216.26	216.48	216.33	216.45	216.50	216.81	217.80	216.43	216.64	216.62	218.01	216.29	216.53	214.41	MW-2A
MW-3A	217.75	213.03	213.47	213.93	213.20	213.34	213.53	213.46	213.97	213.30	213.48	213.43	214.29	213.94	212.36	212.24	MW-3A
MW-4AR	224.47	215.16	215.01	216.16	216.05	215.94	214.08	214.80	216.02	216.49	216.31	216.16	216.19	215.90	214.05	213.09	MW-4AR
MW-5	217.52	213.26	213.20	212.60	212.58	212.69	212.74	212.83	213.01	212.64	212.87	213.04	213.50	213.33	213.29	210.42	MW-5
MW-6	216.46	212.78	212.80	212.62	212.63	212.75	212.68	212.71	212.75	212.74	212.78	213.02	213.24	213.05	213.05	211.55	MW-6
MW-7	219.76	216.72	216.69	216.32	216.31	216.42	216.50	216.57	216.69	216.38	216.46	216.65	216.67	216.55	216.50	214.54	MW-7
MW-8R	207.90	204.16	203.79	203.98	204.12	204.24	204.05	203.54	204.09	204.19	204.31	204.44	203.98	203.94	204.03	202.22	MW-8R
P-1R	207.89	204.86	204.51	204.53	204.48	204.53	204.65	204.78	204.97	204.50	204.73	204.88	204.81	202.98	204.97	200.13	P-1R
P-2	203.18	199.95	199.77	199.93	199.89	199.97	200.04	200.10	200.17	199.93	200.09	200.16	199.74	200.29	201.21	200.09	P-2
P-3	204.85	201.48	201.34	201.01	201.07	201.21	201.30	201.38	201.47	201.19	201.52	201.71	201.63	201.47	201.49	199.84	P-3
P-4	206.82	203.37	203.24	203.01	203.00	203.11	203.14	203.21	203.24	203.09	203.27	203.61	203.54	203.46	203.43	200.65	P-4
P-5	216.99	212.93	212.84	212.41	212.40	212.47	212.60	212.66	212.73	212.40	212.51	212.70	213.11	213.05	213.11	211.46	P-5
P-6	206.34	203.66	203.53	203.43	203.46	203.63	203.66	203.68	203.55	203.58	203.63	203.76	203.92	203.83	203.57	202.86	P-6
TP-9	199.92	195.88	195.98	195.76	195.84	195.95	195.88	196.04	196.24	195.91	196.01	196.14	196.63	196.54	196.11	194.50	TP-9

EXHIBIT 19



DATA SOURCE: HTTPS://GROUNDWATER.GSA.STATE.AL.US

STELLA-JONES CORPORATION - BAY MINETTE HWY 31 [BAY MINETTE, AL]	
DATE: 10/10/23 DRAWING: 231010	
WATER WELLS WITHIN 1-MILE RADIUS OF FACILITY	
H. M. ROLLINS CO., INC. GULFPORT, MS	SCALE: AS SHOWN

EXHIBIT 20

STELLA-JONES CORPORATION
BAY MINETTE, AL

EPA ID No. ALD 031 490 501

EXPOSURE INFORMATION REPORT

Prepared By:
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P. O. Box 3471
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March 1, 2024

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1.0 INTRODUCTION

This Exposure Information Report is submitted to fulfill the requirements of Alabama Department of Environmental Management Rule 335-14-8-.02(1)j. Stella-Jones Corporation (Stella-Jones), EPA ID No. ALD 031 490 501, operates a wood preserving facility in Bay Minette, Baldwin County, Alabama. Stella-Jones acquired this facility from Baldwin Pole & Piling Co., Inc., in July of 2023. As part of the wood preserving process, the prior owner utilized a very small surface impoundment for the retention of process wastewater. The surface impoundment generated some sludge classified as a hazardous waste bearing the EPA designation K001. Closure of the impoundment was completed in accordance with the closure plan approved by ADEM and the EPA. Investigations at the site identified a plume of groundwater contamination extending from the surface impoundment to the north.

This Exposure Information Report, being a part of an application for renewal of the Post-Closure Permit, will address the relevant environmental exposure issues of the closed site.

Guidance for submittal of this information was obtained from the "Permit Applicant's Guidance Manual for Exposure Information Requirements Under RCRA Section 3019," Final, July 3, 1985, Office of Solid Waste, U.S. EPA, Washington, DC. A completed information checklist is included as Exhibit 3.

2.0 GENERAL INFORMATION

Much of the information requested in the guidance document is already included elsewhere in the permit application. Reference will be made to those items as appropriate.

Many of the items of requested information become not applicable for a closed site.

2.1 Risk Assessment Information and Reports

There are no risk assessments available for this site. There have been no insurance claims or settlements made concerning the hazardous waste operations.

2.2 Zoning and Land Use Map

A copy of the City of Bay Minette zoning map is included in Exhibit 7. There is no land use zoning for Baldwin County, Alabama. A USGS map, showing the area surrounding the facility, is included in Exhibit 1.

2.3 Recent Existing Aerial Photo

An aerial photograph of the site and surrounding area is found in Exhibit 26.

2.4 Waste Analyses Not Previously Submitted

This is a closed facility, and there are no waste analyses not previously submitted.

2.5 Estimates of Current Annual Volumes of Waste Handled

Not applicable for a closed facility.

2.6 Federal, State, and Local Agencies Conducting Inspections of the Operation of the Facility

ADEM routinely inspects the facility. Complete reports of those inspections are available at their offices in Montgomery, Alabama.

A review of facility records indicates that the site was generally found reasonably in compliance during routine inspections. Some minor administrative discrepancies have been noted, but immediate corrections have been made.

Records of OSHA inspections do not show any violations associated with the hazardous waste operations.

There were no air monitoring requirements associated with the closed surface impoundment.

There are no transportation accident reports.

There are no local fire marshal reports regarding the closed surface impoundment.

There have been no releases of hazardous materials from the surface impoundment other than to groundwater as documented in this application.

3.0 POPULATION DATA

The 2020 population of the City of Bay Minette was reported to be 8,107.

4.0 PATHWAY SPECIFIC INFORMATION

4.1 Groundwater Pathway

Included in Exhibit 19 is information on withdrawal wells within a three-mile radius and a map showing their location.

Water wells for the City of Bay Minette are located from approximately 1.4 to 2.6 miles southwest of the site and are reportedly completed at depths of 185 to 229 feet in undifferentiated Miocene formations.

The Alabama Geological Survey reports there are no area aquifer discharge/recharge maps available, but in computer modeling efforts underway in southern Baldwin County, they are using a recharge estimate to the Pliocene/Miocene Series aquifers of eight inches per year.

Net seasonal rainfall data for this area was not found. The average expected annual rainfall in Bay Minette is 64.78 inches/year. Estimated annual lake evaporation for this area is 48 inches/year (National Weather Service Office, Mobile, Alabama).

4.2 Surface Water Pathway

The USGS map in Exhibit 19 shows all surface waters within a three-mile radius of the site. Surface water uses within the three-mile radius would be classified as minor recreational.

Hollinger's Creek and an unnamed tributary to McCurtin Creek are located within 1,000 feet of the property. Hollinger's Creek receives no surface or subsurface flow from this site. Both streams are ephemeral. No flow data is available for either stream in the vicinity of the site.

There are no known monitoring systems for monitoring surface water quality in the area.

4.3 Air Pathway

There are no known air monitoring facilities in this area. This site will be incapable of releasing significant airborne contaminants in the closed state.

4.4 Subsurface Gas Pathway

There has been no past disposal of municipal-type wastes in the closed surface impoundment.

The contaminants in the K001 waste are not expected to undergo significant chemical change or decomposition with resulting gas formation. There was no

sign of subsurface gas generation (i.e., bubbling, frothing, foaming) during the active life of the surface impoundment. There are no known underground conduits for possible subsurface gas migration.

There are no monitoring, recovery, or control systems for subsurface gas releases.

4.5 Soil Pathway

In the closed condition, there is no possibility of a soil pathway exposure route from the closed hazardous waste impoundment. Potential exposures to soils located in the Solid Waste Management Unit (SWMU) areas is controlled by site fencing.

5.0 TRANSPORTATION INFORMATION

There are no potential pathways for exposure from transportation associated with a closed site.

6.0 MANAGEMENT PRACTICES INFORMATION

There are no known occupational illness or injury incidents known at this site regarding the hazardous waste impoundment. The closed unit will provide no exposure potential due to management practices.

7.0 KNOWN RELEASE INFORMATION

There are no known releases from this site other than to groundwater as described in previous submittals and in this application. A corrective action system is already in place to address this release. Corrective actions for the SWMUs, in the form of site security fencing and administrative controls on site use, have been completed.

8.0 POTENTIAL FOR HUMAN EXPOSURE

8.1 Groundwater Pathway

The first aquifer at the site is located in a weathered remnant of the Citronelle formation of Pliocene Age. The water in this surficial aquifer flows from the location of the closed impoundment to the natural pond in the northern point of the property. There are no withdrawal wells in the surficial aquifer in use in the zone of the plume or downgradient of the plume. Information on wells located within three miles of the site is found in Exhibit 19.

As described in the Groundwater Quality Assessment for this site, deeper aquifers are separated from the surficial aquifer by a locally continuous, highly impervious clay strata which effectively precludes any interconnection between the aquifers at this site. All known public drinking water wells are screened in much deeper aquifers.

The site closure method should have virtually eliminated any future addition to the existing plume. The corrective action program has stopped the migration of the plume and has been removing contaminants from the aquifer for more than 30 years. There is no existing exposure via the groundwater pathway and, based on site-specific conditions, the potential for any future exposure is nil.

8.2 Surface Water Pathway

The regulated surface impoundment is closed and properly capped to prevent any contact of surface waters with the solidified waste.

Before corrective action was initiated, the drainage pond at the north end of the site property was believed to be the receptor for a small quantity of contaminated groundwater flow. In the pond, the contaminated water was immediately diluted by other uncontaminated surface and subsurface flow from the remainder of the drainage basin which feeds the pond, and natural degradation mechanisms resulted in there being no detectable K001 constituents in the discharge from this pond.

The pond drains to the west through a culvert under the railroad fill into an unnamed ephemeral tributary of McCurtin Creek. The ephemeral stream meanders through hilly forest land for several miles before it joins McCurtin Creek. It is apparent from visual observation of the terrain and vegetation that shallow groundwater feeds from the bordering hills into the drainage basin along the course of the stream or drain.

The drainage pond water has been sampled and analyzed for the contaminants of concern. No contaminants were found in the analysis at detection limits of 10 µg/l (ppb). Additionally, the discharge from this pond is routinely monitored under the facility's NPDES permit. This pond is not used for any purpose. There are no known downstream intakes for drinking water or major industrial uses.

Given that the groundwater corrective action system is attempting to capture all contaminated groundwater, and that routine monitoring has found no measurable impact on the surface water, the potential for exposure through the surface water pathway is judged to be low.

8.3 Air Pathway

The only hazardous waste facility at the site is properly closed and capped. The hazardous waste resides beneath several feet of compacted fill, two feet of compacted impervious clay, a 20-mil geomembrane, and three feet of cover and drainage material. It is felt that the potential for exposure through the air pathway is nonexistent.

8.4 Subsurface Gas Pathway

For the reasons discussed in paragraph 4.4 of this report, it is felt that the potential for exposure via this pathway in the closed state is nil.

8.5 Soil Pathway

In the closed site, there is no possibility of contaminated soils being within five feet of the surface. This precludes any exposure pathways such as direct exposure, wind dispersion, and rainfall runoff. No crops will be grown on the site so any possibility of indirect exposure via the food chain is eliminated. Future disturbance of the closed unit is prohibited by the regulations and restrictions placed on the deed to the property.

The potential for exposure by the soil pathway for the SWMUs is controlled by site security fencing, which effectively prohibits site access, and administrative controls on site use. Therefore, exposure potential via this route is nil.

8.6 Transportation Related Exposure Pathway

There are no transportation activities associated with the closed impoundment.

8.7 Worker-Management Practices

This section is not applicable for this closed site.

EXHIBIT 21

BALDWIN POLE & PILING CO., INC.
Bay Minette, Alabama
Corrective Action Discharge Analytical Results

Sample Date	Phenol, ppm	Oil & Grease, ppm	Penta, ppm	Total Organic Carbon, ppm	Arsenic, ppm	Chromium, ppm	Copper, ppm
1/3/1994	.04		.014	3	<.01	0.26	<.01
1/17/1994	<.01		ND				
2/1/1994	.04		ND				
2/14/1994	.04		ND				
3/2/1994	.03		.020				
3/14/1994	.14						
3/28/1994	.03		.237				
4/11/1994	.28		.172	14			
4/25/1994	.02		<.011				
5/9/1994	.05		<.011				
5/23/1994	.04		<.04				
5/25/1994	.02	<5	ND		<.01	0.21	0.06
6/6/1994	.03		.018				
6/20/1994	<.01		ND				
7/5/1994	ND		ND	8.8	0.01	0.01	0.04
7/19/1994	.02		ND				
8/1/1994	<.01		ND				
8/15/1994	.02		.034				
8/29/1994	.02		.012				
9/12/1994	.05		.065				
9/27/1994	.08		.079				
10/10/1994	.06		.024	14			
10/24/1994	.03		.017				
11/7/1994	.05		.061				
11/21/1994	.04		.027				
12/5/1994	.06		.244				
12/19/1994	.07		.191				
1/16/1995	0.1		.191				
1/26/1995	.49		.267	20	<.005	0.06	0.015
1/30/1995	.22		.349				
2/14/1995	.08		.276				
2/27/1995	.04		.138				
3/13/1995	.17		.164				
3/27/1995	.02		.018				
4/10/1995	.03		.025	18			
4/25/1995	.02	<5	ND				
5/8/1995	.05	<5	ND				
5/23/1995	.01	<5	ND				
6/5/1995	.08	<5	.027				
6/19/1995	.02		.018	<5			
7/5/1995	.01	<5	ND	10	<.005	0.01	<.005
7/19/1995	.01	<5	.012				
8/1/1995	.02	<5	ND				
8/14/1995	.01	<5	.011				
8/28/1995	.01	<5	ND				
9/11/1995	.02	<5	ND				
9/26/1995	.24	<5	.029				
10/9/1995	.04	<5	.194	9			
10/23/1995	.07	<5	.018				
11/6/1995	.04	<5	.242				
11/20/1995	.25	5	.174				
12/4/1995	.09	14	.100				
12/18/1995	.18	14	.109				
1/1/1996	.13	7	.347	13	<.005	<.005	0.03
1/15/1996	.16	<5	.558				
1/29/1996	.27	<5	.374				
2/12/1996	.05	6	.579				
2/26/1996	.14	<5	.298				
3/11/1996	1.2	<5	.544				
3/26/1996	.10	7	.167				
4/8/1996	.11	<5	.015	10.3			

BALDWIN POLE & PILING CO., INC.
Bay Minette, Alabama
Corrective Action Discharge Analytical Results

Sample Date	Phenol, ppm	Oil & Grease, ppm	Penta, ppm	Total Organic Carbon, ppm	Arsenic, ppm	Chromium, ppm	Copper, ppm
4/25/1996	.45	53	.327				
5/6/1996	.33	8	.770				
5/20/1996	.16	<5	.218				
6/4/1996	.05	<5	.032				
6/17/1996	.01	8	.011				
7/1/1996	<.01	<5	.017	11	<.005	0.02	0.01
7/15/1996	.10	< 5	ND				
7/29/1996	.06	< 5	.065				
8/13/1996	.14	8	.200				
8/27/1996	.12	12	.092				
9/9/1996	.06	25	.142				
9/23/1996	.03	11	ND				
10/10/1996	.07	13	.013				
10/21/1996	.18	6	ND				
11/4/1996	.24	7	ND				
11/19/1996	.16	10	<.010				
12/2/1996	.05	<5	.055				
12/12/1996	.02	9			<.005	<.005	0.01
12/16/1996	.06	<5	ND				
12/30/1996	.03	5	ND				
1/13/1997	4.48	7	.174		<.005	<.005	<.005
1/27/1997	.09	9	.209				
2/10/1997	.26	13	<.010				
2/24/1997	.15	7	<.010				
3/10/1997	.23	9	.139				
3/24/1997	.08	5	<.010				
4/8/1997	.21	7	.068				
4/21/1997	.13	<5	<.016				
5/5/1997	.16	14	.027				
5/19/1997	.16	11	.017				
6/2/1997	.07	7	.117				
6/18/1997	.09	<5	<.012				
7/1/1997	.20	<5	.144		<.005	<.006	<.01
7/14/1997	.04	<5	.049				
7/28/1997	.10	<5	<.010				
8/11/1997	.09	8	<.010				
8/25/1997	.16	<5	.043				
9/8/1997	.04	<5	<.010				
9/5/1997			.031				
9/22/1997	.06	<5	<.012				
10/7/1997	.06	9	<.010				
10/20/1997	1.6	15	<.010				
11/5/1997	.09	20	<.010				
11/17/1997	.89	8	.422				
12/1/1997	.20	4	.319				
12/15/1997	.25	<5	.012				
12/29/1997	.18	10	<.010				
1/12/1998	.09	<5	<.010		<.005	<.005	.015
1/26/1998	.05	<5	.134				
2/9/1998	.08	<5	.015				
2/23/1998	1.9	5	.013				
3/9/1998	1.2	<5	<.010				
3/23/1998	3.3	10	<.010				
4/6/1998	.26	8	.790				
4/20/1998	1.08	44	.486				
5/4/1998	.33	18	<.010				
5/18/1998	.09	7	.321				
6/1/1998	.17	5	<.019				
6/15/1998	.04	9	.352				
7/1/1998	0.1	9	<.010		<.05	<.05	0.01
7/13/1998	0.1	<5	<.010				

BALDWIN POLE & PILING CO., INC.
Bay Minette, Alabama
Corrective Action Discharge Analytical Results

Sample Date	Phenol, ppm	Oil & Grease, ppm	Penta, ppm	Total Organic Carbon, ppm	Arsenic, ppm	Chromium, ppm	Copper, ppm
7/27/1998	0.06	<5	<.010				
8/10/1998	0.09	14	0.086				
8/24/1998	0.05	10	0.014				
9/9/1998	0.04	<5	0.014				
9/22/1998	0.03	8	<.010				
10/5/1998	0.05	5	0.022				
11/2/1998	0.05	7	0.204				
11/16/1998	0.08	10	<.010				
12/1/1998	0.04	8	<.010				
12/14/1998	0.05	9	0.103				
12/28/1998	0.9	30	<.010				
1/11/1999	<.01	27	0.169				
1/25/1999	0.32	21	0.132				
2/10/1999	<.01	13	0.494				
2/22/1999	0.68	19	0.333				
3/8/1999	0.02	77	0.260				
3/22/1999	0.15	48	0.243				
3/30/1999		15					
4/5/1999	0.17	20	0.320				
4/19/1999	0.12	17	0.243				
5/3/1999	0.68	7	0.020				
5/17/1999	0.13	6	0.169				
6/1/1999	0.07	11	0.209		<.005	<.005	<.005
6/14/1999	0.05	9	0.201				
6/28/1999	0.13	8	0.406				
7/12/1999	0.14	9	0.226				
7/26/1999	0.1	6	0.362				
8/9/1999	0.09	<5	0.190				
8/23/1999	0.02	12	0.338				
9/8/1999	0.13	36	0.452				
9/20/1999	0.10	<5	0.284				
10/4/1999	0.82	17	1.070				
10/17/1999	0.28	22	0.800				
11/4/1999	0.29	10	0.544				
11/15/1999	0.15	24	0.247				
12/1/1999	0.07	<5	0.249		<.005	<.005	0.008
12/13/1999	0.06	6	0.156				
12/27/1999	<.01	<5	0.187				
1/11/2000	0.12	<5	0.181				
1/24/2000	0.07	22	0.234				
2/7/2000	0.08	<5	0.265				
2/21/2000	0.12	6	0.195				
3/6/2000	0.10	<5	0.273				
3/20/2000	0.04	5	0.138				
4/3/2000	0.1	9	0.283				
4/20/2000	0.08	<5	0.498				
5/1/2000	0.11	10	0.253				
5/15/2000	0.04	8	0.095				
5/30/2000	0.14	8	0.186				
3/12/2000	0.09	<5	0.230		<.005	<.005	<.005
6/28/2000	0.03	<5	0.058				
7/12/2000	0.08	<5	0.015				
7/24/2000	0.06	<5	0.047				
8/7/2000	0.04	<5	0.014				
8/21/2000	0.06	<5	0.014				
9/5/2000	0.07	<5	0.057				
9/18/2000	0.1	<5	0.027				
10/5/2000	0.11	<5	0.010				
10/17/2000	0.07	<5	0.012				
11/1/2000	0.07	<5	<.010				
11/17/2000	0.54	<5	0.054				

BALDWIN POLE & PILING CO., INC.
Bay Minette, Alabama
Corrective Action Discharge Analytical Results

Sample Date	Phenol, ppm	Oil & Grease, ppm	Penta, ppm	Total Organic Carbon, ppm	Arsenic, ppm	Chromium, ppm	Copper, ppm
11/28/2000	0.08	<5	0.072				
12/11/2000	0.12	<5	0.124				
12/27/2000	0.48	<5	0.051		<.005	<.01	<.01
1/8/2001	0.32	<5	0.089				
1/23/2001	0.26	<5	0.062				
2/5/2001	0.01	<5	0.052				
2/20/2001	0.11	<5	0.037				
3/5/2001	0.05	<5	0.035				
3/19/2001	0.04	<5	<.010				
4/2/2001	0.28	8	0.127				
4/16/2001	0.06	<5	0.285				
5/1/2001	0.05	<5	0.047				
5/14/2001	0.04						
5/21/2001			0.030				
5/29/2001	0.04		<.010				
6/11/2001	0.06	<5	0.027		<.05	<.01	<.01
6/25/2001	<0.01		0.126				
7/10/2001	<0.01		0.035				
7/23/2001	0.01		<.010				
8/6/2001	0.02		0.179				
8/20/2001	0.05		0.461				
9/4/2001	0.05		<.020				
9/18/2001	0.04		0.398				
10/1/2001	0.03		<.040				
10/15/2001	0.04		0.012				
10/18/2001		8	<.010		<.05	<.05	<.01
10/29/2001	0.02		0.037				
11/12/2001	0.02		0.026				
11/27/2001	0.06		0.011				
12/10/2001	0.1		0.036				
12/27/2001	0.07		0.047				
1/7/2002	0.14		0.052				
1/22/2002	0.05		0.029				
2/5/2002	0.04		0.021				
2/18/2002	0.1		0.025				
3/4/2002	0.06		0.021				
3/18/2002	0.02		<.010				
4/3/2002	0.04		0.012				
4/15/2002	0.03		<.010				
5/1/2002	0.02		<.010				
5/13/2002	0.01		<.010				
5/29/2002	0.04		0.059				
6/11/2002	0.13	21	0.524		<0.05	<0.05	<0.01
6/24/2002	0.03		0.083				
7/10/2002	0.02		0.095				
7/23/2002	0.01		0.050				
8/5/2002	0.01		0.025				
8/19/2002	0.02		0.056				
9/3/2002	<0.01		0.022				
9/16/2002	<0.01		0.011				
10/1/2002	0.03		0.039				
10/14/2002	<0.01		0.027				
10/28/2002	0.01		0.019				
11/12/2002	0.02		0.016				
11/25/2002	0.02		<.010				
12/9/2002	0.03	<5	<.010		<0.05	<0.05	<0.01
12/23/2002	0.01		0.011				
1/2/2003	0.01		broken container				
1/13/2003	0.05		0.052				
1/27/2003	0.05		0.049				
2/10/2003	0.05		0.035				

BALDWIN POLE & PILING CO., INC.
Bay Minette, Alabama
Corrective Action Discharge Analytical Results

Sample Date	Phenol, ppm	Oil & Grease, ppm	Penta, ppm	Total Organic Carbon, ppm	Arsenic, ppm	Chromium, ppm	Copper, ppm
2/24/2003	0.01		<.010				
3/10/2003	0.05		0.014				
3/24/2003	0.14		0.026				
4/7/2003	0.01		<.010				
4/21/2003	0.01		<.010				
5/5/2003	0.01		0.017				
5/19/2003	<0.01		<.010				
6/2/2003	<0.01	<5	0.017		<0.05	<0.01	<0.01
6/16/2003	<0.01		0.012				
7/1/2003	0.02		<.010				
7/14/2003	0.02		0.029				
7/28/2003	0.02		<.010				
8/13/2003	0.01		0.011				
8/25/2003	0.02		0.042				
9/8/2003	0.01		<.010				
9/22/2003	0.01		0.012				
10/6/2003	0.02		0.016				
10/20/2003	0.01		<.010				
11/4/2003	0.48		0.028				
11/17/2003	0.17		0.131				
12/2/2003	0.05	11	<.010		<0.05	<0.01	<0.01
12/15/2003	0.06		0.087				
12/29/2003	0.06		0.064				
1/12/2004	0.1		0.071				
1/26/2004	0.12		0.073				
2/9/2004	0.06		0.077				
2/23/2004	0.03		0.066				
3/11/2004	0.81		0.233				
3/22/2004	0.24		1.061				
4/6/2004	0.02		0.142				
4/22/2004	0.04		0.017				
5/4/2004	0.01		0.570				
5/17/2004	0.03		0.053				
6/2/2004	<0.01	<5	0.051		<0.05	<0.01	<0.01
6/14/2004	<0.01		<.010				
6/28/2004	0.02		0.021				
7/12/2004	0.01		0.018				
7/26/2004	<0.01		<.0036				
8/9/2004	<0.01		0.008				
8/23/2004	<0.01		0.018				
9/8/2004	<0.01		0.009				
9/29/2004	<0.01		<.0036				
10/5/2004	0.04		0.175				
10/19/2004	0.04		0.048				
11/1/2004	0.02		0.036				
11/18/2004	0.48		0.014				
11/29/2004	0.028		0.107				
12/14/2004	<0.01	<5	0.147		<0.05	<0.01	<0.01
12/27/2004	0.22		0.179				
1/10/2005	0.01		0.026				
1/25/2005	<0.01		0.009				
2/8/2005	0.03		0.059				
2/22/2005	0.01		0.012				
3/10/2005	0.06		0.017				
3/22/2005	0.13		0.006				
4/5/2005	0.01		0.018				
4/18/2005	0.02		0.011				
5/2/2005	0.02		0.043				
5/17/2005	0.01		<.0036				
6/1/2005	<0.01	<5	0.011		<0.05	<0.01	<0.01
6/14/2005	0.01		<.0036				

BALDWIN POLE & PILING CO., INC.
Bay Minette, Alabama
Corrective Action Discharge Analytical Results

Sample Date	Phenol, ppm	Oil & Grease, ppm	Penta, ppm	Total Organic Carbon, ppm	Arsenic, ppm	Chromium, ppm	Copper, ppm
6/27/2005	<0.01						
7/5/2005	0.02		0.007				
7/13/2005	0.02		0.050				
7/25/2005	0.07		0.006				
8/9/2005	0.03		0.018				
8/23/2005	0.05		0.005				
9/8/2005	0.01		<.0036				
9/19/2005	0.03		0.007				
10/4/2005	0.02		<.0036				
10/17/2005	0.03		0.023				
10/31/2005	0.02		0.005				
11/14/2005	0.02		0.004				
11/28/2005	0.04		0.012				
12/13/2005	0.04		0.012				
12/28/2005	0.04	<5	0.010		<0.05	<0.01	<0.01
1/9/2006	0.01		<.0036				
1/25/2006	<0.01		0.015				
2/7/2006	0.03		<.0036				
2/21/2006	0.08		0.006				
3/7/2006	0.02		0.013				
3/21/2006	0.02		0.013				
4/3/2006	0.02		0.005				
4/17/2006	0.06		<.018				
5/1/2006	0.2		0.055				
5/15/2006	0.02		0.010				
5/30/2006	0.03		0.023				
6/12/2006	0.04	<5	0.019		<0.05	<0.01	<0.01
7/10/2006	0.02		<.018				
8/9/2006	0.03		<.018				
9/14/2006	0.07		0.230				
10/3/2006	0.07		0.047				
11/13/2006	0.06		0.063				
1/8/2007	0.08		0.101				
2/6/2007	0.04		0.235				
3/7/2007	0.05		0.085				
4/3/2007	0.02		0.021				
5/12/2007	0.04		0.018				
6/11/2007	0.02	<5	0.474		<0.05	<0.01	<0.01
8/14/2007	0.03		0.235				
9/5/2007	0.02		0.006				
10/3/2007	0.02		0.014				
11/19/2007	0.02		<.0179				
12/11/2007	0.03	<5	0.015		<0.05	<0.01	<0.01
1/8/2008	0.07		0.255				
2/5/2008	0.05		0.117				
3/11/2008	0.03		0.006				
4/7/2008	0.03		<0.0038				
5/12/2008	0.02		0.017				
6/9/2008	0.02	<5	0.012		<0.05	<0.01	<0.01
7/7/2008	0.02		<.0036				
8/5/2008	0.02		0.033				
9/10/2008	<0.01		0.010				
10/6/2008	<0.01		0.002				
11/4/2008	0.02		0.059				
12/1/2008	0.32	5.49	0.059		<0.05	<0.01	<0.01
1/12/2009	0.02		0.025				
2/10/2009	0.03		0.011				
3/9/2009	0.02		<0.0036				
4/7/2009	0.03		0.047				
5/19/2009	0.04		<0.0036				
6/9/2009	0.36	<5	0.040		<0.05	<0.01	<0.01

BALDWIN POLE & PILING CO., INC.
Bay Minette, Alabama
Corrective Action Discharge Analytical Results

Sample Date	Phenol, ppm	Oil & Grease, ppm	Penta, ppm	Total Organic Carbon, ppm	Arsenic, ppm	Chromium, ppm	Copper, ppm
7/13/2009	<0.01		0.016				
8/5/2009	0.02		0.039				
9/9/2009	0.02		0.004				
10/12/2009	0.02		0.006				
11/11/2009	0.03		0.007				
12/7/2009	0.02	<5	0.019		<0.05	<0.01	<0.01
1/11/2010	0.04		0.049				
2/1/2010	0.04		0.110				
3/9/2010	0.03		0.224				
4/7/2010	<0.21		0.022				
5/4/2010	<0.21		0.017				
6/2/2010	<0.21	<5	0.015		<0.05	<0.01	<0.01
7/12/2010	<0.21		0.010				
8/3/2010	<0.21		0.016				
9/8/2010	<0.21		0.019				
10/18/2010	<0.21		0.059				
12/13/2010	<0.21	5.44	0.026		<0.05	<0.01	<0.01
1/11/2011	0.78		0.019				
2/7/2011	<0.11		0.015				
3/7/2011	<0.11		0.033				
4/11/2011	<0.11		0.009				
5/9/2011	<0.11		0.022				
6/6/2011	<0.11	14	0.033		<0.05	<0.01	<0.01
7/6/2011	<0.11		0.017				
8/10/2011	<0.11		0.050				
9/7/2011	<0.11		0.020				
10/5/2011	<0.11		0.015				
11/8/2011	<0.11		0.041				
12/13/2011	0.0258	8.9	0.440		<0.05	<0.01	<0.01
1/16/2012	0.2		0.089				
2/6/2012	<0.11		0.011				
3/5/2012	<0.11		0.055				
4/3/2012	<0.11		0.050				
5/1/2012	0.12		0.038				
6/6/2012	<0.45	<5			<0.05	<0.01	<0.01
6/19/2012			0.076				
7/10/2012	<0.45	<5	0.009		<0.05	<0.01	<0.01
8/6/2012	<0.45		0.024				
9/10/2012	<0.45		0.084				
10/1/2012	<0.45		0.051				
11/1/2012	<0.45		0.034				
12/27/2012	<0.45	38.3	0.067		<0.05	<0.01	<0.01
1/16/2013	<0.45		0.078				
2/6/2013	<0.45		0.087				
3/6/2013	<0.45		0.065				
4/8/2013	<0.45		0.042				
5/9/2013	<0.21		0.109				
6/10/2013	<0.21	<5	0.029		<0.05	<0.01	<0.01
7/9/2013	<0.21		0.011				
8/12/2013	<0.21		0.041				
9/10/2013	<0.21		0.075				
10/7/2013	<0.21		0.053				
11/5/2013	<0.21		0.055				
12/2/2013	<0.21	<5	0.091		<0.05	<0.01	<0.01
1/13/2014	<0.21		0.044				
2/12/2014	<0.21		0.487				
2/20/2014			0.447				
3/11/2014	<0.21		0.065				
4/8/2014	<0.21		0.014				
5/19/2014			0.006				
5/20/2014	<0.21						

BALDWIN POLE & PILING CO., INC.
Bay Minette, Alabama
Corrective Action Discharge Analytical Results

Sample Date	Phenol, ppm	Oil & Grease, ppm	Penta, ppm	Total Organic Carbon, ppm	Arsenic, ppm	Chromium, ppm	Copper, ppm
6/4/2014	<0.21	<5	<.0037		<0.05	<0.01	<0.01
7/8/2014	<0.21		<.0037				
8/12/2014	<0.21		0.013				
9/15/2014	<0.21		<.0037				
10/14/2014	<0.21		0.014				
12/9/2014	<0.21	<5	0.015		<0.05	<0.01	<0.01
11/11/2014	<0.21		0.011				
1/14/2015	<0.21		0.299				
2/3/2015	<0.21		0.064				
3/10/2015	<0.37		0.027				
4/7/2015	<0.37		0.013				
5/5/2015	<0.04		0.016				
6/3/2015	<0.37	<5	0.024		<0.05	<0.01	<0.01
7/8/2015	<0.60	<5	0.030		<0.05	<0.01	<0.01
8/12/2015	<0.60		0.023				
9/14/2015	<0.60		0.015				
10/7/2015	<0.60		0.013				
11/3/2015	<0.60		0.017				
12/7/2015	<0.60	6.8	0.031		<0.05	<0.01	<0.01
1/11/2016	<0.60		0.029				
2/9/2016	<0.60		0.053				
3/8/2016	<0.42		0.024				
4/5/2016	<0.42		1.160				
4/18/2016			0.191				
5/3/2016	<0.42		0.074				
6/13/2016	<0.42	5.7	0.039		<0.05	<0.01	<0.01
7/13/2016	<0.42		0.031				
8/10/2016	<0.42		0.062				
9/7/2016	<0.42		0.024				
10/11/2016	<0.42		0.037				
11/9/2016	<0.42		0.040				
12/6/2016	<0.42	39.1	0.041		<0.05	<0.01	<0.01
12/20/2016		7.1					
1/10/2017	<0.42		2.800				
1/17/2017	<0.42		0.265				
2/7/2017	<0.36		0.027				
4/10/2017	<0.11		<.0037				
5/16/2017	<0.36		0.071				
6/6/2017	<0.11	<5	0.005		<0.05	0.043	<0.01
7/11/2017	<0.11		<.0037				
9/5/2017	<0.11		0.009				
10/3/2017	<0.36		0.152				
11/8/2017	<0.21		0.043				
12/5/2017	<0.36	9	0.014		<0.05	<0.01	<0.01
1/8/2018	<0.21		0.026				
2/5/2018	<0.54		0.046				
3/7/2018	0.04		0.030				
4/10/2018	0.06		0.044				
5/15/2018	0.07		0.054				
6/6/2018	<0.10	<5	0.029		<0.05	<0.01	<0.01
7/11/2018	<0.10		0.027				
8/6/2018	<0.10		0.011				
9/12/2018	<0.10		0.016				
10/10/2018	<0.10		0.006				
11/6/2018	<0.10		0.024				
12/4/2018	<0.10		0.021				
12/11/2018		<10.7			<0.05	<0.01	<0.002
1/9/2019	<0.10		0.448				
1/29/2019	<0.10		0.034				
2/6/2019	<0.10		0.010				
3/11/2019	<0.10		0.397				

BALDWIN POLE & PILING CO., INC.
Bay Minette, Alabama
Corrective Action Discharge Analytical Results

Sample Date	Phenol, ppm	Oil & Grease, ppm	Penta, ppm	Total Organic Carbon, ppm	Arsenic, ppm	Chromium, ppm	Copper, ppm
4/3/2019	<0.10		0.021				
5/8/2019	<0.10		<.0037				
6/4/2019	<0.10	<5.1	<.0037		<0.05	<0.01	<0.01
7/10/2019	<0.10		<.0037				
8/7/2019	<0.10		<.0037				
9/10/2019	<0.10		0.008				
10/9/2019	<0.10		<.0037				
10/31/2019	<0.10	5.5	0.123				
12/4/2020	<0.10	<5.1	0.047		<0.05	0.0341	0.0116
1/15/2020	<0.10		0.012				
2/5/2020	<0.10		0.033				
3/17/2020	0.128		<.0037				
4/9/2020	<0.10		<.0037				
5/12/2020	<0.10		0.036				
6/17/2020	<0.10	<5	0.016		<0.05	0.0143	<0.01
7/8/2020	<0.10		0.022				
8/11/2020	<0.10		0.039				
9/9/2020	<0.10		0.004				
10/14/2020	0.15		0.041				
10/21/2020	<0.10	7.1	0.032		0.00293	<0.01	<0.01
11/11/2020	<0.10		0.032				
12/9/2020	<0.10	<5.4	0.034				
12/21/2020					<0.002	<0.01	<0.01
1/13/2021	<0.10		0.048				
2/10/2021	0.08		0.102				
3/10/2021	<0.05		0.271				
4/8/2021	<0.05		0.018				
5/12/2021	0.07		0.035				
6/10/2021	<0.05	<5	<.0037		<0.05	<0.01	<0.01
7/14/2021	<0.05		0.013				
8/10/2021	<0.05		0.007				
9/13/2021	<0.05		0.013				
10/12/2021	<0.05		0.020				
11/8/2021	0.05		0.020				
12/7/2021	<0.05	<5	<.0037		<0.05	<0.01	<0.01
1/17/2022	<0.10		0.036				
2/2/2022	<0.05		0.022				
3/8/2022	<0.05		0.005				
4/5/2022	0.05		0.011				
5/10/2022	<0.05		0.018				
6/28/2022	<0.06	<5	0.208		<0.05	0.14	0.051
7/20/2022	<0.08		0.054				
8/15/2022	<0.10		0.766				
9/7/2022	<0.05		0.661				
9/27/2022			0.023				
10/11/2022	<0.05		0.022				
11/7/2022	<0.05		0.017				
12/12/2022	<0.05	<5.2	0.179		<0.05	0.0674	0.0191
1/4/2023	<0.10		0.761				
2/15/2023	<0.10		0.351				
4/4/2023	<0.10		0.054				
5/3/2023	<0.25		0.033				
6/7/2023	<0.25	<5.0	0.032		<0.0500	0.0355	0.0401
7/18/2023	<0.13		0.013				
8/8/2023	<0.08		0.020				
9/13/2023	<0.10		0.066				
10/2/2023	<0.10		0.005				
11/6/2023	<0.05		0.006				
12/5/2023	<0.05	<5	<.0039		<0.0500	<0.0100	<0.0100
1/8/2024	<0.05		<.0037				

EXHIBIT 22

STELLA-JONES CORPORATION
BAY MINETTE, ALABAMA

Corrective Action Cost Estimate

Post-Closure Permit No. ALD 031 490 501

Prepared By:
H. M. Rollins Company, Inc.
P. O. Box 3471
Gulfport, Mississippi 39505
(228) 832-1738

March 1, 2024

In July of 2023, Stella-Jones Corporation (Stella-Jones) acquired the wood preserving plant previously owned and operated by Baldwin Pole & Piling Co., Inc., in Bay Minette, Alabama. This facility is subject to a Resource Conservation and Recovery Act (RCRA) Permit issued by the Alabama Department of Environmental Management (ADEM), Permit Number ALD 031 490 501. The provisions of that permit require operation of a groundwater corrective action system and groundwater monitoring to demonstrate the effectiveness of the corrective actions. This cost estimate is intended to provide third-party costs to perform the activities required.

The cost estimate for corrective action is prepared to cover the annual operating expenses of the corrective action program, required monitoring, and reporting. These operating costs are divided into major divisions of:

1. Operating and Maintenance Labor
2. Groundwater Monitoring Expenses
3. Electrical Power
4. SID Discharge Analytical Expenses
5. Equipment Maintenance, Chemicals, and Supplies
6. Reporting

Certain portions of these activities, such as monitoring of the compliance point wells, is part of post-closure care. The Post-Closure Care Cost Estimate has been adjusted to reflect that these costs are covered in the Corrective Action Cost Estimate. Financial assurance for the post-closure care activities listed in that estimate is provided by a letter of credit, and financial assurance for the costs for corrective action detailed in this estimate is provided by a trust fund established by Stella-Jones Corporation in accordance with ADEM regulations.

Cost Estimates

1. Operating and Maintenance Labor:

Labor - After more than 30 years of system operation, the resources required to operate the corrective action system are well known. The groundwater treatment system functions automatically and without any operator control. The system operator spends 0.5 hours per day checking the system operation. In addition, the operator performs maintenance activities on an as-needed basis, inspects the impoundment cap, and assists as needed in the semiannual groundwater monitoring activities. In recent years, the total hours involved in these activities have been about 475 man-hours per year. A labor rate of $25.00 per hour will be assumed for third-party costs.

475 hours/year @ $25/hr	$11,875.00

2. Groundwater Monitoring:

The facility permit requires semiannual monitoring of compliance point and effectiveness groundwater monitoring wells and annual sampling of boundary wells. Even though compliance point monitoring is part of post-closure care activities, those costs are included in this corrective action cost estimate.

There are four boundary wells, two effectiveness wells, and three compliance point wells. The costs for sampling and analysis of the boundary wells,

compliance point wells, and effectiveness wells will be included in this corrective action cost estimate as well as the analytical expenses associated with a trip blank and a field blank. One day of environmental technician sampling cost will be required for each sampling event.

The boundary wells will require the use of two separate analytical methods in order to attempt to achieve detection limits below the groundwater protection standards in the permit. These methods are Method 8270 GCMS using Select Ion Monitoring (SIM) for the PAH compounds and Method 8270 Low Level Semi-Volatiles for the remaining compounds.

1st Groundwater Sampling Event (Background, Effectiveness, and Compliance Point Wells)

Number of groundwater samples	9
Number of QC samples	2
Total	11

Labor Cost & Material Costs:

Sampling Labor, 1 8-hr day @ $75/hr:	$75 x 8 =	$ 600.00
Sampling Supplies, $15/sample:	$15 x 11 =	$ 165.00
Misc. Expenses/Travel/Per Diem (1-day)		$ 300.00
Total Sampling Costs		$ 1,065.00

1st Sampling Event Analytical Expenses

EPA Method 8270, PAHs by SIM (4 + 2 QC):	$250 x 6 =	$ 1,500.00
EPA Method 8270, Low Level SV (4 + 2 QC):	$200 x 6 =	$ 1,200.00
EPA Method 8270, Semi-volatiles (5):	$160 x 5 =	$ 800.00
Total Analytical Expenses		$ 3,500.00

1st Event Combined Sampling & Analytical Expenses: $ 4,565.00

2nd Groundwater Sampling Event (Effectiveness, and Compliance Point Wells)

Number of groundwater samples	5
Number of QC samples	2
Total	7

Labor Cost & Material Costs:

Sampling Labor, 1 8-hr day @ $75/hr:	$75 x 8 =	$ 600.00
Sampling Supplies, $15/sample:	$15 x 7 =	$ 105.00
Misc. Expenses/Travel/Per Diem (1-day)		$ 300.00
Total Sampling Costs		$ 1,005.00

2nd Sampling Event Analytical Expenses

EPA Method 8270, Semi-volatiles (7):	$160 x 7 =	$ 1,120.00
Total Analytical Expenses		$ 1,120.00

2nd Event Combined Sampling & Analytical Expenses $ 2,125.00

GROUNDWATER MONITORING ANNUAL TOTAL $ 6,690.00

3. Electrical Power:

The 2022 electrical power costs were $22,176, or $1,848 per month.

Electrical Power	$22,176.00

4. SID Discharge Analytical Expenses:

The State Indirect Discharge (SID) permit issued by ADEM requires monthly analysis of the treated groundwater from the corrective action treatment system for pentachlorophenol and phenols and semiannual analyses for Oil & Grease and Metals.

12 analyses by EPA Method 625 @ $185/sample	$ 2,220.00
12 analyses by EPA Method 420.1 @ $25/sample	$ 300.00
Lab disposal fee - 12 @ $5/each	$ 60.00
2 analyses of Oil & Grease @ $50/sample	$ 100.00
2 analyses of Metals @ $53/sample	$ 106.00
Total SID Analytical Expense	$ 2,786.00

5. Equipment Maintenance, Chemicals, and Supplies:

The average maintenance cost for the last three years has been approximately $8,800 per year.

Annual Average Maintenance Cost	$ 8,800.00

6. Reporting

The recordkeeping and annual corrective action effectiveness reports required by the permit require approximately 25 hours of professional time per year and 16 hours of clerical/administrative time per year.

Professional hours - 25 hrs @ $150/hour =	$ 3,750.00
Clerical hours - 16 hrs @ $50/hour =	$ 800.00
Total Reporting Cost	$ 4,550.00

Corrective Action Annual Cost Estimate

The corrective action annual cost estimate is:

1.	Operating and Maintenance Labor	$11,875
2.	Groundwater Monitoring	$ 6,690
3.	Electrical Power	$22,176
4.	SID Discharge Analytical Expense	$ 2,786
5.	Equipment Maintenance, Chemicals, and Supplies	$ 8,800
6.	Reporting	$ 4,550
	Total Annual Corrective Action Cost Estimate	**$56,877**

Financial Assurance for Corrective Action
Calculation of Required Balance
as of March 1, 2024

The current annual corrective action cost estimate (03/01/24) is $56,877/yr. The required balance at the end of the pay-in period is 15 yrs x $56,877/yr, or $853,155.

This amount is assured by the trust fund established by Stella-Jones Corporation in accordance with ADEM regulations.

EXHIBIT 23

40 CFR PART 261, APPENDIX VII
BASIS FOR LISTING
HAZARDOUS WASTES K001

pentachlorophenol

phenol

2-chlorophenol

p-chloro-m-cresol

2,4-dimethylphenol

2,4-dinitrophenol

trichlorophenols

tetrachlorophenols

phenanthrene

carbazole

chrysene

naphthalene

fluoranthene

benzo(b)fluoranthene

benzo(a)pyrene

indeno(1,2,3-cd)pyrene

benz(a)anthracene

dibenz(a,h)anthracene

acenaphthalene

*creosote: Analyze for phenanthrene and carbazole. If these compounds are present in a ratio between 1.4:1 and 5:1, creosote should be considered present. (Footnote 1, 40 CFR Part 261, Appendix III, Table 1).

SELECTED TRANSPORT AND TRANSFORMATION DATA

CHEMICAL CONTAMINANTS OF CONCERN

K001

40 CFR PART 261, APPENDIX VII

CONSTITUENT	K_{ow}	K_{oc}	SOLUBILITY ppm	HYDROLYSIS RATE CONSTANT	BIOTRANSFORMATION RATE CONSTANT ml/Cell-hr.
pentachlorophenol	1.1×10^5	5.3×10^4	14	0	3×10^{-9}
phenol	30	14.2	9.3×10^4	0	3×10^{-6}
2-chlorophenol	151	73	2.85×10^3	0	1×10^{-7}
p-chloro-m-cresol	1259	604	3.85×10^3	0	3×10^{-9}
2,4-dimethylphenol	200	96	590	0	1×10^{-7}
2,4-dinitrophenol	34.7	16.6	5.6×10^3	0	3×10^{-9}
trichlorophenols (Data for 2,4,6)	4.1×10^3	2.0×10^3	800	0	3×10^{-9}
tetrachlorophenols					
creosote*					
chrysene	4.1×10^5	2.0×10^5	1.8×10^{-3}	0	1×10^{-10}
naphthalene	1.95×10^3	940	31.7	0	1×10^{-7}
fluoranthene	7.9×10^4	3.8×10^4	0.26	0	1×10^{-10}
benzo(b)fluoranthene	1.15×10^6	5.5×10^5	0.014	0	3×10^{-12}
benzo(a)pyrene	1.15×10^6	5.5×10^5	3.8×10^{-3}	0	3×10^{-12}
indeno(1,2,3-cd)pyrene	3.2×10^6	1.6×10^6	5.3×10^{-4}	0	3×10^{-12}
benz(a)anthracene	4.1×10^5	2.0×10^5	5.7×10^{-3}	0	1×10^{-10}
dibenz(a,h)anthracene	6.9×10^6	3.3×10^6	5×10^{-4}	0	3×10^{-12}
acenaphthalene	5.3×10^3	2.5×10^3	3.93	0	3×10^{-9}
phenanthrene	2.8×10^4	1.4×10^4	1.00	0	1.6×10^{-7}

*Creosote: Analyze for Phenanthrene and Carbazole. If these compounds are present in a ratio between 1.4:1 and .5:1, creosote should be considered present. (Footnote 1, 40 CFR 261, Appendix III, Table 1).

Data extracted from "Aquatic Fate Process Data For Organic Priority Pollutants," Final Report, 1982, EPA 440/4-81-014, U.S. EPA.

EXHIBIT 24

Ball Engineering, Inc.

February 27, 1986

Mr. Steve Calloway, Geologist
ADEM - Groundwater Section
1751 Federal Drive
Montgomery, AL 36130

RE: Information On New Wells At Baldwin Pole & Piling Company, Inc., Bay Minette, AL ID# ALD 031 490 501

Dear Mr. Calloway:

Enclosed is the information you requested on the new detection wells at Baldwin Pole & Piling. The data consist of the following:

1) All monitor well and piezometer locations on a 1"= 200' scale drawing. The original wells are MW-1, 2, 3, and 4. There are piezometers at B-1, 2, and 3. The new wells are MW-1A, 2A, 3A and 4A.

2) Groundwater elevations of the shallow piezometers and wells taken 10/22/85.

3) Groundwater contours based on elevations of 10/22/85.

4) Logs for the new wells MW-1A, 2A, 3A and 4A.

5) Analytical results and elevations from new wells from samples taken on 11/14/85.

Please let me know if you need additional information.

Very truly yours,

John Ball

Enclosure

cc: Mr. Tom McMillan

John Ball, Ph.D. Professional Engineer
BOX JB, UNIVERSITY, ALABAMA 35486 • TELEPHONE (205) 349-4142

TABLE I

REPORT OF ANALYSIS AFTER FIRST YEAR UNDER RCRA REQUIREMENTS

FACILITY NAME: Baldwin Pole and Piling Co., Inc.

FACILITY LOCATION: Bay Minette, AL

CONTROL WELL IS WELL # 1

	1st Half 1985 (4-10-85)				2nd Half (11-14-85)			
Section 265.92 - b(2) PARAMETERS	WELL #1	WELL #2	WELL #3	WELL #4	WELL #1A	WELL #2A	WELL #3A	WELL #4A
Chloride, mg/L					3.7	49.0	18.0	18.0
Iron, mg/L					0.35	6.0	3.0	5.5
Manganes, mg/L					<0.25	0.5	<0.25	0.25
Phenols, mg/L					<0.005	0.10	9.5	0.03
Sodium, mg/L					[illegible]	[illegible]	[illegible]	[illegible]
Sulfate, mg/L					17.0	<0.5	5.0	9.0
Section 265.92 - b(3) PARAMETERS								
pH, units	5.71	6.42	6.56	5.52	6.2	5.5	5.7	5.0
	5.71	6.42	6.55	5.53	6.2	5.4	5.7	4.9
	5.70	6.41	6.55	5.52	6.2	5.5	5.7	4.9
	5.70	6.41	6.55	5.52	6.2	5.5	5.7	4.9
Specific Conductance, µmho/cm	115	330	110	30	195	340	120	135
	120	340	115	30	195	340	120	135
	120	340	120	30	195	340	120	135
	120	340	120	30	195	340	120	135
Total Organic Carbon, mg/L	1.93	14.3	8.30	4.75	3.93	64.0	67.0	23.6
	1.91	18.9	8.17	4.64	2.83	66.2	66.3	22.7
	1.88	18.6	8.06	4.70	2.40	66.0	66.5	22.7
	1.88	18.2	8.11	4.51	2.22	65.1	66.5	22.5
Total Organic Halogen, mg/L	<0.020	0.021	<0.020	<0.020	<0.010	0.256	0.330	0.131
	<0.020	0.022	<0.020	<0.020	<0.010	0.225	0.292	0.129
	<0.020	0.021	<0.020	<0.020	<0.010	0.120	0.267	0.131
	<0.020	0.023	<0.020	<0.020	<0.010	0.133	0.302	0.154
Depth to water, feet	59.6	33	35.6	36.7	15.3	2.5	3.4	5.5
Water Table Elevation, MSL	184.52	184.77	184.99	184.41	231.09	216.0	213.75	226.29

1A NEAR WELL #1
2A NW of Pond.
3A NE of Pond
4A E of Pond

From Ball Engineering, Inc. 2/27/86

Micro-Methods, Inc.
5106 Telephone Road
Pascagoula, MS 39567
(601) 769-7774
July 7, 1986

H. M. Rollins
P. O. Box 3471
Gulfport, MS 39501

ATTN: Mr. Rollins:

Dear Mr. Rollins:

The results of the analyses of the Baldwin Pole and Piling Company well samples received 5-23-86, description as shown, lab file #17-HM-07-86, are as attached.

If we can be of further assistance, please let us know.

Sincerely,

Thomas J. Wilson

TJW/tg

encl.

TO: H. M. Rollins
FROM: Micro-Methods, Inc.
Lab File #17-HM-07-86

B A L D W I N P O L E A N D P I L I N G C O M P A N Y

	WELL #1 µg/L
Naphthalene	<10
Acenaphthalene	<10
Fluoranthene	<10
Phenanthrene	<10
Carbazole	<10
Benzo(a)pyrene	<10
Chrysene	<10

	µg/L
Phenol	<10
2-Chlorophenol	<10
p-chloro-m-cresol	<10
2,4-Dimethylphenol	<10
2,4-Dinitrophenol	<10
Trichlorophenol	<10
Tetrachlorophenol	<10
Pentachlorophenol	<10

METHODOLOGY

Federal Register, October 26, 1984
EPA Method #610

TO: H. M. Rollins
FROM: Micro-Methods, Inc.
Lab File #17-HM-07-86

B A L D W I N P O L E A N D P I L I N G C O M P A N Y

	WELL #2 µg/L
Naphthalene	<10
Acenaphthalene	<10
Fluoranthene	<10
Phenanthrene	<10
Carbazole	<10
Benzo(a)pyrene	<10
Chrysene	<10

	µg/L
Phenol	<10
2-Chlorophenol	<10
p-chloro-m-cresol	<10
2,4-Dimethylphenol	<10
2,4-Dinitrophenol	<10
Trichlorophenol	<10
Tetrachlorophenol	<10
Pentachlorophenol	<10

METHODOLOGY

Federal Register, October 26, 1984
EPA Method #610

TO: H. M. Rollins
FROM: Micro-Methods, Inc.
Lab File #17-HM-07-86

B A L D W I N P O L E A N D P I L I N G C O M P A N Y

	WELL #3 µg/L
Naphthalene	<10
Acenaphthalene	<10
Fluoranthene	<10
Phenanthrene	<10
Carbazole	<10
Benzo(a)pyrene	<10
Chrysene	<10

	µg/L
Phenol	<10
2-Chlorophenol	<10
p-chloro-m-cresol	<10
2,4-Dimethylphenol	<10
2,4-Dinitrophenol	<10
Trichlorophenol	<10
Tetrachlorophenol	<10
Pentachlorophenol	<10

METHODOLOGY

Federal Register, October 26, 1984
EPA Method #610

TO: H. M. Rollins
FROM: Micro-Methods, Inc.
Lab File #17-HM-07-86

BALDWIN POLE AND PILING COMPANY

	WELL #4 µg/L
Naphthalene	<10
Acenaphthalene	<10
Fluoranthene	<10
Phenanthrene	<10
Carbazole	<10
Benzo(a)pyrene	<10
Chrysene	<10

	µg/L
Phenol	<10
2-Chlorophenol	<10
p-chloro-m-cresol	<10
2,4-Dimethylphenol	<10
2,4-Dinitrophenol	<10
Trichlorophenol	<10
Tetrachlorophenol	<10
Pentachlorophenol	<10

METHODOLOGY

Federal Register, October 26, 1984
EPA Method #610

TO: H. M. Rollins
FROM: Micro-Methods, Inc.
Lab File #17-HM-07-86

B A L D W I N P O L E A N D P I L I N G C O M P A N Y

	WELL #1A µg/L
Naphthalene	<10
Acenaphthalene	<10
Fluoranthene	<10
Phenanthrene	<10
Carbazole	<10
Benzo(a)pyrene	<10
Chrysene	<10

	µg/L
Phenol	<10
2-Chlorophenol	<10
p-chloro-m-cresol	<10
2,4-Dimethylphenol	<10
2,4-Dinitrophenol	<10
Trichlorophenol	<10
Tetrachlorophenol	<10
Pentachlorophenol	<10

METHODOLOGY

Federal Register, October 26, 1984
EPA Method #610

TO: H. M. Rollins
FROM: Micro-Methods, Inc.
Lab File #17-HM-07-86

B A L D W I N P O L E A N D P I L I N G C O M P A N Y

	WELL #2A µg/L
Naphthalene	17
Acenaphthalene	10
Fluoranthene	<10
Phenanthrene	<10
Carbazole	<10
Benzo(a)pyrene	<10
Chrysene	<10

	µg/L
Phenol	14
2-Chlorophenol	<10
p-chloro-m-cresol	26
2,4-Dimethylphenol	10
2,4-Dinitrophenol	23
Trichlorophenol	21
Tetrachlorophenol	26
Pentachlorophenol	40

METHODOLOGY

Federal Register, October 26, 1984
EPA Method #610

TO: H. M. Rollins
FROM: Micro-Methods, Inc.
Lab File #17-HM-07-86

B A L D W I N P O L E A N D P I L I N G C O M P A N Y

	WELL #3A µg/L
Naphthalene	363
Acenaphthalene	102
Fluoranthene	20
Phenanthrene	39
Carbazole	<10
Benzo(a)pyrene	<10
Chrysene	<10

	µg/L
Phenol	1090
2-Chlorophenol	1040
p-chloro-m-cresol	113
2,4-Dimethylphenol	2959
2,4-Dinitrophenol	70
Trichlorophenol	300
Tetrachlorophenol	1150
Pentachlorophenol	66

METHODOLOGY

Federal Register, October 26, 1984
EPA Method #610

TO: H. M. Rollins
FROM: Micro-Methods, Inc.
Lab File #17-HM-07-86

B A L D W I N P O L E A N D P I L I N G C O M P A N Y

	WELL #4A µg/L
Naphthalene	180
Acenaphthalene	930
Fluoranthene	115
Phenanthrene	375
Carbazole	75
Benzo(a)pyrene	<10
Chrysene	<10

	µg/L
Phenol	1,935
2-Chlorophenol	2,300
p-chloro-m-cresol	735
2,4-Dimethylphenol	1,250
2,4-Dinitrophenol	250
Trichlorophenol	500
Tetrachlorophenol	955
Pentachlorophenol	275

METHODOLOGY

Federal Register, October 26, 1984
EPA Method #610

Micro-Methods, Inc.
5106 Telephone Road
Pascagoula, MS 39567
(601) 769-7774
December 18, 1986

H. M. Rollins
P. O. Box 3471
Gulfport, MS 39501

ATTN: H. M. Rollins

Dear Mr. Rollins:

The results of the analyses of the Baldwin Pole & Pile Company water samples received 12-11-86, description as shown, lab file #49-HM-12-86, are as attached.

If we can be of further assistance, please contact the office.

Sincerely,

Thomas J. Wilson

TJW/tg

encl.

TO: H. M. Rollins
FROM: Micro-Methods, Inc.
Lab file #49-HM-12-86

B A L D W I N P O L E & P I L I N G C O M P A N Y

	WELL #5	WELL #6	WELL #7
Phenol	<10	<10	<10
2-Chloro, 5 Methyl Phenol,	<10	<10	<10
2,4-Dimethylphenol	<10	<10	<10
p-chloro-m-cresol	<10	<10	<10
Trichlorophenol	<10	<10	<10
Tetrachlorophenol	<10	<10	<10
Pentachlorophenol	<10	<10	<10
2,4-Dimethylphenol	<10	<10	<10
2,4-Dinitrophenol	<10	<10	<10
2, Nitrophenol	<10	<10	<10
4, Nitrophenol			
Naphthalene	<10	<10	<10
Acenaphthalene	<10	<10	<10
Phenanthrene	<10	<10	<10
Carbazole	<10	<10	<10
Fluoranthene	<10	<10	<10
Benzo(a)pyrene	<10	<10	<10
Chrysene	<10	<10	<10

METHODOLOGY

Federal Register, October 26, 1984

TO: H. M. Rollins
FROM: Micro-Methods, Inc.
Lab file #49-HM-12-86

B A L D W I N P O L E & P I L I N G C O M P A N Y

W E L L # 5

	SPIKED ug/l	RECOVERED ug/l
Phenol	10	5.8
2-Chloro, 5 Methyl Phenol	10	9.5
2,4-Dimethylphenol	10	9.8
p-chloro-m-cresol	10	10.1
Trichlorophenol	10	11.8
Tetrachlorophenol	10	11.2
Pentachlorophenol	10	12.6
2,4-Dinitrophenol	10	9.3
2, Nitrophenol	10	12.8
4, Nitrophenol	10	3.8
Naphthalene	10	8.9
Acenaphthalene	10	9.3
Phenanthrene	10	10.8
Carbazole	10	12.6
Fluoranthene	10	11.5
Benzo(a)pyrene	10	13.7
Chrysene	10	12.5

METHODOLOGY

Federal Register, October 26, 1984

Micro-Methods, Inc.
5106 Telephone Road
Pascagoula, MS 39567
(601) 769-7774
May 8, 1987

H. M. Rollins
P. O. Box 3471
Gulfport, MS 39501

ATTN: H. M. Rollins

Dear Mr. Rollins:

The corrected results of the analyses of the Baldwin Pole and Piling Co. water samples received 4-2-87, description as shown, lab file #93-HM-04-87, are as attached.

If we can be of further assistance, please contact the office.

Sincerely,

Harry P. Howell

Harry P. Howell

HPH/tg

encl.

TO: H. M. Rollins
FROM: Micro-Methods, Inc.
Lab file #93-HM-04-87

B A L D W I N P O L E A N D P I L I N G C O.

	P-1 ppb	P-2 ppb	P-3 ppb
Napthalene	<10	980	<10
Acenapthene	<10	38	<10
Acenaphthalene	<10	142	<10
Phenanthrene	<10	50	<10
Anthracene	<10	<10	<10
Carbazole	<10	80	<10
Fluoranthene	<10	<10	<10
Benzo(a)pyrene	<10	<10	<10
Chrysene	<10	<10	<10
Phenol	<10	80	<10
2-Chlorophenol	<10	<10	<10
2,4-Dimethylphenol	<10	225	<10
2,4-Dinitrophenol	<10	92	<10
p-chloro-m-cresol	<10	<10	<10
Trichlorophenol	<10	<10	<10
Tetrachlorophenol	<10	<10	<10
Pentachlorophenol	<10	<10	<10

NOTE: Filtered through a 4.5 micron filter before extraction.

METHODOLOGY

Federal Register, October 26, 1984

TO: H. M. Rollins
FROM: Micro-Methods, Inc.
Lab file #93-HM-04-87

B A L D W I N P O L E A N D P I L I N G C O.

	P-4 ppb	P-5 ppb	P-6 ppb
Napthalene	<10	<10	<10
Acenapthene	<10	<10	<10
Acenaphthalene	<10	<10	<10
Phenanthrene	<10	<10	<10
Anthracene	<10	<10	<10
Carbazole	<10	<10	<10
Fluoranthene	<10	<10	<10
Benzo(a)pyrene	<10	<10	<10
Chrysene	<10	<10	<10
Phenol	<10	<10	<10
2-Chlorophenol	<10	<10	<10
2,4-Dimethylphenol	<10	<10	<10
2,4-Dinitrophenol	<10	<10	<10
p-chloro-m-cresol	<10	<10	<10
Trichlorophenol	<10	<10	<10
Tetrachlorophenol	<10	<10	<10
Pentachlorophenol	<10	<10	<10

NOTE: Filtered through a 4.5 micron filter before extraction.

METHODOLOGY

Federal Register, October 26, 1984

MICRO-METHODS. INC.
5106 TELEPHONE ROAD
PASCAGOULA. MS 39567
(601) 769-7774
August 20. 1987

H. M. Rollins
P. O. Box 3471
Gulfport. MS 39501

ATTN: H. M. Rollins

Dear Mr. Rollins:

The results of the analyses of the Baldwin Pole and Piling Co. samples received 7-30-87. description as shown. lab file #79-HM-08-87. are as attached.

If we can be of further assistance. please contact the office.

Sincerely.

Thomas J. Wilson

TJW/tg

encl.

TO: H. M. Rollins
FROM: Micro-Methods. Inc.
Lab file #79-HM-08-87

BALDWIN POLE AND PILING CO.

	TP #7 12:45 pm 7-30-87 µg/l	TP #8 12:45 pm 7-30-87 µg/l
Phenol	<10	<10
2-Chlorophenol	<10	<10
2.4-Dimethylphenol	<10	<10
2.4-Dinitrophenol	<10	<10
p-chloro-m-cresol	<10	<10
Trichlorophenol	<10	<10
Tetrachlorophenol	<10	<10
Pentachlorophenol	<10	<10
Napthalene	<10	<10
Acenaphthalene	<10	<10
Phenanthrene	<10	<10
Anthracene	<10	<10
Carbazole	<10	<10
Fluoranthene	<10	<10
Benzo(a)pyrene	<10	<10
Chrysene	<10	<10

METHODOLOGY

SW 846

TO: H. M. Rollins
FROM: Micro-Methods. Inc.
Lab file #79-HM-08-87

BALDWIN POLE AND PILING CO.

	TP #9 12:30 pm 7-30-87 µg/l	TP #10 12:30 pm 7-30-87 µg/l
Phenol	<10	<10
2-Chlorophenol	<10	<10
2.4-Dimethylphenol	<10	<10
2.4-Dinitrophenol	<10	<10
p-chloro-m-cresol	<10	<10
Trichlorophenol	<10	<10
Tetrachlorophenol	<10	<10
Pentachlorophenol	<10	<10
Napthalene	<10	<10
Acenaphthalene	<10	<10
Phenanthrene	<10	<10
Anthracene	<10	<10
Carbazole	<10	<10
Fluoranthene	<10	<10
Benzo(a)pyrene	<10	<10
Chrysene	<10	<10

METHODOLOGY

SW 846

MICRO-METHODS. INC.
5106 TELEPHONE ROAD
PASCAGOULA. MS 39567
(601) 769-7774
October 21. 1987

H. M. Rollins
P. O. Box 3471
Gulfport. MS 39501

Dear Mr. Rollins:

The results of the analyses of the samples received 9-29-87. from Baldwin Pole and Piling Co.. Bay Minette. Al. description as shown. lab file #151-HM-10-87. are as attached.

If we can be of further assistance. please contact the office.

Sincerely.

Thomas J. Wilson

TJW/ta

encl.

TO: H. M. Rollins
FROM: Micro-Methods, Inc.
Lab file #151-HM-10-87

BALDWIN POLE AND PILING COMPANY

	Well #10 ppb	Well #11 ppb	Well #12 ppb
Phenol	<10	<10	<10
2-Chlorophenol	<10	<10	<10
2,4-Dimethylphenol	<10	<10	<10
p-chloro-m-cresol	<10	<10	<10
Trichlorophenol	<10	<10	<10
Tetrachlorophenol	<10	<10	<10
Pentachlorophenol	<10	<10	<10
Naphthalene	<10	<10	<10
Acenaphthalene	<10	<10	<10
Acenaphthene	<10	<10	<10
Phenanthrene	<10	<10	10
Anthracene	<10	<10	<10
Carbozole	<10	<10	<10
Fluoranthene	<10	<10	<10
Benzo(a)pyrene	<10	<10	<10
Chrysene	<10	<10	<10

METHODOLOGY

SW 846

EXHIBIT 25

NOTE:

The RESSQ program is set up in SI units. Only length and time units are used.

All data was entered in feet instead of meters. Please mentally change all data printed as M, M/HR, M^3/HR to FT, FT/HR, FT^3/HR. The numerical portions are correct as printed.

BALDWIN POLE AND PILING CO. CORRECTIVE ACTION ---- RESSQ

PRACTICAL SYSTEM OF UNITS IS USED

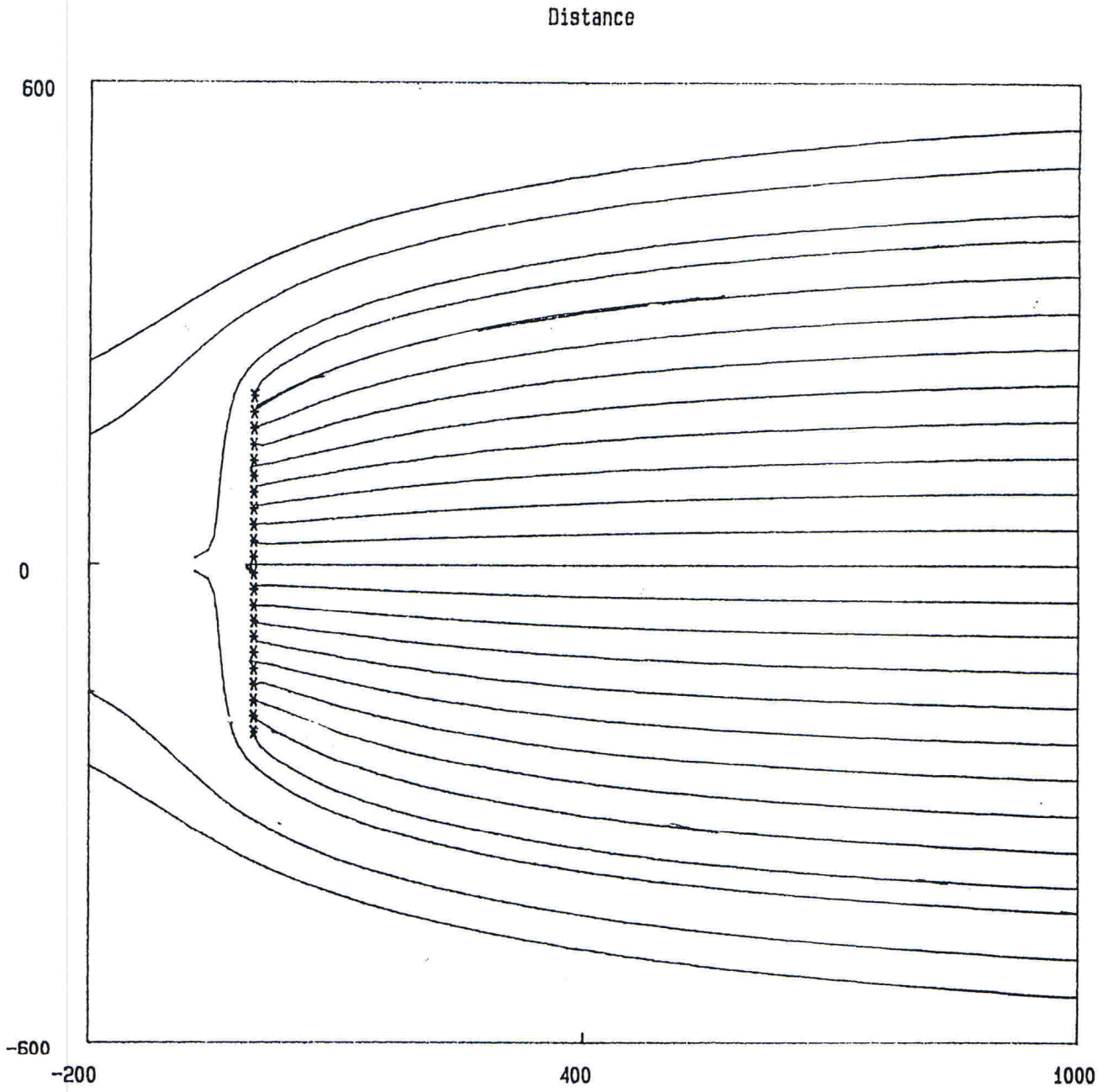
REGIONAL FLOW. PORE VELOCITY	=	800.00	M/YR
ORIENTATION OF REGIONAL FLOW	=	180.00	DEGREES
THICKNESS OF THE AQUIFER	=	7.00	METERS
POROSITY	=	35.00	PERCENT
PERIOD STUDIED	=	12.00	YEARS
INITIAL AQUIFER CONCENTRATION	=	0.000E-01	PERCENT
DEFAULT INJECTION CONCENTRATION	=	0.000E-01	PERCENT
STREAMLINE STEP LENGTH	=	6.00	METERS
ADSORPTION CAPACITY OF ROCK	=	00.00	PERCENT

25 INJECTION WELLS

WELL NAME	X METERS	Y METERS	FLOW-RATE M3/H	CONCENTRATION PERCENT	RADIUS METERS	INDICATO
IW-1	4000.00	-600.00	0.00	0.00E-01	7.50E-02	-1
IW-2	4000.00	-550.00	0.00	0.00E-01	7.50E-02	-1
IW-3	9000.00	-495.00	0.00	0.00E-01	7.50E-02	-1
IW-4	4000.00	-450.00	0.00	0.00E-01	7.50E-02	-1
IW-5	4000.00	-400.00	0.00	0.00E-01	7.50E-02	-1
IW-6	4000.00	-350.00	0.00	0.00E-01	7.50E-02	-1
IW-7	4000.00	-300.00	0.00	0.00E-01	7.50E-02	-1
IW-8	4000.00	-250.00	0.00	0.00E-01	7.50E-02	-1
IW-9	4000.00	-200.00	0.00	0.00E-01	7.50E-02	-1
IW-10	4000.00	-150.00	0.00	0.00E-01	7.50E-02	-1
IW-11	4000.00	-100.00	0.00	0.00E-01	7.50E-02	-1
IW-12	4000.00	-50.00	0.00	0.00E-01	7.50E-02	-1
IW-13	4000.00	0.00	0.00	0.00E-01	7.50E-02	-1
IW-14	4000.00	50.00	0.00	0.00E-01	7.50E-02	-1
IW-15	4000.00	100.00	0.00	0.00E-01	7.50E-02	-1
IW-16	4000.00	150.00	0.00	0.00E-01	7.50E-02	-1
IW-17	4000.00	200.00	0.00	0.00E-01	7.50E-02	-1
IW-18	4000.00	250.00	0.00	0.00E-01	7.50E-02	-1
IW-19	4000.00	300.00	0.00	0.00E-01	7.50E-02	-1
IW-20	4000.00	350.00	0.00	0.00E-01	7.50E-02	-1
IW-21	4000.00	400.00	0.00	0.00E-01	7.50E-02	-1
IW-22	4000.00	450.00	0.00	0.00E-01	7.50E-02	-1
IW-23	9000.00	495.00	0.00	0.00E-01	7.50E-02	-1
IW-24	4000.00	550.00	0.00	0.00E-01	7.50E-02	-1
IW-25	4000.00	600.00	0.00	0.00E-01	7.50E-02	-1

22 PRODUCTION WELLS

WELL NAME	X METERS	Y METERS	FLOW-RATE M3/H	RADIUS METERS	INDICATOR
PW-1	0.00	-210.00	10.23	7.50E-02	-1
PW-2	0.00	-190.00	10.23	7.50E-02	-1
PW-3	0.00	-170.00	10.23	7.50E-02	-1
PW-4	0.00	-150.00	10.23	7.50E-02	-1
PW-5	0.00	-130.00	10.23	7.50E-02	-1
PW-6	0.00	-110.00	10.23	7.50E-02	-1
PW-7	0.00	-90.00	10.23	7.50E-02	-1
PW-8	0.00	-70.00	10.23	7.50E-02	-1
PW-9	0.00	-50.00	10.23	7.50E-02	-1
PW-10	0.00	-30.00	10.23	7.50E-02	-1
PW-11	0.00	-10.00	10.23	7.50E-02	-1
PW-12	0.00	10.00	10.23	7.50E-02	-1
PW-13	0.00	30.00	10.23	7.50E-02	-1
PW-14	0.00	50.00	10.23	7.50E-02	-1
PW-15	0.00	70.00	10.23	7.50E-02	-1
PW-16	0.00	90.00	10.23	7.50E-02	-1
PW-17	0.00	110.00	10.23	7.50E-02	-1
PW-18	0.00	130.00	10.23	7.50E-02	-1
PW-19	0.00	150.00	10.23	7.50E-02	-1
PW-20	0.00	170.00	10.23	7.50E-02	-1
PW-21	0.00	190.00	10.23	7.50E-02	-1
PW-22	0.00	210.00	10.23	7.50E-02	-1


Distance
600
0
-600
-200
400
1000

STREAMLINES DEPARTING FROM INJECTION WELL IW-1

NUMBER OF STREAMLINE	WELL REACHED	TIME OF ARRIVAL	ANGLE BETA IN DEGREES
1	+++none+++	12.0 YEARS	180.0

STREAMLINES DEPARTING FROM INJECTION WELL IW-2

NUMBER OF STREAMLINE	WELL REACHED	TIME OF ARRIVAL	ANGLE BETA IN DEGREES
1	+++none+++	12.0 YEARS	180.0

STREAMLINES DEPARTING FROM INJECTION WELL IW-3

NUMBER OF STREAMLINE	WELL REACHED	TIME OF ARRIVAL	ANGLE BETA IN DEGREES
1	+++none+++	12.0 YEARS	180.0

STREAMLINES DEPARTING FROM INJECTION WELL IW-4

NUMBER OF STREAMLINE	WELL REACHED	TIME OF ARRIVAL	ANGLE BETA IN DEGREES
1	PW-1	4.5 YEARS	180.0

STREAMLINES DEPARTING FROM INJECTION WELL IW-5

NUMBER OF STREAMLINE	WELL REACHED	TIME OF ARRIVAL	ANGLE BETA IN DEGREES
1	PW-2	4.5 YEARS	180.0

STREAMLINES DEPARTING FROM INJECTION WELL IW-6

NUMBER OF STREAMLINE	WELL REACHED	TIME OF ARRIVAL	ANGLE BETA IN DEGREES
1	PW-3	4.5 YEARS	180.0

STREAMLINES DEPARTING FROM INJECTION WELL IW-7

NUMBER OF STREAMLINE	WELL REACHED	TIME OF ARRIVAL	ANGLE BETA IN DEGREES
1	PW-4	4.5 YEARS	180.0

STREAMLINES DEPARTING FROM INJECTION WELL IW-8

NUMBER OF STREAMLINE	WELL REACHED	TIME OF ARRIVAL	ANGLE BETA IN DEGREES
1	PW-6	4.5 YEARS	180.0

STREAMLINES DEPARTING FROM INJECTION WELL IW-9

NUMBER OF STREAMLINE	WELL REACHED	TIME OF ARRIVAL	ANGLE BETA IN DEGREES
1	PW-7	4.4 YEARS	180.0

STREAMLINES DEPARTING FROM INJECTION WELL IW-10

NUMBER OF STREAMLINE	WELL REACHED	TIME OF ARRIVAL	ANGLE BETA IN DEGREES
1	PW-8	4.4 YEARS	180.0

STREAMLINES DEPARTING FROM INJECTION WELL IW-11

NUMBER OF STREAMLINE	WELL REACHED	TIME OF ARRIVAL	ANGLE BETA IN DEGREES
1	PW-9	4.4 YEARS	180.0

STREAMLINES DEPARTING FROM INJECTION WELL IW-12

NUMBER OF STREAMLINE	WELL REACHED	TIME OF ARRIVAL	ANGLE BETA IN DEGREES
1	PW-10	4.4 YEARS	180.0

STREAMLINES DEPARTING FROM INJECTION WELL IW-13

NUMBER OF STREAMLINE	WELL REACHED	TIME OF ARRIVAL	ANGLE BETA IN DEGREES
1	PW-11	4.8 YEARS	180.0

STREAMLINES DEPARTING FROM INJECTION WELL IW-14

NUMBER OF STREAMLINE	WELL REACHED	TIME OF ARRIVAL	ANGLE BETA IN DEGREES
1	PW-13	4.4 YEARS	180.0

STREAMLINES DEPARTING FROM INJECTION WELL IW-15

NUMBER OF STREAMLINE	WELL REACHED	TIME OF ARRIVAL	ANGLE BETA IN DEGREES
1	PW-14	4.4 YEARS	180.0

STREAMLINES DEPARTING FROM INJECTION WELL IW-16

NUMBER OF STREAMLINE	WELL REACHED	TIME OF ARRIVAL	ANGLE BETA IN DEGREES
1	PW-15	4.4 YEARS	180.0

STREAMLINES DEPARTING FROM INJECTION WELL IW-17

NUMBER OF STREAMLINE	WELL REACHED	TIME OF ARRIVAL	ANGLE BETA IN DEGREES
1	PW-16	4.4 YEARS	180.0

STREAMLINES DEPARTING FROM INJECTION WELL IW-18

NUMBER OF STREAMLINE	WELL REACHED	TIME OF ARRIVAL	ANGLE BETA IN DEGREES
1	PW-17	4.5 YEARS	180.0

STREAMLINES DEPARTING FROM INJECTION WELL IW-19

NUMBER OF STREAMLINE	WELL REACHED	TIME OF ARRIVAL	ANGLE BETA IN DEGREES
1	PW-19	4.5 YEARS	180.0

STREAMLINES DEPARTING FROM INJECTION WELL IW-20

NUMBER OF STREAMLINE	WELL REACHED	TIME OF ARRIVAL	ANGLE BETA IN DEGREES
1	PW-20	4.5 YEARS	180.0

STREAMLINES DEPARTING FROM INJECTION WELL IW-21

NUMBER OF STREAMLINE	WELL REACHED	TIME OF ARRIVAL	ANGLE BETA IN DEGREES
1	PW-21	4.5 YEARS	180.0

STREAMLINES DEPARTING FROM INJECTION WELL IW-22

NUMBER OF STREAMLINE	WELL REACHED	TIME OF ARRIVAL	ANGLE BETA IN DEGREES
1	PW-22	4.5 YEARS	180.0

STREAMLINES DEPARTING FROM INJECTION WELL IW-23

NUMBER OF STREAMLINE	WELL REACHED	TIME OF ARRIVAL	ANGLE BETA IN DEGREES
1	+++none+++	12.0 YEARS	180.0

STREAMLINES DEPARTING FROM INJECTION WELL IW-24

NUMBER OF STREAMLINE	WELL REACHED	TIME OF ARRIVAL	ANGLE BETA IN DEGREES
1	+++none+++	12.0 YEARS	180.0

STREAMLINES DEPARTING FROM INJECTION WELL IW-25

NUMBER OF STREAMLINE	WELL REACHED	TIME OF ARRIVAL	ANGLE BETA IN DEGREES
1	+++none+++	12.0 YEARS	180.0 .

EXHIBIT 26



STELLA-JONES CORPORATION - BAY MINETTE HWY 31 [BAY MINETTE, AL]	
DATE: 2/12/24	DRAWING: 240212
AERIAL PHOTOGRAPH	
H. M. ROLLINS CO., INC. GULFPORT, MS	SCALE: 1"≈335'

Source: Baldwin County Parcel Viewer - https://isv.kcsgis.com/al.baldwin_revenue/

EXHIBIT 27

Stella-Jones Corporation

Solid Waste Management Unit Information

Exhibit 27

Post-Closure Permit Renewal Application

March 1, 2024

The Stella-Jones Corporation (Stella-Jones) facility with EPA ID# ALD 031 490 501, was previously known as Baldwin Pole & Piling Co., Inc. (Baldwin Pole). Stella-Jones acquired the facility in July of 2023. Baldwin Pole operated the facility under the terms of a State-issued Resource Conservation and Recovery Act (RCRA) permit as well as an EPA-issued Hazardous and Solid Waste Amendments (HSWA) permit. The present permit issued by the Alabama Department of Environmental Management (ADEM) covers both RCRA and HSWA issues. All solid waste management unit (SWMU) issues have been addressed under the terms of these permits.

As part of Post-Closure Permit renewal activities, ADEM conducts a new RFA during each 10-year renewal cycle. The last RFA report is dated April 9, 2015. ADEM conducted the visual site inspection for a new RFA in 2023. Specific information on individual SWMUs can be found in the 2015 RFA prepared by ADEM. The conclusions of that RFA were that the approved corrective measures were adequate and should be continued. A copy of the ADEM 2015 RFA is included in this Exhibit in the electronic copy of this application, but not in the printed copy due to its size.

Alabama Department of Environmental Management



RCRA Facility Assessment

Baldwin Pole & Piling, Bay Minette, Alabama

EPA ID Number ALD 031 490 501

RCRA Facility Assessment

Baldwin Pole & Piling
Bay Minette, Alabama
EPA ID Number ALD 031 490 501

Prepared by

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
1400 Coliseum Blvd.
Montgomery, Alabama 36110

Date Prepared:	April 9, 2015
Prepared by:	Teresa Estes
Telephone Number:	334-270-5638

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LIST OF ACRONYMS

ADEM	Alabama Department of Environmental Management
AHWMMA	Alabama Hazardous Waste Management and Minimization Act
AO(s)	Administrative Order(s)
AOC(s)	Area(s) of Concern
bgs	below ground surface
C	Candidate Species
CAA	Clean Air Act
CEI	Compliance Evaluation Inspection
CH	Critical Habitat
CM	Corrective Measures

CO(s)	Consent Order(s)
COCs	Chemicals of Concern
COPC(s)	Constituent(s) of Potential Concern
CP	Closure Plan
CWA	Clean Water Act
E	Endangered
EPA	Environmental Protection Agency
GPS	Groundwater Protection Standard
gpm	gallons per minute
HSWA	Hazardous Waste and Solid Waste Amendments
HWSF	Hazardous Waste Storage Facility
MSL	mean sea level
mg/L	milligrams/liter
mg/kg	milligrams/kilogram
µg/kg	micrograms per kilogram
NFA	no further action
NOD(s)	Notice(s) of Deficiency
NOV(s)	Notice(s) of Violation
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NW	Noncompliance Warning
OSWER	Office of Solid Waste and Emergency Resources
P	Possible occurrence
PCH	Proposed Critical Habitat
PE	Proposed Endangered
POTW	publicly owned treatment works
ppm	parts per million
PR	Preliminary Review
PT	Proposed Threatened
RCRA	Resource Conservation and Recovery Act
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
SDWA	Safe Drinking Water Act
SID	State Indirect Discharge
SV	Sampling Visit
SWMU(s)	Solid Waste Management Unit(s)
T	Threatened
TSD	treatment, storage, and disposal
UST	underground storage tank
VSI	Visual Site Inspection
WL(s)	Warning Letter(s)

EXECUTIVE SUMMARY

The Resource Conservation and Recovery Act (RCRA) and the Hazardous and Solid Waste Amendments (HSWA) of 1984 gives the Environmental Protection Agency (EPA) federal authority to require comprehensive corrective action on releases of hazardous constituents to air, surface water, soil, and ground water at all facilities that manage hazardous waste. The Alabama Hazardous Waste Management and Minimization Act (AHWMMA), §22-30-1 et seq., Code of Alabama 1975, as amended, gives the Alabama Department of Environmental Management (ADEM), the State authority to address these issues. On June 24, 1996, ADEM was granted final authorization by EPA to require and oversee the corrective action conducted at these facilities under AHWMMA in lieu of the federal program. To enforce provisions of these Acts, ADEM may conduct assessments of facilities that manage hazardous waste in Alabama. One such assessment is the RCRA Facility Assessment (RFA), which is based on a review of ADEM files and a site inspection of a facility.

Baldwin Pole and Piling (BP&P) has been operating as a wood treatment company at this location since 1958. It has been under the present ownership since 1980. The facility has used creosote and pentachlorophenol to treat wood poles for utility and marine service. Creosote was the only preservative in use from 1958 to 1976. Pentachlorophenol was added in 1976. From 1976 to 1989, both creosote and pentachlorophenol were used. Only pentachlorophenol has been used since 1989.

Prior to 1974, contaminated wastewaters generated during the wood treatment process flowed into a drainage ditch on the southwest corner of the property. The drainage continued north along the eastern side of the railroad tracks, turned east into the swamp and terminated in the drainage pond (Solid Waste Management Unit (SWMU) 21). In 1974, BP&P constructed a surface impoundment (SWMU 1) to contain and evaporate the contaminated wastewaters. With the enactment of RCRA, the bottom sediment sludge in the surface impoundment was classified as a listed hazardous waste (K001). Groundwater monitoring, required by RCRA, identified significant groundwater contamination. BP&P closed the surface impoundment and installed a wastewater treatment system (SWMUs 12-20). The impoundment was closed by 1987 and BP&P submitted its RCRA permit application in 1988. Groundwater investigations were conducted to identify the extent of groundwater contamination and its rate of migration. These investigations identified a large area of subsurface contamination associated with a variety of past operating practices.

The first RFA, completed in 1988, recommended soil sampling for SWMUs 2, 4, and 10; identifying the extent of contamination at SWMUs 21 and 22; examining the concrete underlying SWMUs 3, 5, 8, 9, and Area of Concern (AOC) A; determining if SWMU 11 was cleaned; and No Further Action (NFA) for SWMUs 1 and 12-20.

The facility's first permit was issued in 1989. The permit required BP&P to implement corrective action for the site's groundwater contamination; conduct post-closure activities for the closed

surface impoundment (SWMU 1); conduct a RFI for SWMUs 2-4, 8-10, 21, 22, and AOC A; and conduct confirmatory sampling for SWMUs 5-7 and 11.

Installation of the proposed corrective action system (SWMU 25) was completed in 1991. The Confirmatory Sampling report was submitted in 1991. Based on the results, ADEM and EPA required SWMUs 5-7 to be assessed during the RCRA Facility Investigation (RFI) while SWMU 11 required No Further Action (NFA). The RFI was finalized in 1999. SWMUs 2-10, 21, 22, and AOC A were shown to exceed action levels for different combinations of pentachlorophenol, benzo(a)anthracene, chyrsene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, dibenz(a,h)anthracene, napthalene, phenanthrene, and/or carbazole. The RFI proposed additional institutional controls (security fencing and deed use restrictions) to reduce exposure from SWMUs 2-10, 21, 22, and AOC A.

ADEM conditionally approved the report and required Baldwin Pole & Piling to submit a facility-wide proposal, including appropriate justification per Appendix C of the Post Closure Permit, for implementation of Corrective Measures.

In the early 1990's, BP&P made several changes to their operations. SWMU 10 was cleaned, assessed during the RFI, and backfilled with concrete during the installation of a roof over the treatment plant. The old wastewater treatment system was replaced by the current corrective action system (SWMU 25) and the facility modified the treatment process to eliminate drippage of treated wood.

The Corrective Measures Study (CMS), finalized in 2005, concluded that the existing groundwater treatment system, along with the installation of a security fence around the perimeter of the site and deed restrictions on use of the facility property would be sufficient to provide adequate protection for humans and the environment. These additional measures (deed restrictions and security fencing) were completed in 2005. ADEM approved the CMS, and incorporated the revision through modification number two of the facility's AHWMMA Post-Closure Permit. These corrective measures remain in place to address the on-site contamination.

ADEM conducted a Visual Site Inspection (VSI) at BP&P on November 5-6, 2014. Based on the findings of this VSI and the file review, one new SWMU was identified (SWMU 26 - $\underline{\leq}$90 Day Hazardous Waste Storage Area). BP&P should continue to maintain SWMU 1 as required by the facility's Hazardous Waste Facility Permit. BP&P should add the benchmark for SWMU 1 to the quarterly inspection checklist. BP&P should address the maintenance deficiencies discovered at groundwater monitoring wells TP-9, MW-12, MW-6, MW-5, and P2. BP&P should continue corrective measures for SWMUs 2-10, 21, 22, 25, and AOC A as stipulated in the facility's Hazardous Waste Facility Permit and the approved Corrective Action Plan. The security fence (north boundary, and southwest boundary in particular) should be re-evaluated to ensure that there is no unauthorized access to the facility. The production process measures to prevent all drippage from treated poles stored in SWMU 4 should be re-evaluated. BP&P should continue to manage SWMU 26 as required by ADEM's Division 14 Regulations. NFA is required for SWMUs 11, 12-20, and 24 at this time.

TABLE 1
EXECUTIVE SUMMARY
Baldwin Pole & Piling Co., Inc., Bay Minette, Alabama

SWMU/AOC	TYPE OF UNIT	YEARS OF OPERATION	WASTES MANAGED	POLLUTION MIGRATION PATHWAYS [1]	EXPOSURE POTENTIAL [2]	POTENTIAL FOR RELEASE [3]	NEED FOR INTERIM MEASURES	SUGGESTED FURTHER ACTION[4]
SWMU 1-Closed Surface Impoundment	evaporation pond	1975 to 1986	process wastewaters and pond sediments (K001)	A GW S SS SW	L L L L L	L H H L L	No	BP&B should continue groundwater detection monitoring, cap maintenance requirements, security requirements (fencing), inspection requirements, record keeping requirements, reporting requirements, and remediation of groundwater as stipulated by the facility's Hazardous Waste Facility Permit. BP&P should address the maintenance deficiencies discovered at groundwater monitoring wells TP-9, MW-12, MW-6, MW-5, and P2. The security fence (north boundary, and southwest boundary in particular) should be re-evaluated to ensure there is no unauthorized access to the facility. BP&P should add the benchmark for SWMU 1 to the quarterly inspection checklist.
SWMU 2-Tramways in Concrete	tramways	1958-present	drippage from poles treated with creosote (1958-1989) and pentachlorophenol (1976-present/changing practices in 1991 greatly reduced drippage)	A GW S SS SW	L L M L L	L M H L L	No	BP&P should continue groundwater remediation and institutional controls for SWMU 2 as required by the facility's Hazardous Waste Facility Permit and the Corrective Action Plan. The security fence, installed as part of the corrective measures for this unit, should be re-evaluated to ensure there is no unauthorized access to the facility.
SWMU 3-Creosote Oil/Water Separator	oil/water separator	1958-1988	creosote waste sludge	A GW S SS SW	L L M L L	L M H L L	No	BP&P should continue groundwater remediation and institutional controls for SWMU 3 as required by the facility's Hazardous Waste Facility Permit and the Corrective Action Plan. The security fence, installed as part of the corrective measures for this unit, should be re-evaluated to ensure there is no unauthorized access to the facility.
SWMU 4-Treated Pole Storage Area	storage yard	1958-present	drippage from poles treated with creosote (1958-1989) and pentachlorophenol (1976-present/changing practices in 1991 greatly reduced drippage)	A GW S SS SW	L L M L L	L M H L L	No	BP&P should continue groundwater remediation and institutional controls for SWMU 4 as required by the facility's Hazardous Waste Facility Permit and the Corrective Action Plan. The security fence, installed as part of the corrective measures for this unit, should be re-evaluated to ensure there is no unauthorized access to the facility. The production process measures to prevent all drippage from treated poles stored in SWMU 4 should be re-evaluated.
SWMU 5-Liquid Loading and Unloading Area	loading/unloading area	1985-1991	spills from unloading creosote and pentachlorophenol, spills for oil/water separators	A GW S SS SW	L L M L L	L M H L L	No	BP&P should continue groundwater remediation and institutional controls for SWMU 5 as required by the facility's Hazardous Waste Facility Permit and the Corrective Action Plan. The security fence, installed as part of the corrective measures for this unit, should be re-evaluated to ensure there is no unauthorized access to the facility.

1. For Pollution Migration Pathways, 'A' designates Air; 'GW' designates Ground Water; 'S' designates Soil; 'SS' designates Subsurface Gas; 'SW' designates Surface Water, and 'SD' designates Sediment.
2. For Exposure Potential, 'H' designates High; 'M' designates Medium; 'L' designates Low; and 'U' designates Unknown exposure potential; see each SWMU/AOC in Section 4.0 of the RFA for substantiation.
3. Potential for Release is defined as High (H), evidence indicates that a release of hazardous waste or hazardous constituents has occurred; Medium (M) evidence indicates that a release may have occurred; Low (L) no evidence of release was found; and Unknown (U) sufficient information is not available to make a determination.
4. See each SWMU/AOC in Section 4.0 of the RFA for substantiation.

TABLE 1
EXECUTIVE SUMMARY
Baldwin Pole & Piling Co., Inc., Bay Minette, Alabama

SWMU/AOC	TYPE OF UNIT	YEARS OF OPERATION	WASTES MANAGED	POLLUTION MIGRATION PATHWAYS [1]	EXPOSURE POTENTIAL [2]	POTENTIAL FOR RELEASE [3]	NEED FOR INTERIM MEASURES	SUGGESTED FURTHER ACTION[4]
SWMU 6-Buried Debris West of the Closed Impoundment	buried debris	unknown	scrap metal including metal from the old tramway system and at least one drum	A GW S SS SW	L L M L L	L M H L L	No	BP&P should continue groundwater remediation and institutional controls for SWMU 6 as required by the facility's Hazardous Waste Facility Permit and the Corrective Action Plan. The security fence, installed as part of the corrective measures for this unit, should be re-evaluated to ensure there is no unauthorized access
SWMU 7-Disposal Area	disposal area	unknown	scrap wastes including the heads of old wood treating cylinders, pipes, a pump, and broken treated poles	A GW S SS SW	L L M L L	L M H L L	No	BP&P should continue groundwater remediation and institutional controls for SWMU 7 as required by the facility's Hazardous Waste Facility Permit and the Corrective Action Plan. The security fence, installed as part of the corrective measures for this unit, should be re-evaluated to ensure there is no unauthorized access
SWMUs 8 & 9-Oil/Water Separator Tanks	oil/water separators	1958-present	condensed water from creosote (1958-1989) and pentachlorophenol (1976-present) wood treating process	A GW S SS SW	L L M L L	L M H L L	No	BP&P should continue groundwater remediation and institutional controls for SWMUs 8 & 9 as required by the facility's Hazardous Waste Facility Permit and the Corrective Action Plan. The security fence, installed as part of the corrective measures for this unit, should be re-evaluated to ensure there is no unauthorized access to the facility.
SWMU 10-Sump at North end of Wood Preserving Plant	sump	1958-1991	condensed water from creosote (1958-1989) and pentachlorophenol (1976-present) wood treating process	A GW S SS SW	L L M L L	L M H L L	No	BP&P should continue groundwater remediation and institutional controls for SWMU 10 as required by the facility's Hazardous Waste Facility Permit and the Corrective Action Plan. The security fence, installed as part of the corrective measures for this unit, should be re-evaluated to ensure there is no unauthorized access to the facility.
SWMU 11-Buried Pipe to closed Surface Impoundment	pipe	1975-1986	process wastewaters contaminated with creosote (ceased in 1991) and pentachlorophenol	A GW S SS SW	L L L L L	L L L L L	No	No further action is required for SWMU 11 at this time.
SWMUs 12-20-Wastewater Treatment Plant	wastewater treatment plant	1984-early 1990's	process wastewaters contaminated with creosote and pentachlorophenol	A GW S SS SW	L L L L L	L L L L L	No	No further action is required for SWMUs 12-20 at this time.

1. For Pollution Migration Pathways, 'A' designates Air; 'GW' designates Ground Water; 'S' designates Soil; 'SS' designates Subsurface Gas; 'SW' designates Surface Water, and 'SD' designates Sediment.
2. For Exposure Potential, 'H' designates High; 'M' designates Medium; 'L' designates Low; and 'U' designates Unknown exposure potential; see each SWMU/AOC in Section 4.0 of the RFA for substantiation.
3. Potential for Release is defined as High (H), evidence indicates that a release of hazardous waste or hazardous constituents has occurred; Medium (M) evidence indicates that a release may have occurred; Low (L) no evidence of release was found; and Unknown (U) sufficient information is not available to make a determination.
4. See each SWMU/AOC in Section 4.0 of the RFA for substantiation.

TABLE 1
EXECUTIVE SUMMARY
Baldwin Pole & Piling Co., Inc., Bay Minette, Alabama

SWMU/AOC	TYPE OF UNIT	YEARS OF OPERATION	WASTES MANAGED	POLLUTION MIGRATION PATHWAYS [1]	EXPOSURE POTENTIAL [2]	POTENTIAL FOR RELEASE [3]	NEED FOR INTERIM MEASURES	SUGGESTED FURTHER ACTION[4]
SWMU 21-Drainage Pond and Swamp	drainage pond and swamp	1958-present	surface water runoff from entire facility prior to 1989 contained drippage from poles treated with creosote and pentachlorophenol, after 1989 creosote was no longer used and treatment practices significantly reduced drippage from pentachlorophenol treated poles	A GW S SS SW	L L M L L	L M H L L	No	BP&P should continue groundwater remediation and institutional controls for SWMU 21 as required by the facility's Hazardous Waste Facility Permit and the Corrective Action Plan. The security fence, installed as part of the corrective measures for this unit, should be re-evaluated to ensure there is no unauthorized access to the facility.
SWMU 22-Area of Former Direct Discharge of Wastes	ditch	1958-1975	process wastewaters from creosote treatment of poles	A GW S SS SW	L L M L L	L M H L L	No	BP&P should continue groundwater remediation and institutional controls for SWMU 22 as required by the facility's Hazardous Waste Facility Permit and the Corrective Action Plan. The security fence, installed as part of the corrective measures for this unit, should be re-evaluated to ensure there is no unauthorized access to the facility.
SWMU 24-New Liquid Unloading Area	unloading area	1989-present	spills of pentachlorophenol	A GW S SS SW	L L L L L	L L L L L	No	No further action at this time.
SWMU 25-Corrective Action System	pumping wells, oil/water separator, and biological groundwater treatment unit	1991-present	groundwater contaminated with creosote and pentachlorophenol constituents	A GW S SS SW	L L L L L	L L L L L	No	BP&P should continue operation of the system as directed by the facility's Hazardous Waste Facility Permit and the Corrective Action Plan.
SWMU 26-≤90 Day Hazardous Waste Storage Area	-≤90 Day Hazardous Waste Storage Area	early 1990's to present	F032	A GW S SS SW	L L L L L	L L L L L	No	BP&P should continue to manage SWMU 26 as required by ADEM's Division 14 Regualtions.
AOC A-Raw Creosote Tanks	storage tanks	1958-1988	creosote	A GW S SS SW	L L M L L	L M H L L	No	BP&P should continue groundwater remediation and institutional controls for AOC A as required by the facility's Hazardous Waste Facility Permit and the Corrective Action Plan. The security fence, installed as part of the corrective measures for this unit, should be re-evaluated to ensure there is no unauthorized access to the facility.

1. For Pollution Migration Pathways, 'A' designates Air; 'GW' designates Ground Water; 'S' designates Soil; 'SS' designates Subsurface Gas; 'SW' designates Surface Water, and 'SD' designates Sediment.
2. For Exposure Potential, 'H' designates High; 'M' designates Medium; 'L' designates Low; and 'U' designates Unknown exposure potential; see each SWMU/AOC in Section 4.0 of the RFA for substantiation.
3. Potential for Release is defined as High (H), evidence indicates that a release of hazardous waste or hazardous constituents has occurred; Medium (M) evidence indicates that a release may have occurred; Low (L) no evidence of release was found; and Unknown (U) sufficient information is not available to make a determination.
4. See each SWMU/AOC in Section 4.0 of the RFA for substantiation.

1. INTRODUCTION

This report describes the findings of the Preliminary Review (PR) and the Visual Site Inspection (VSI). The report includes: (1) a description of the facility and its SWMUs and AOCs, (2) an identification of the release potential of hazardous wastes or hazardous constituents through various migration pathways, and (3) a summary of conclusions and recommendations regarding further remediation activities and/or additional assessment activities.

1.1 PURPOSE OF THE RCRA FACILITY ASSESSMENT

According to EPA's "RCRA Facility Assessment Guidance" (Reference 1), a RFA has four purposes:

- Identify and gather information on releases at RCRA-regulated facilities.
- Evaluate SWMUs and AOCs for releases to all environmental media and regulated units for releases to media other than groundwater.
- Make preliminary determinations regarding releases and the need for further actions at BP&P.
- Screen from further investigation SWMUs and AOCs that do not pose a threat to human health and the environment.

A RFA may be performed when RCRA (AHWMMA) Permits are issued, are modified, or when the facility ceases to manage hazardous wastes. BP&P has submitted its RCRA permit for renewal and the permit was reissued on September 4, 2014.

1.2 PROCEDURES

ADEM personnel conducted the RFA in accordance with procedures outlined in EPA's RFA-Guidance document (Reference 1). Beginning on July 21, 2014, ADEM personnel conducted a PR of the RCRA facility file information at ADEM's office in Montgomery, Alabama.

ADEM's review included: (1) general correspondence with state and federal agencies concerning the facility, (2) Notices of Violation (NOVs), and Warning Letters (WLs) resulting from facility compliance inspections, (3) Notices of Deficiency (NODs) resulting from Permit Applications or Modifications, (4) Administrative Orders (AOs) or Consent Orders (COs) issued by ADEM, (5) RODs issued by EPA (if applicable), (6) the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Preliminary Assessment (PA) (if applicable), (7) the CERCLA Site Inspection (SI) (if applicable), and (8) various facility maps and process diagrams. ADEM used the information collected during the PR to prepare a list of potential SWMUs and AOCs. A request for general facility information was submitted to BP&P on August 8, 2014. ADEM received this information on September 16, 2014.

ADEM conducted the VSI from November 5-6, 2014. ADEM met with BP&P representatives to discuss the facility's history, organization, and operations. ADEM personnel explained the purpose of the visit and discussed the RFA process. Meeting attendees on November 5, 2014, included the following:

Teresa Estes	ADEM	Andy McMillan	BP&P
Robert B. Stanley	ADEM	Archie McMillan	BP&P
Clethes Stallworth	ADEM	Ray Long	BP&P
Brad Johnson	ADEM	Jason Rollins	H. M. Rollins Co., Inc.

After the initial meeting, Mr. Stallworth and Mr. Long reviewed facility records while Ms. Estes, Mr. Johnson, Mr. Stanley, Mr. McMillan, and Mr. Rollins began the facility tour to verify and document SWMUs and AOCs. After Mr. Stallworth completed the records review, he and Mr. Long proceeded to inspect the treatment plant. After completing most of the inspection, the two groups met at the office to plan the next day's activities. ADEM personnel departed BP&P at 3:30 pm. On November 6, 2014, Ms. Estes, Mr. Stanley, and Mr. Stallworth returned to BP&P at 8:00 am to complete the inspection. Mr. McMillan, Mr. Long, and Mr. Rollins accompanied the ADEM personnel. The inspection concluded at 12:00 pm, and the ADEM personnel departed the BP&P facility.

1.3 REPORT ORGANIZATION

This report summarizes information obtained during the PR, the VSI, and evaluates the information in terms of the RFA objectives listed in Section 1. Section 2 describes the facility and its operations. Section 3 discusses the environmental settings. Section 4 identifies and discusses SWMUs and AOCs. Section 5 covers potential human and environmental receptors, and Section 6 contains the conclusions and recommendations. The trip summary is in Appendix A and Appendix B presents the site photographs.

2 FACILITY DESCRIPTION

This section of the RFA report describes the facility location, facility background, and historical and current production operations and waste management practices.

2.1 SITE LOCATION

The facility is at latitude of N 30º 53’ 25” and longitude of 87º 45’ 19” W in Bay Minette, Baldwin County, Alabama. Additional pertinent information is listed below.

Facility Mailing Address:	P. O. Drawer 758 Bay Minette, Alabama 36507
Facility Contact:	Thomas A. McMillan, Jr., President (251) 937-2141
EPA Identification Number	ALD 031 490 501

2.2 FACILITY BACKGROUND

The BP&P site is located in Baldwin County in the Gulf Coastal Plain of southwestern Alabama. It is an active wood treating facility. The site covers 22 acres while the process and storage areas are approximately 13 acres. The facility is bounded on the south by U.S. Highway 31, on the east by private property, and on the northwest by tracks of the CSX Railroad (Figure 1).

BP&P began operating a wood treatment company at this location in 1958. The facility has used creosote and pentachlorophenol to treat wood poles for utility and marine service. The facility received dry, debarked logs from the other Baldwin Pole & Piling facility in Bay Minette. These logs were subjected to pressure treatment where a preservative is forced into the pore structure of the wood.

Creosote was the only preservative in use from 1958 to 1976. Pentachlorophenol was added in 1976. From 1976 to 1989, both creosote and pentachlorophenol were used. Only pentachlorophenol has been used since 1989.

Wastewaters generated during the wood treating process, prior to 1974, flowed southwest into a drainage ditch which followed northeastward along the railroad tracks (SWMU 22) and into the swamp north of the facility (SWMU 21). These wastewaters were contaminated. A surface impoundment (SWMU 1), required by the Alabama Water Improvement Commission, was constructed in 1974 to contain and evaporate the contaminated wastewaters. This eliminated discharge of the wastewaters.

With the enactment of RCRA, the bottom sediment sludge in the surface impoundment was classified as a listed hazardous waste (K001). Groundwater monitoring, required by RCRA, identified significant groundwater contamination. BP&P closed the surface impoundment and install a wastewater treatment system (SWMUs 12-20). The impoundment was closed by 1987 and BP&P submitted its RCRA permit application in 1988. Groundwater investigations were conducted to identify the extent of groundwater contamination and its rate of migration. These investigations delineated a large area of subsurface contamination associated with a variety of past operating practices.

In 1988, A. T. Kearney, under contract to EPA, completed a RFA for BP&P. The RFA recommended soil sampling for SWMUs 2, 4, and 10. A review of past sampling activities was indicated for SWMUs 21 and 22 to determine the extent of contamination in the area. The report indicated the concrete under SWMUs 3, 5, 8, 9, and AOC A should be examined to assure there were no cracks or other pathways to underlying soils or groundwater. SWMUs 1 and 12-20 required NFA. Records of closure of SWMU 1 were required for SWMU 11 to determine whether the pipe had been cleaned during closure of the surface impoundment (Reference 2).

The facility's permit application was completed in 1989 and the first permit was issued in 1989. The permit required BP&P to implement corrective action for the site's groundwater contamination and conduct post-closure activities for the closed surface impoundment which included groundwater monitoring. The permit also required a RFI for SWMUs 2-4, 8-10, 21, 22, and AOC A, and confirmatory sampling for SWMUs 5-7 and 11 (Reference 3).

Installation of the proposed corrective action system (SWMU 25) was completed in 1991. The system included 24 groundwater removal wells, 2 DNAPL removal wells, a two part groundwater treatment system, and the associated piping and pumps.

The Confirmatory Sampling report was submitted in 1991. Based on the results, ADEM required SWMUs 5-7 to be assessed during the RFI while SWMU 11 required NFA. The RFI was finalized in 1999. SWMUs 2-10, 21, 22, and AOC A were shown to exceed action levels for different combinations of pentachlorophenol, benzo(a)anthracene, chyrsene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, dibenz(a,h)anthracene, napthalene, phenanthrene, and/or carbazole. The RFI proposed additional institutional controls (security fencing and deed use restrictions) to reduce exposure from SWMUs 2-10, 21, 22, and AOC A (References 4-6).

ADEM conditionally approved the report and required Baldwin Pole & Piling to submit a facility-wide proposal, including appropriate justification per Appendix C of the Post Closure Permit, for implementation of Corrective Measures (Reference 7).

In the early 1990's, BP&P made several changes to their operations. SWMU 10 was cleaned, assessed during the RFI and backfilled with concrete during the installation of a roof over the treatment plant. The old wastewater treatment system was replaced by the current corrective

action system (SWMU 25) and the facility modified the treatment process to eliminate drippage of treated wood.

The CMS, finalized in 2005, concluded that the existing groundwater treatment system, along with the installation of a security fence around the perimeter of the site and deed restrictions on use of the facility property would be sufficient to provide adequate protection for humans and the environment. These additional measures (deed restrictions and security fencing) were completed in 2005. ADEM approved the CMS, and incorporated the revision through modification number two of the facility's AHWMMA Post-Closure Permit. These corrective measures remain in place to address the on-site contamination (References 8, 9).

2.3 PROCESS INFORMATION

BP&P used an "empty-cell" process for the preservation (creosote or pentachlorophenol) of its poles. In the treatment process, wood was placed into a retort. The retort was sealed and treatment began with steam conditioning which was accomplished through heating the wood with steam for 30 minutes to 2 hours. Next a vacuum was applied at a rapid rate to remove moisture from the wood. The pressure in the retort was raised to approximately 65 psi and the wood preservative was introduced into the retort. The pressure was raised to 150 psi and maintained for several hours to allow for the preservative to permeate the wood. After an appropriate amount of time, the retort was vented; the preservative pumped back to storage tanks, and an air vacuum was pulled on the retort for about one hour. After a final pump-out, the cylinder doors were opened and the wood was rolled out onto a cradle car on rail tracks (SWMU 2) for transport to the treated pole storage area (SWMU 4) where the wood was unloaded and remains until it was sold and hauled off-site. Use of creosote was discontinued in 1989.

Condensate generated during the treatment process and oil water emulsions occurring in the preservative tanks were directed to the oil/water separators (SWMUs 8 & 9). In the oil/water separators, recovered preservative was pumped to the preservative tank, wastewater was directed to the wastewater treatment system, and oily sludges were directed to the temporary accumulation tank. Process wastes generated during unloading of the retort included preservative and contaminated water that accumulated in the sump (SWMU 10) in front of the retorts. The wastes in the sump were pumped to the oil/water separators. Wastewaters from the wastewater treatment system were discharged to the local POTW (Reference 2).

In the early 1990's, BP&P made several change to their operations. SWMU 10 was cleaned, assessed during the RFI, and backfilled with concrete during the installation of a roof over the process area. The old wastewater treatment system was replaced by the current corrective action system (SWMU 25). The facility modified the treatment process to eliminate drippage of treated wood.

BP&P still utilizes the "empty cell" process. Kiln dried poles are purchased from an off-site source or a sister facility. Poles (the charge) are placed in the retort and the retort is sealed. A small vacuum is pulled on the retort and the retort is filled with pentachlorophenol solution from the work tank. Pressure is applied to the retort (depending on size of the charge can be up to 65 psi), then after an appropriate amount of time, the retort is vented. The pentachlorophenol solution is pumped back to the work tank and an air vacuum is pulled on the retort for a minimum of 5 hours. After the final vacuum the doors are opened and the poles are examined for drippage. If there is no visible drippage the poles are pulled out. If drippage is observed then the door is closed and another vacuum is pulled on the poles for a few more hours, and the process is repeated until no drippage is observed. The first vacuum usually results in no

drippage. When the holding time is completed, the poles are placed onto a cradle car on rail tracks (SWMU 2) for transport to the treated pole storage area (SWMU 4) where the poles are stored until sold off-site.

When the retort doors are opened and the poles are removed, any remaining pentachlorophenol solution and other wastes (sand, dirt, and wood contaminated with pentachlorophenol) are collected by the new metal lined sump under the retort doors. The liquids (pentachlorophenol solution) drain to a nearby sump where they are pumped back to the work tank. The remaining solid wastes (sand, dirt, and wood contaminated with pentachlorophenol-F032) are removed from the metal lined sump and placed in 55-gallon drums. The drum is stored in the satellite accumulation area until full, at which time it is labeled and transferred to the <90 Day Hazardous Waste Storage Area (SWMU 26).

2.4 FACILITY WASTE MANAGEMENT PRACTICES

The following sections describe how BP&P manages on-site generated non-hazardous wastes, hazardous wastes, universal wastes, and used oil.

2.4.1 Management of Non-hazardous Wastes

Non-hazardous wastes generated at the facility consist primarily of office type wastes (paper, used cleaning supplies, etc.). The office wastes are placed in a dumpster which is emptied by the city and managed as solid wastes (disposed at a Subtitle D landfill). Sanitary wastes generated at the office building are piped to the city's sewage system.

2.4.2 Management of Hazardous Wastes

BP&P operates at Large Quantity Generator (LQG) status. Hazardous wastes generated in the wood preservative plant include sand, dirt, and wood contaminated with pentachlorophenol (F032), and contaminated groundwater sludges (K001). The contaminated groundwater and process wastewaters (F032) are treated on site in the facility's biological wastewater treatment system prior to discharge to the local POTW. The contaminated sand, dirt, wood, and sludges are stored in 55-gallon drums is the ≤90 Day Hazardous Waste Storage Area (SWMU 26) prior to transported off-site by Action Resources (ALR000007237). The sludges (K001) are sent to Giant Resource Recovery (ALD070513767) for storage/bulking prior to transport to another TSDF or to Holcim (US) Inc. (MSD077655876) for fuel blending prior to energy recovery. The contaminated sand, dirt, and wood (F032) are sent to Giant Resource Recovery (ALD070513767) for storage/bulking prior to transport to another TSDF (Reference 10).

Process wastewaters are directed to oil/water separators (SWMUs 8-9). The oily sludges generated from the oil/water separators are pumped back to the work tank. The wastewaters are pumped to the wash water tank. Rainwater collected in the trench is also pumped to the wash water tank. The wash waters are used by the vacuum pumps and for cleaning out the retorts. When the wash water tank becomes too full, the excess waters are pumped into a mobile container and transported to the biological treatment system. At the biological treatment system, the wash waters are discharged into the biological stage one unit for processing prior to discharge to the city sewer system (Figure 2) (Reference 11).

2.4.3 Management of Universal Wastes

BP&P generates used fluorescent light bulbs. The bulbs are collected in a container provided by the recycler. The container is kept in the facility office and once full is sent off-site for recycling (Reference 10).

2.4.4 Management of Used Oil

BP&B generates used oil from maintenance of its forklifts. The used oil is collected in a 250-gallon tank located within the containment area for the facility's diesel fuel tank. The used oil is sent off-site for recycling (Reference 10).

2.5 SID DISCHARGES

The facility has a State Indirect Discharge (SID) permit (IU330200027) which was issued on June 21, 2011, and expires on May 31, 2016 (Reference 10).

2.6 NPDES DISCHARGES

The facility has a National Pollutant Discharge Elimination System (NPDES) permit (AL0059943) which was issued on June 21, 2011, and expires on June 30, 2016 (Reference 10).

2.7 AIR PERMITS

The facility does not require any air permits issued by ADEM.

2.8 IDENTIFICATION OF SWMUs AND AOCs

Through this RFA, 25 SWMUs and 1 AOC were identified at the BP&P site. The definition of a SWMU adopted in this RFA reflects current EPA policy stated in the July 15, 1985, Codification Rule (50 FR 28702); the "RCRA Facility Assessment Guidance" (Reference 1); and other recent policy directives from the EPA Office of Solid Waste and Emergency Response.

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

AOCs are defined as any area having a probable release of hazardous waste or hazardous constituent which is not from a SWMU and is determined by ADEM to pose a current or potential threat to human health or the environment. Such AOCs may require investigations and remedial action as required under Section 3005(c)(3) of the RCRA and ADEM Administrative Code rule 335-14-8-.03(b)2 in order to ensure adequate protection of human health and the environment.

2.9 REGULATORY STATUS

This Section discusses the regulatory status and presents a chronological regulatory history of BP&P through a review of ADEM's Land Division files. It covers the period of June 1988 to November 2014. The file review indicates that the state regulatory programs under which the facility is currently regulated include AHWMMA, CWA, and CAA.

On December 30, 1988, ADEM issued a Part B Review to BP&P concerning the second review of the permit application submitted on October 14, 1988. Comments addressed deficiencies in the Part A, groundwater monitoring, groundwater remediation, the corrective action plan, and need for the application to cite ADEM regulations.

On February 6, 1989, BP&P submitted a revised permit application to address ADEM's second set of comments.

On June 2, 1989, ADEM issued a Part B Review to BP&P concerning the third review of the permit application submitted on February 6, 1989. Comments addressed deficiencies in groundwater monitoring, groundwater remediation, and the funding mechanism.

On June 20, 1989, BP&P submitted a revised permit application to address ADEM's third set of comments.

On December 15, 1989, ADEM, in conjunction with EPA issued BP&P a Hazardous Waste Facility Permit for the closed surface impoundment (SWMU 1). The permit required the facility to enact the corrective action program for groundwater, submit a work plan for conducting Confirmatory Sampling for SWMUs 5, 6, 7, and 11, and submit a work plan for conducting a RFI for SWMUs 2, 3, 4, 8, 9, 10, 21, 22, and AOC A.

On February 9, 1990, BP&P submitted a work plan for Confirmatory Sampling.

On October 9, 1990, ADEM commented on the August 17, 1990, Corrective Action Progress Report. ADEM indicated the report did not contain deadlines for evaluation and procurement of the groundwater treatment system as required by the facility's permit. ADEM indicated a work schedule addressing these issues was needed.

On December 19, 1990, ADEM issued a NOV to BP&P for violations regarding failure to maintain groundwater monitoring wells, failure to maintain the closed surface impoundment, and failure to comply with the facility's AHWMA permit.

On January 29, 1991, BP&P submitted a response to the December 19, 1990, NOV, which detailed the measures taken to correct the violations.

On February 13, 1991, ADEM issued correspondence to BP&P indicating the steps taken to correct the violations cited in the December 19, 1990, NOV, were adequate.

On March 8, 1991, ADEM issued a WL to BP&P for failing to submit progress reports as required by the facility's permit.

On March 22, 1991, BP&P submitted the progress report.

On April 9, 1991, ADEM issued correspondence to BP&P indicating the steps taken to correct the violations cited in the March 8, 1991, WL, were adequate.

On June 11, 1991, EPA issued comments on the Confirmatory Sampling work plan, and requested a revised work plan.

On August 7, 1991, ADEM issued a NOV to BP&P for inappropriate disposal of groundwater well purge waters and failure to submit required reports.

On September 9, 1991, BP&P submitted a response to ADEM's August 7, 1991, NOV.

On August 10, 1991, BP&P submitted a revised Confirmatory Sampling work plan.

On October 17, 1991, EPA approved the revised work plan and directed BP&P to submit the draft report by December 16, 1991.

On November 5, 1991, ADEM issued a response to BP&P's September 9, 1991, letter in which the Department indicated submittal dates for the reports had been miscalculated and purged groundwater was to be placed in the groundwater treatment system.

On December 27, 1991, BP&P submitted the Confirmatory Sampling Report to ADEM and EPA.

On February 5, 1992, ADEM issued a WL to BP&P for violations discovered during a Compliance Evaluation Inspection (CEI) which included a manifest violation and a container marking violation.

On March 3, 1992, BP&P submitted a response to ADEM's February 5, 1992, WL.

On March 19, 1992, ADEM issued a response to BP&P's March 3, 1992, letter. ADEM concluded BP&P's corrections were adequate.

On October 30, 1992, BP&P submitted the work plan for the RFI.

On March 15, 1992, ADEM issued correspondence to BP&P indicating ADEM concurred with EPA's proposed comments on the RFI work plan with no additional comments from ADEM.

On May 26, 1992, EPA issued approval of the Confirmatory Sampling Report and required BP&P to include SWMUs 5, 6, and 7 in the RFI.

On July 6, 1992, ADEM issued approval of the Confirmatory Sampling Report and concurred with EPA's requirement to include SWMUs 5, 6, and 7 in the RFI.

On March 19, 1993, EPA issued a NOTI to BP&P for the RFI work plan which the facility submitted on October 30, 1992.

On April 14, 1993, ADEM issued a WL to BP&P for RCRA violations discovered during the March 10, 1993, CEI. Violations included failure to properly manage hazardous waste and missing elements of the contingency plan.

On May 14, 1993, BP&P submitted a response to ADEM's April 14, 1993, WL.

On May 21, 1993, BP&P submitted a revised RFI work plan.

On June 1, 1993, ADEM issued correspondence to BP&P indicating the facility's May 21, 1993, response to the WL was adequate.

On August 17, 1993, EPA and ADEM issued letters to BP&P citing deficiencies in the May 21, 1993, revised RFI work plan.

On September 20, 1993, BP&P submitted a revised RFI work plan.

On November 1, 1993, EPA conditionally approved the revised RFI work plan.

On March 2, 1994, ADEM issued a letter to BP&P regarding deficiencies in the trust fund for the facility.

On April 4, 1994, BP&P representatives contacted ADEM regarding the trust fund deficiencies.

On May 5, 1994, ADEM determined that BP&P had corrected the deficiencies in the trust fund.

On June 27, 1994, BP&P submitted the first draft of the RFI report.

On January 25, 1995, ADEM issued a NOV to BP&P concerning violations discovered during a CEI. Violations included failure to submit an 8700-12, failure to maintain the ≤90 day storage area inspection log, and failure to file a manifest discrepancy report.

On February 6, 1995, BP&P submitted a response to ADEM's NOV of January 25, 1995.

On March 13, 1995, ADEM issued correspondence to BP&P indicating the facility's February 6, 1995, response to the NOV was adequate.

On September 26, 1995, ADEM submitted comments to EPA on the June 27, 1994, draft RFI from BP&P.

On November 28, 1995, EPA issued a NOTI to BP&P regarding the June 27, 1994, draft RFI.

On March 11, 1996, BP&P submitted a revised RFI report.

On February 14, 1997, ADEM issued a notice of inspection to BP&P indicating certain facility personnel's training records did not reflect current necessary RCRA training.

On February 25, 1997, BP&P submitted evidence of personnel training for the employees in question.

On February 27, 1997, ADEM determined that BP&P had corrected the deficiencies in employee training.

On September 11, 1997, ADEM issued a NOD to BP&P regarding the facility's revised RFI report.

On June 9, 1998, ADEM issued correspondence to BP&P regarding data gaps in the revised RFI report.

On October 20, 1998, ADEM issued a WL to BP&P for violations discovered during the October 14, 1998, CEI. Violations included gaps in the security fence around the closed surface impoundment; signs not appropriately displayed on the security fence around the closed surface impoundment; drippage of pentachlorophenol from treated poles; an unlabeled container of hazardous waste; two manifests without accompanying land disposal restrictions; and an open container of used oil.

On November 9, 1998, BP&P submitted a response to ADEM's October 20, 1998, WL to address the violations.

On November 23, 1998, ADEM issued correspondence to BP&P indicating the facility's November 9, 1998, response to the WL was adequate.

On June 17, 1999, BP&P submitted a revised RFI report.

On August 3, 1999, ADEM conditionally approved the report indicating all SWMUs and AOC A (as shown in the draft RFI) were shown to exceed action levels for different combinations of pentachlorophenol, benzo(a)anthracene, chyrsene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, dibenz(a,h)anthracene, napthalene, phenanthrene, and/or carbazole. As a result, ADEM required BP&P to submit a facility-wide proposal, including appropriate justification per Appendix C of the Post Closure Permit, for implementation of Corrective Measures. ADEM also required BP&P to submit a finalized copy of the RFI.

On September 1, 1999, BP&P submitted the finalized copy of the RFI report.

On October 1, 1999, BP&P submitted the SWMU CMS.

On February 28, 2000, ADEM issued a NOV to BP&P regarding violations discovered during a CEI. Violations included a portion of the perimeter security fence was down, some warning signs were not present on the security fence around the surface impoundment, and no numbers on groundwater recovery wells 1-23.

On March 9, 2000, BP&P submitted a response to ADEM's February 28, 2000, NOV.

On March 22, 2000, ADEM issued correspondence to BP&P indicating the facility's February 28, 2000, response to the NOV was adequate.

On October 9, 2003, ADEM issued a NOV to BP&P regarding violations discovered during a joint CEI performed by ADEM and EPA. Violations included; failure to label groundwater monitoring wells; failure to operate DNAPL wells; storing K001 waste for more than 90 days without a storage permit; failure to label hazardous waste storage tanks; failure to conduct daily inspections on the K001 storage tanks; releases in the groundwater recovery area and the biological treatment system; universal wastes stored in unmarked and open container; no return-to-generator copy for a manifest; job descriptions did not describe responsibilities of the positions related to hazardous waste management; and no biennial report was available for review during the inspection.

On November 4, 2003, BP&P submitted a response to ADEM's October 9, 2003, NOV.

On November 18, 2003, ADEM determined that BP&P had corrected the violations cited in the October 9, 2003, NOV.

On March 18, 2004, ADEM issued correspondence to BP&P which indicated a major permit modification was necessary to incorporate the approved CMS.

On September 30, 2004, ADEM issued the first modification to BP&P's Hazardous Waste Permit. The modification incorporated the approved CMS. ADEM indicated that BP&P should proceed to address the compliance schedule in the CMS.

On December 27, 2004, BP&P submitted the survey plat and deed notice to comply with sections V.B.5 and V.B.6 of the modified Hazardous Waste Permit.

On January 10, 2005, ADEM issued correspondence to BP&P indicating the survey plat and deed notice submitted on December 27, 2004, met the requirements of sections V.B.5 and V.B.6 of the modified Hazardous Waste Permit. BP&P was directed to initiate security measures within 180 days.

On February 23, 2005, BP&P submitted a request to ADEM to modify the security fence due to problems encountered in the northeast portion of the facility (swamp-SWMU 22) with installation of fence poles.

On March 23, 2005, ADEM issued correspondence to BP&P notifying the facility that any change to the CMS would require a Hazardous Waste Permit modification.

On April 22, 2005, BP&P submitted a request to modify their Hazardous Waste Permit and the CMS to address changes necessary to install a security fence around the perimeter of the facility.

On May 20, 2005, ADEM requested a revised CMS which would include BP&P proposed changes to the facility's security measures.

On June 20, 2005, BP&P submitted the revised CMS.

On July 18, 2005, ADEM issued the second modification to BP&P's Hazardous Waste Permit. The modification incorporated the approved revisions to the CMS. ADEM indicated that BP&P should proceed to address the compliance schedule in the revised CMS.

On March 10, 2006, ADEM issued a WL to BP&P regarding violations discovered during a CEI. Violations included failure to label laboratory hazardous waste container, full name of inspector not on inspection sheets, and failure to maintain names and job descriptions of personnel managing hazardous wastes.

On March 24, 2006, BP&P submitted a response to ADEM's March 10, 2006, WL.

On April 5, 2006, ADEM issued correspondence to BP&P indicating the facility's March 24, 2006, response to the WL was adequate.

On January 22, 2014, ADEM issued a NOD to BP&P for deficiencies in the facility's permit application (submitted on July 3, 2013).

On February 25, March 13, and June 12, 2014, BP&P submitted responses to the January 22, 2014, NOD.

On July 7, 2014, ADEM determined that the AHWMMA permit application from BP&P was complete and placed the draft permit on public notice.

On September 4, 2014, ADEM reissued the AHWMMA Post-Closure Permit to BP&P.

3 ENVIRONMENTAL SETTING

This section covers the specific environmental conditions surrounding the BP&P site. Current and past land use is described along with endangered species of flora and fauna known to inhabit the area. Climate, topography, surface water, soils, and hydrogeology are among the factors to be considered when determining the impact or potential impact of a release from a SWMU or AOC that has been identified at a TSD facility.

3.1 LAND USE

The land use of the properties in immediate proximity to the site can be divided into the following categories: recreational-0 %, residential-25 %, agricultural-75 %, and commercial-0 % (Reference 10).

Based on information received from the United States Fish and Wildlife Service the following are: E-Endangered, T-Threatened, CH-Critical Habitat has been designated, PE-Proposed to be listed as Endangered, PT-Proposed to be listed as Threatened, PCH-Proposed Critical Habitat, C-Candidate Species, or P-Possible Occurrence species in Baldwin County, Alabama: Wood stork (Mycteria americana)-T, Piping Plover (Charadrius melodus)-T, Red Knot (Calidris canutus rufa)-PT, Alabama heelsplitter (Potamilus inflatus)-T, Southern clubshell (Pleurobema decisum)-E, Alabama sturgeon (Scaphirhynchus suttkusi)-E, Gulf sturgeon (Acipenser oxyrinchus desotoi)-T, American chaffseed (Schwalbea americana)-E, West Indian Manatee (Trichechus manatus)-E, Perdido Key Beach mouse (Peromyscus polionotus trissyllepsis)-E, Alabama Beach mouse (Peromyscus polionotus ammobates)-E, Hawksbill sea turtle (Eretmochelys imbricata)-E, Leatherback sea turtle (Dermochelys coriacea)-E, Kemp's Ridley sea turtle (Lepidochelys kempii)-E, Green sea turtle (Chelonia mydas)-T, Loggerhead sea turtle (Caretta caretta)-T, Alabama Red-Belly turtle (Pseudemys alabamensis)-E, Eastern Indigo snake (Drymarchon corais couperi)-T, and Gopher tortoise (Gopherus polyphemus)-C (Reference 11).

3.2 CLIMATE

BP&P is located on the northeast edge of the city of Bay Minette, Alabama bounded by Highway 31 to the south and a CSX rail line running southwest to northeast (Figure 1). The climate of Baldwin County is considered to be subtropical or nearly subtropical with hot summers and mild winters. Rainfall averages about 64 inches per year and generally well distributed throughout the year. The average temperature in the summer is 82º F and the average temperature in the winter is 53.9º F (References 6, 12). The average annual temperature for the area is 68º F.

3.3 TOPOGRAPHY AND SURFACE WATER

The facility is approximately 22 acres in size. The southern portion of the facility is relatively flat lying and transitions in the northern part of the site through a short zone of steeper slope into a low flat hardwood bottom. Surface elevations vary from 240 feet above mean sea level (MSL) in the southern portion of the site to 200 feet MSL at the northern end of the site (References13, 14, Figure 3). The area surrounding the facility is considered to be in the Southern Pine Hills Physiographic District of the East Gulf Coastal Plain Physiographic Section (Reference 15, Figure 4). The Southern Pine Hills is made up of Pliocene-Pleistocene terrace deposits gradually sloping from 350 feet above MSL to 30 feet above MSL.

The facility is located very near the surface drainage divide separating the Mobile River drainage basin and the Perdido River drainage basin. Runoff from this facility will enter the Perdido River system (Reference 6, Figure 3). Surface water drainage from the facility flows north where it joins with the off-site drainage in the swamp bottom and the drainage pond at the north end of the facility boundary. The discharge from this pond flows west through a box culvert beneath the railroad line along the western boundary and enters an unnamed tributary which flow east/northeast into McCurtin Creek. McCurtin Creek flows approximately due east for six miles where it then turns southeast flowing into the confluence with Dyas Creek. Dyas Creek flows approximately three mile south/southeast before meeting the confluence with the Perdido River. The Dyas Creek is listed in ADEM Administrative Code R. 335-6-11.02 with a use classification of Swimming/Fish and Wildlife (S/F&W). The Perdido River has the same use classification of S/F&W to its source (Reference 16).

3.4 SOILS

The facility sits on top of soils from Bowie-Lakeland-Cuthbert Association (Figures 5, 6, References 12, 18). The southern half of the facility consists of near level gently sloping to moderately sloping well drained soils comprised from the Bowie (BwD), Lakeland (LaB), and minor Carnegie (CgA) soils. The Bowie soils have a surface layer of grayish-brown to very dark gray fine sandy loam and a subsoil of yellowish-brown to strong brown sandy clay loam. The Lakeland soils have a surface layer of grayish-brown to dark grayish-brown loamy fine sand and a subsoil of brownish-yellow to dark yellowish-brown loamy sand (Reference 12).

The northern half of the facility is consists of wet loamy alluvial land, minor soils comprised from Hyde and Bayboro soils and Muck (Hb) which are very poor drained soils subject to frequent flooding and stay wet from water seepage (Reference 12).

3.5 REGIONAL GEOLOGY

Geologic formations which outcrop in Baldwin County are sedimentary of Tertiary and Quaternary age and consist of undifferentiated Miocene beds, the Citronelle Formation of Pliocene age, high terrace deposits of Pleistocene age associated with the major rivers, and low terrace and deltaic deposits at the lower elevations. The formations of Miocene age in south Alabama are difficult to classify because they are often covered by younger sediments, are largely unfossiliferous and are located in a transition zone between Miocene deposits of one facies in Mississippi and those of a different facies in Florida. They therefore remain largely undifferentiated within the area of interest (Figure 7, Reference 18). The Citronelle formation unconformably overlies the older Miocene beds and the contact is non-uniform, as would be expected, dipping to the southwest at from 5 to 50 feet per mile. The gentler dips are reported to occur at the Citronelle outcrops. There are no known shallow structural anomalies in the immediate vicinity, but the site lies some ten miles north and east of the Mobile Bay graben. Some displacement in the Miocene beds due to faulting is reported in North Baldwin County but correlation across the faults and magnitude of displacement is indeterminate due to lack of traceable marker beds (Reference 19).

The Miocene formation is the oldest geologic unit in the area and outcrops in the northern and central part of the county. Its thickness ranges from 100 feet in the northern portion of the county where it outcrops, to about 3,400 feet along the coast. It consists of light gray, yellowish gray, yellow and white, laminated to thin bedded and massive clay, sand and sandy clay. Sands range from fine to coarse and are cross bedded. Weathering at outcrops produces a variety of darker colors, some of which are mottled. Down deep where the formation is buried, it contains beds of dolomitic, fossiliferous limestone. The contact between the Citronelle and Miocene is reported to be readily detectable since it is marked by a sharp contrast between the light gray to white sandy clay of the Miocene and the reddish brown, sometimes limonitic sands and gravels of the Citronelle (Reference 19).

The Citronelle formation of Pliocene age outcrops throughout Baldwin County except at lower elevations along the coast and in stream valleys where it has been removed by erosion. Later studies indicate that it is not as prevalent in the northern portion of the county, occurring only as outliers. It is reported to be from 0 to 130 feet in thickness and composed of dark reddish brown gravelly sand containing small amounts of clay in nodules and thin partings and occasional beds of gray, orange and brown sandy clay (Reference 18).

The facility is under lane by Pliocene Citronelle Formation which lies unconformably over the undifferentiated Miocene Series. At the higher elevations in the treatment and storage areas of the plant (220 to 240 feet above MSL), the near surface soil profile consists of approximately 18

to 40 feet of sediments which include topsoil and/or fill overlying generally sandy soils containing some gravel and varying amounts of clay. This material is tentatively identified as a weathered remnant of the Citronelle Formation. Identification is based primarily on color and grain size (Reference 2).

Underlying the Citronelle at the higher elevations is a 40 to 45 feet thick stratum of clay which is identified as the upper member of the undifferentiated Miocene Series. The upper ten feet of this clay stratum contains isolated pockets of weathered chert reduced to silt and sand size particles, becoming less prevalent with depth. The center one quarter to one half of this stratum is variably sandy, ranging from 11.5 feet of clayey sand with fat clay layers at MW-4, to 21.0 feet of relatively clean sand at MW-1. The lower unit of this stratum grades to gray, massive, homogeneous fat clay with no detectable discontinuities (Reference 2).

Underlying this clay member is a sand stratum at least 35 feet thick which is the second aquifer, continuous throughout the facility. The weathered Citronelle unit appears to pinch out below elevations of 220 feet and merges with a thin veneer of recent alluvium at lower elevations. The alluvium ranges in thickness from 9 to 16 feet and consists of a sandy organic silt layer from the surface to an approximate depth of 7 feet, followed by a clayey sand layer containing some silt. The alluvium lies directly upon the erosional surface of the upper Miocene clay member. The clay appears to have retained its impervious character, as indicated by the laboratory permeability test on a specimen taken from the boring at MW-9 at a depth of 13 to 15 feet which showed a permeability of 8.23×10^{-9} cm./sec[(2)] at elevations below 220 feet. NGVD, the upper Miocene clay member was measured at thicknesses of 31 feet in the swamp, 37 feet at the western perimeter (MW-11), and 27 feet at the eastern perimeter (MW-12). The intermediate sandy zone in the clay member is more pronounced in boring B-5 located in the swamp, but the clay member apparently functions as an effective aquiclude through the area of concern, as evidenced by the significant head differential in the two aquifers and the absence of any contaminants in the lower one (Reference 2).

3.6 REGIONAL HYDROGEOLOGY

The major aquifers in Baldwin County are the Pliocene-Miocene and the Alluvial-Costal aquifers. Even though the Citronelle Formation and the undifferentiated Miocene Series are lithologically different, they are hydraulically connected and generally respond to stress as a single aquifer. Groundwater occurring at the Baldwin Pole & Pile facility is considered to be from the Pliocene-Miocene aquifer. The Pliocene-Miocene aquifer occurs in beds of sand and gravel, which are lenticular in shape and of limited lateral extent. The sand and gravel beds in the Citronelle Formation and those at shallow depths in the Miocene Series are undifferentiated and hydraulically connected to land surface; therefore, the aquifer is considered unconfined. Discontinuous lenses of clay within these deposits retard the vertical movement of water but do not separate the aquifers. At depth, clayey sediments in the Miocene Series are semi-confining, which reduces vertical infiltration of water. The deeper portions of the aquifer in Miocene Series may respond to short term pumpage as a confined aquifer (Reference 20).

Groundwater movement is generally from topographic highs to topographic lows where it is discharged to streams or areas of groundwater withdrawal. Regional groundwater movement is from the topographically higher areas of north central Baldwin County to the east toward the Perdido River and to the south toward the Gulf of Mexico (Figure 8). Local groundwater movement in the Pliocene-Miocene aquifer is expected to mimic surface topography and move predominantly to the north east in the direction of McCurtin Creek from an un-named tributary and east/south east toward the Perdido River (Figure 3). However, in the immediate vicinity of

the site, the groundwater potentiometric level is primarily controlled by pumping of groundwater from production and intercept wells

Aquifers are susceptible to surface contamination wherever recharge occurs. Factors that increase infiltration and decrease natural filtration make certain aquifers or portions of aquifers highly susceptible to contamination. These factors include sinkholes, surface or near surface faults and fractures as well as poorly drained or internally drained areas where permeable surface materials are present (Reference 21). While there are no known faults, large scale fractures or sinkholes present at the Baldwin Pole & Piling facility, the area is underlain by unconsolidated, highly permeable sediments that have high recharge rates (greater than 6 inches per year) and an unconfined aquifer. Therefore the Baldwin Pole & Piling facility site should be considered highly vulnerable to contamination from the surface.

The City of Bay Minette obtains its water from a series of public supply wells. Figure 9 shows the location of public supply wells that are currently being used and ones not being used. Access to public water within the four-mile radius of the site should be available to most households. However, private water supply wells, irrigation wells, industrial wells, etc., may be present within the two-mile radius of the site due to the area's past rural/agricultural and industrial history (Reference 22).

3.6.1 GROUNDWATER MONITORING SYSTEM

The groundwater monitoring system at BP&P consists of twelve monitoring wells and seven piezometers screened in two different zones separated by an a thick clay layer which acts like an aquitard making the lower portion of the aquifer confined and the upper portion unconfined (Figure 10). Eight of the twelve monitoring wells and the seven piezometers are screened from thirteen feet to less than one foot below ground surface (bgs) in the upper portion of the Pliocene-Miocene aquifer. The four remaining wells are screened from fifty-five feet to twenty-two feet bgs. The compliance wells (3) and effectiveness wells (2) are sampled semi-annually in the months February and August. The boundary wells (3) are sampled annually (Reference 23). The groundwater elevations taken during the semi-annual sampling are used to create a site wide potentiometric map. Potentiometric maps of the facility from 2014 are included in Figure 11.

From the review of the semi-annual effectiveness reports from March and September 2014, as well as, effectiveness reports from 2013 to 2012, the current monitoring well network is capable of adequately monitoring the groundwater at current site conditions around the closed impoundment (References 24-27).

During the VSI performed on November 5th and 6th of 2014, monitoring wells TP-9, MW-12, MW-6, MW-5, and P2 were noted as deficient and in need of repair. TP-9 was not clearly marked and is not secure due to the square opening cut into the side of the protective well housing. The lid to the protective housing around MW-12 was no longer attached at the hinge and the corner of the well pad was broken off. The soil beneath the well pad for MW-6 was eroded away exposing the underside of the well pad. The protective housing surrounding MW-5 was rusted out at the base of the housing and the well pad. The well riser for P2 was heaved upward preventing the protective well housing from being properly closed and secure. An investigation is needed for monitoring well P2 in order to discover the cause of the problem and find a solution to repair the well (Photographs 1, 2, 3, 4, and 5).

3.6.2 GROUNDWATER CORRECTIVE ACTION

BP&P is currently working under a corrective action plan that was approved in April of 1991. The corrective action system was designed with twenty-four recovery wells and two DNAPL recovery wells installed in the upper surficial aquifer. Twenty-three of the recovery wells are located immediately down gradient of the closed surface impoundment forming an arc running east to west and are interconnected and pumped using a vacuum created by a liquid eductor system which employs a pump that pumps pretreated groundwater (from the groundwater pretreatment system) through the educator to create the necessary vacuum. The remaining recovery well and DNAPL recovery wells are located near the edge of the plume and use electric pumps operated by a timers in an attempt to maximize low recovery yields area (Figure 12).

All liquids are first routed to a groundwater pre-treatment plant where they are subjected to oil/water separation. The water is then pumped to a biological groundwater treatment unit and then discharged to the City of Bay Minette POTW under a State Indirect Permit (SID) (Reference 23).

3.6.3 GROUNDWATER QUALITY

Water in alluvium and low terrace deposits in the Perdido River basin and the Mobile River Basin in the north half of Baldwin County is probably of good chemical quality but locally may have a dissolved solid content that exceeds 1000 mg/l and may contain objectionable amount of iron (Reference 20). The upper surficial unconfined aquifer at the facility and the surrounding area is not used as a potable water source. The lower portion of the aquifer which is considered semi-confined to confined is used as a potable source.

3.6.4 CONCLUSIONS

1. The upper portion of the aquifer beneath the site is highly vulnerable to surface sources of contamination. This susceptibility is caused by the permeability of the underlying geologic formations, the lack of any laterally extensive clay units and the relatively flat topography. The lower portion of the aquifer is separated by a thick confining clay layer highly reducing the susceptibility from surface contamination.

2. There are six public water supply wells, some of which may or may not be functional, two industrial wells, and two private water supply wells within a 2-mile radius of the BP&P site. However, it is expected that the majority of the homes within the 4-mile radius will have access to public water supply.

3. Twelve monitoring wells and seven piezometers are currently sampled as part of the on-going detection monitoring program. The monitoring system appears capable of adequately monitoring the site.

4. During the VSI performed on November 5th and 6th of 2014, monitoring wells TP-9, MW-12, MW-6, MW-5, and P2 were noted as deficient and in need of repair.

5. Regional groundwater movement across the facility is generally to the east towards the Perdido River.

6. No new releases of contaminants have been documented from the closed RCRA unit at the facility. Currently there are two active recovery well systems onsite for DNAPL and dissolved plume concentrations.

4 SOLID WASTE MANAGEMENT UNITS

This section discusses the SWMUs and AOCs identified at BP&P and an evaluation of the actual and potential releases from these units. During the PR, ADEM identified 27 possible SWMUs and 1 AOC. After the VSI, 25 SWMUs and 1 AOC were identified. Photographs of the units are provided in Appendix B. For the release pathways discussion for each SWMU/AOC, the following definitions are used to rank the probability that hazardous wastes or hazardous constituents were released to air, soil, surface water, or groundwater:

- High — Evidence indicates that a release of hazardous waste or hazardous constituents has occurred
- Medium — Evidence indicates that a release may have occurred
- Low — No evidence of release was found
- Unknown — Sufficient information is not available to make a determination

Evidence of a release is defined as visual signs of contamination, analytical documentation of a release, discharge permit violation, facility representative statements, or file material indicating a release.

The photograph numbers(s) for each SWMU and AOC correspond to the numbering system of the Photograph Log provided in Appendix B. A list of all SWMUs and AOCs at BP&P is presented in Executive Summary Table 1.

4.1 SWMU 1 Closed Surface Impoundment

This surface impoundment is south of the drainage pond and swamp (SWMU 21) and northeast of the wood treatment building (Figure 13). It operated from 1975 to 1986 and was closed in 1987. It received wastewaters containing creosote and pentachlorophenol from the wood treating process. It served as an evaporation pond for the treatment of the wastewaters therefore the pond sediments would be K001 wastes. The surface impoundment is not lined. The surface impoundment was closed and capped in 1987. During closure, water was removed from the impoundment, treated in the wastewater treatment plant (SWMUs 12-20), and discharged to the local POTW. Sludges (K001) were removed and sent to Allied Chemical in Birmingham where they were incinerated. Unrecoverable sludges were mixed with lime kiln dust. The impoundment was filled, the clay cap installed, and vegetation was established. EPA approved the closure (References 2, 28).

In 1988, a RFA was completed for BP&P. No releases were found at the closed surface impoundment. The report recommended NFA for the surface impoundment as it was being addressed through RCRA post-closure permitting activities (Reference 2).

In 1989, H. M. Rollins Company, on behalf of BP&P, completed an Exposure Information Report for the facility. This report was incorporated into the facility's RCRA permit application. The report concluded that while the surface impoundment had resulted in groundwater contamination at the site, the plume was contained within the facility boundary. The potential for exposure for workers to contaminants via the groundwater pathway was low as workers were not exposed to the contaminated groundwater. The report also concluded the potential for

workers to be exposure to contaminants via the surface water, air, soil, and subsurface gas pathways was low (Reference 29).

In 1989, a Groundwater Quality Assessment was completed for the facility. It concluded the surface impoundment and other facility practices resulted in the uppermost aquifer at the facility being contaminated by soluble constituents of creosote and pentachlorophenol. EPA required a corrective action plan for the contaminated groundwater. The EPA approved plan was completed in 1989. Corrective measures would include the installation of 26 recovery wells in the top of the aquiclude underlying the surficial aquifer. Contaminated groundwater would be treated on-site before discharge to the local POTW. BP&P would also provide semi-annual corrective action reports (groundwater monitoring) to determine progress in remediation of the groundwater plume. This corrective action was incorporated into the facility's RCRA permit and is currently active (References 30, 31).

H. M. Rollins Company, on behalf of BP&P, submitted a CMS in 1999, and a finalized revision in 2005. The study concluded that the existing groundwater treatment system, along with the installation of a security fence around the perimeter of the site and deed restrictions on use of the facility property would be sufficient to provide adequate protection for humans and the environment. These additional measures were completed in 2006 (Reference 8).

On November 5, 2014, ADEM representatives inspected SWMU 1. The cap on the surface impoundment was intact, the vegetative cover was healthy and intact, and no erosion was found (Photographs 6, 7). The ditching was intact and contained little debris. Groundwater monitoring wells MW-1, MW-1A, MW-2A, MW-3A, MW-4AR, MW-5, MW-6, MW-7, MW-8R, MW-10, MW-11, MW-12, P-1R, P-2, P-3, P-4, P-5, P-6, and TP-9 were inspected on November 5-6, 2014. Well P-2 was not closed due to heaving of the inner casing (Photograph 1). The inspector was able to remove the cap on the inner casing. The outer casing of MW-5 was corroded (Photograph 2). All soils had washed from under the pad of MW-6 (Photograph 3). Well TP-9 was not numbered and the outer casing had an opening which allowed access to the groundwater monitoring well (Photograph 4). The hinge of the cap for the outer casing of MW-12 was rusted through allowing access to the groundwater monitoring well (Photograph 5) and the pad for the well was damaged (corner was broken off). No deficiencies were found at any of the other groundwater monitoring wells for SWMU 1.

The benchmark for SWMU 1 was inspected on November 5, 2014. It is a concrete monument on the southeast corner of the property. The plate on top of the monument had no identifying labeling.

The security fence for the facility was inspected by ADEM personnel on November 5-6, 2014. Three areas of the security fence appeared to have some deficiencies. At the northern end of the facility property, the fence was open, allowing access to the facility (Photographs 8, 9). At the southwest corner of the facility, two stretches of the southern fence had gaps between the bottom of the fence and the ground (Photographs 10, 11) which would allow access to the facility.

During the evaluation of the quarterly inspection records, it was discovered that the benchmark for SWMU 1 was not included as an item to be inspected. Section II.C.2.e. requires the inspection of the benchmark.

Based on the closure activities, the unit history, the groundwater assessment, the Exposure Information Report, and the findings of the current VSI, the probability of releases from SWMU 1

to soils and groundwater is high, while the probability of releases to air, surface water, and subsurface gasses is low. BP&B should continue groundwater detection monitoring, cap maintenance requirements, security requirements (fencing), inspection requirements, record keeping requirements, reporting requirements, and remediation of groundwater as stipulated by the facility's RCRA permit. In addition, findings during the VSI indicated that security measures require re-evaluation and deficiencies found with groundwater monitoring wells TP-9, MW-12, MW-6, MW-5, and P2 should be corrected. BP&P should add the benchmark for SWMU 1 to the quarterly inspection checklist.

4.2 SWMU 2 Tramways in Concrete

The tramways are used to move treated wood from the retorts to the treated pole storage area (SWMU 4). The tramways were installed in 1958 and lead north from the wood preserving plant across SWMU 4 (Figure 13). In 1981, concrete was placed under the tramways. Prior to 1981, tramways at the same location were in use. Before changes in facility practices, which greatly reduced drippage from treated wood, small amounts of preservatives (creosote and pentachlorophenol) would drip from the treated logs onto the concrete under the tramways. The concrete under the tramways has no sumps, drains, or curbs.

In 1988, a RFA was completed for BP&P. During the VSI, preservative drippage was observed on the concrete under the tramways. The drippage could indicate more extensive contamination. The report concluded the potential for release to the soil and groundwater was high based on visual observation of stained soils and concrete. The lack of secondary containment and the direct contact with the soil caused a high potential for releases to surface waters through the swamp and drainage pond (SWMU 21). The potential for release through subsurface gas generation was low based on the relative non-volatility of the preservatives. The report recommended soil sampling to characterize the nature and extent of the releases which occurred from the unit to the soil. The report also recommended unannounced inspections of the process (Reference 2).

EPA and ADEM issued BP&P a Hazardous Waste Facility Permit in 1989. Paragraph II.D.1 of the permit required BP&P to conduct a RFI for SWMUs 2, 3, 4, 8, 9, 10, 21, 22, and AOC A. The EPA approved work plan was completed and implemented in 1993 (References 3, 32).

The RFI report was finalized in 1999. The investigations conducted for SWMU 2 included sampling on both sides of the concrete slab under the tramways at points approximately 1/4, 1/2, and 3/4 of the length of the tracks, measured from the retort doors. Samples were planned to be taken from 0 to 1 foot and 3 to 4 feet in depth at each sampling point. At sample point 2-6, the deeper samples could not be obtained due to the presence of debris.

The surface samples from all 6 sample points reported at least one constituent. All of the samples reported pentachlorophenol at levels between 0.42 and 22 ppm. Two of the samples, 2-4A and 2-5A, reported additional constituents associated with the prior use of creosote, at levels from less than 1 to 64 ppm. Only one of the deeper samples reported any constituent at above detection limits. This sample was 2-1B, which showed fluoranthene at 0.35 ppm, and 0.64 ppm on reanalysis.

The sample results confirmed that soils in the area where preservative treated wood was handled exhibited measureable levels of wood preserving constituents. The data did not suggest constituents had migrated to a significant depth or that the unit presented any risk to groundwater. Surface water concerns were addressed as flow across the site terminates in the drainage pond (SWMU 21). Overflow from the pond is regulated through a NPDES permit. The

data did not suggest the unit presented any risk to groundwater. Several PAHs were identified in two samples above ingestion based threshold levels; however, the RFI found the risk to be low. This low risk was attributed to the fact that the soils beneath the tramways were covered with curbed concrete and any risk employees would incur through exposure to on-site soils contaminated with wood preserving chemicals was much lower that the daily exposure the employee would receive through their regular duties. In addition, the RFI proposed additional institutional controls (security fencing and deed use restrictions) to reduce exposure (Reference 6).

ADEM conditionally approved the report indicating all SWMUs and AOC A (as shown in the draft RFI) were shown to exceed action levels for different combinations of pentachlorophenol, benzo(a)anthracene, chyrsene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, dibenz(a,h)anthracene, napthalene, phenanthrene, and/or carbazole. As a result, ADEM required BP&P to submit a facility-wide proposal, including appropriate justification per Appendix C of the Post Closure Permit, for implementation of Corrective Measures (Reference 7).

The CMS was finalized in 2005. The study concluded that the existing groundwater treatment system, along with the installation of a security fence around the perimeter of the site and deed restrictions on use of the facility property would be sufficient to provide adequate protection for humans and the environment. These additional measures (deed restrictions and security fencing) were completed in 2005 (Reference 8). ADEM approved the revised CMS, and incorporated the revision through modification number two of the facility's AHWMMA Post-Closure Permit. SWMU 2 would be subject to corrective measures (Reference 9).

On November 5, 2014, ADEM personnel inspected SWMU 2. The concrete underlying the tramway tracks was intact. No staining, new releases, or cracks were observed on or along the tramways and concrete (Photographs 12, 13). The security fence for the facility was inspected by ADEM personnel on November 5-6, 2014. It was installed as part of the corrective measures for this unit. Three areas of the security fence appeared to have some deficiencies. At the northern end of the facility property, the fence was open, allowing access to the facility (Photographs 8, 9). At the southwest corner of the facility, two stretches of the southern fence had gaps between the bottom of the fence and the ground (Photographs 10, 11) which would allow access to the facility.

Based on the unit history, the RFI, the CMS, and the findings of the current VSI, the probability of releases from SWMU 2 to soils is high, the probability of releases to groundwater is medium, and the probability of releases to air, surface water, and subsurface gasses is low. BP&P should continue groundwater remediation and institutional controls for SWMU 2 as required by the facility's Hazardous Waste Facility Permit and the Corrective Action Plan. In addition, findings during the VSI indicated that the security fence requires re-evaluation.

4.3 SWMU 3 Creosote Oil/Water Separator

The separator was a covered tank which sat on a concrete base and was surrounded by a low dike. It was south of the wood treating plant and adjacent to the two product creosote tanks (Figure 13). It is not known when the concrete base was installed. The tank began operation in 1958. Process water from the condenser, the wood treatment cylinder, and the sump at the north end of the wood preserving plant (SWMU 10) was sent to the separator where the phased creosote was separated and sent to the raw creosote tanks (AOC-A). Water was sent to the wastewater and rainwater storage tank (SWMU 12).

In 1988, a RFA was completed for BP&P. During the VSI, the inspector observed staining on the base of the tank but found no major cracks. Stains were also found on the outside of the tank. The RFA concluded the staining indicated releases may have occurred and the potential for releases to soils and groundwater was moderate to high. The report recommended examining the concrete pad to ensure it was free of cracks or other pathways to soil or groundwater, constructing a roof over the area, and completion of the low dike (Reference 2). EPA and ADEM issued BP&P a Hazardous Waste Facility Permit in 1989. Paragraph II.D.1 of the permit required BP&P to conduct a RFI for SWMUs 2, 3, 4, 8, 9, 10, 21, 22, and AOC A. The EPA approved work plan was completed and implemented in 1993. The workplan indicated the tanks (SWMU 3 and AOC A) were removed sometime during 1988 (References 3, 32).

The RFI report was finalized in 1999. The creosote oil/water separator (SWMU 3) and the raw creosote tanks (AOC A) were evaluated as one unit as all three tanks were located within one containment area. The investigation for the tanks involved breaking through the existing concrete at two locations between the points where the tanks previously existed. Samples were obtained at 0 to 1 feet and 4 to 5 feet in depth. All of the samples obtained had physical evidence of contamination in the form of odor. The shallow samples exhibited the highest total concentration of K001 constituents of any samples during the investigation. These two samples were subsequently analyzed for all detectable constituents via Method 8270. Several other creosote constituents were identified, but no other compounds were found.

Although there were several creosote compounds found at levels in excess of 1,000 ppm, in general, these levels were not above EPA's threshold action levels. There were six compounds found above EPA's threshold action levels. These compounds were carbazole, indeno(1,2,3-c,d)pyrene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, and benzo(a)anthracene.

The report concluded several constituents were identified in soils above EPA’s ingestion based thresholds of concern; however, the soils pathway was eliminated by the existing concrete slab and roof of the new treatment building. The structure would prevent any rainfall infiltration. In addition, the RFI proposed additional institutional controls (security fencing and deed use restrictions) to reduce exposure (Reference 6).

ADEM conditionally approved the report indicating all SWMUs and AOC A (as shown in the draft RFI) were shown to exceed action levels for different combinations of pentachlorophenol, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, dibenz(a,h)anthracene, napthalene, phenanthrene, and/or carbazole. As a result, ADEM required BP&P to submit a facility-wide proposal, including appropriate justification per Appendix C of the Post Closure Permit, for implementation of Corrective Measures (Reference 7).

The CMS was finalized in 2005. The study concluded that the existing groundwater treatment system, along with the installation of a security fence around the perimeter of the site and deed restrictions on use of the facility property would be sufficient to provide adequate protection for humans and the environment. The additional measures (deed restrictions and security fencing) were completed in 2005 (Reference 8). ADEM approved the revised CMS, and incorporated the revision through modification number two of the facility’s AHWMMA Post-Closure Permit. SWMU 3 would be subject to corrective measures (Reference 9).

On November 5, 2014, ADEM personnel inspected the former location of SWMU 3 and AOC A. The tanks and oil/water separator had been removed (Photograph 14). No stains or releases

were found in the area formerly occupied by the units. The security fence for the facility was inspected by ADEM personnel on November 5-6, 2014. It was installed as part of the corrective measures for this unit. Three areas of the security fence appeared to have some deficiencies. At the northern end of the facility property, the fence was open, allowing access to the facility (Photographs 8, 9). At the southwest corner of the facility, two stretches of the southern fence had gaps between the bottom of the fence and the ground (Photographs 10, 11) which would allow access to the facility.

Based on the unit history, the RFI, the CMS, and the findings of the current VSI, the probability of releases from SWMU 3 and AOC A to soils is high, the probability of releases to groundwater is medium, while the probability of releases to air, surface water, and subsurface gasses is low. BP&P should continue groundwater remediation and institutional controls for SWMU 3 and AOC A as required by the facility's Hazardous Waste Facility Permit and the Corrective Action Plan. In addition, findings during the VSI indicated that the security fence requires re-evaluation.

4.4 SWMU 4 Treated Pole Storage Area

This unit is used for the storage of treated logs prior to shipment to customers. The unit is a 5-acre area located to the north of the wood treatment plant and south and west of the Closed Surface Impoundment (SWMU 1) (Figure 13). The Buried Pipe to the Closed Surface Impoundment (SWMU 11) passes through the treated pole storage area. The area is covered by dirt and contains little or no vegetation. The logs are stored in piles by type, wherever there is available space. The treated pole storage area has been in use since 1958 and is currently in use.

In 1988, a RFA was completed for BP&P. During the VSI, the dirt appeared to be relatively new as there was little staining. The same observation was made by inspectors from the State of Alabama. Liquid creosote and pentachlorophenol drippage from the freshly treated logs was present. The report concluded the lack of secondary containment and the direct contact with the soil caused a high potential for releases to surface waters through the swamp and drainage pond. The potential for release through subsurface gas generation was low based on the relative non-volatility of the preservatives. The report recommended soil sampling to characterize the nature and extent of the releases which occurred from the unit to the soil. The report also recommended unannounced inspections of the process (Reference 2).

EPA and ADEM issued BP&P a Hazardous Waste Facility Permit in 1989. Paragraph II.D.1 of the permit required BP&P to conduct a RFI for SWMUs 2, 3, 4, 8, 9, 10, 21, 22, and AOC A. The EPA approved work plan was completed and implemented in 1993 (References 3, 32).

The RFI report was finalized in 1999. The treated pole storage area was investigated by utilizing a grid and random number sequence to select sampling points. In addition, one biased sampling point was selected in an attempt to demonstrate worst case conditions. A total of 9 sample points were selected. At the randomly selected points, samples were taken from the surface to 1 foot in depth. At the biased sampling point, additional samples were taken at 3 to 4 feet and 5 to 6 feet.

Of the nine surface samples, six showed detectable levels of pentachlorophenol. Of these six, five also reported one or more creosote constituents present. One sample reported only a single creosote constituent.

The deeper samples still showed very low, marginally detectable, levels of pentachlorophenol. Sample 4-9A, the surface sample of the biased sampling point, showed the highest level of

pentachlorophenol of any sample in the manufacturing area of the site. At EPA's direction, this sample point was resampled and analyzed for chlorinated dioxins and furans by Method 8290. The dioxin analyses appeared to indicate somewhat higher levels than expected based upon the pentachlorophenol levels. This phenomenon was reported in the literature as due to the somewhat more refractory nature of these materials relative to pentachlorophenol. Dioxin levels varied from non-detectable levels of 2378-TCDD to 1.2 ppm of OCDD.

The results of sampling in the treated pole storage area confirmed the acknowledged fact that this area has detectable levels of wood preserving constituents as a result of the storage of finished products. The levels found suggested that natural attenuation mechanisms are working to prevent a continuing buildup of these constituents. The potential environmental impact of the low levels of constituents in the soils was far lower than the potential impacts associated with the finished products that are stored there. Surface water impacts due to storm water run-off appeared to be the most significant potential route of exposure. Prior monitoring of MW-1A demonstrated a lack of groundwater impact and any potential impact would be of little significance in comparison to the known existing conditions. The potential surface water exposure is being managed by the existing NPDES permit for storm water leaving the drainage pond. Additional run-off sampling, ahead of the pond, was conducted as part of the investigations for SWMU 21. In addition, the RFI proposed additional institutional controls (security fencing and deed use restrictions) to reduce exposure (Reference 6).

ADEM conditionally approved the report indicating all SWMUs and AOC A (as shown in the draft RFI) were shown to exceed action levels for different combinations of pentachlorophenol, benzo(a)anthracene, chyrsene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, dibenz(a,h)anthracene, napthalene, phenanthrene, and/or carbazole. As a result, ADEM required BP&P to submit a facility-wide proposal, including appropriate justification per Appendix C of the Post Closure Permit, for implementation of Corrective Measures (Reference 7).

The CMS was finalized in 2005. The study concluded that the existing groundwater treatment system, along with the installation of a security fence around the perimeter of the site and deed restrictions on use of the facility property would be sufficient to provide adequate protection for humans and the environment. These additional measures (deed restrictions and security fencing) were completed in 2005 (Reference 8). ADEM approved the revised CMS, and incorporated the revision through modification number two of the facility's AHWMMA Post-Closure Permit. SWMU 4 would be subject to corrective measures (Reference 9).

On November 5-6, 2014, ADEM personnel evaluated SWMU 4. Untreated kiln dried poles were generally being stored west of the tramway (SWMU 2) while treated poles were stored east of the tramway (Photographs 15-17). No large releases or discolorations were observed on the soil covering SWMU 4; however, a BP&P employee was observed collecting drippage from treated poles. This employee inspects the treated pole storage area daily and removes any drippage he finds. The drippage (F032) is placed in the 55-gallon hazardous waste drum in the satellite accumulation area at the treatment plant.

The security fence for the facility was inspected by ADEM personnel on November 5-6, 2014. It was installed as part of the corrective measures for this unit. Three areas of the security fence appeared to have some deficiencies. At the northern end of the facility property, the fence was open, allowing access to the facility (Photographs 8, 9). At the southwest corner of the facility, two stretches of the southern fence had gaps between the bottom of the fence and the ground (Photographs 10, 11) which would allow access to the facility.

Based on the unit history, the RFI, the CMS, and the findings of the current VSI, the probability of releases from SWMU 4 to soils is high, the probability of releases to groundwater is medium, while the probability of releases to air, surface water, and subsurface gasses is low. BP&P should continue groundwater remediation and institutional controls for SWMU 4 as required by the facility's Hazardous Waste Facility Permit and the Corrective Action Plan. BP&P should evaluate the treatment process to ensure no drippage occurs in the treated pole storage area. In addition, findings during the VSI indicated that the security fence requires re-evaluation.

4.5 SWMU 5 Liquid Loading and Unloading Area

The Liquid Loading and Unloading Area was an unsheltered, curbed concrete pad measuring 25 feet by 45 feet, located outside, at the southeast corner of the Wood Preserving Plant (Figure 13). It was adjacent to the Waste Water Treatment Plant (SWMUs 12-20). A concrete base, poured in 1985, underlies the loading and unloading area and a low dike surrounds it. A sump, was along the west side of the area and extended its length. The sump was approximately eight feet wide and three feet deep. This sump also collected potentially spilled liquids from the Raw Creosote Tanks (AOC A), the Oil/ Water Separators (SWMUs 8 & 9), and the Creosote Oil/ Water Separator (SWMU 3). Liquid creosote and pentachlorophenol were unloaded at the Liquid Loading and Unloading Area and pumped into product storage tanks. The loading and unloading area began use in 1985 but its use was discontinued in 1991 (References 2, 32).

In 1988, a RFA was completed for BP&P. Releases were observed during the VSI on the concrete dikes and an organic sludge was observed on the walls of the sump. The report concluded the potential for release to the soil and groundwater was low to moderate. The concrete pad in the area was new, only minor surficial cracking was observed at the time of the VSI. Thus, this was not a major pathway for release of preservative to the soil and groundwater. The dike surrounding the area was low and might not provide adequate storage capacity in the event of a spill. The report recommended the concrete pad underlying the area be thoroughly examined to assure that it was free of cracks and other pathways to soil or groundwater. The capacity of the area to contain spills should be determined and an assessment made to determine if the dike should be raised or if automatic pumps (to remove spills) should be Installed (Reference 2)

EPA and ADEM issued BP&P a Hazardous Waste Facility Permit in 1989. Paragraph III.C of the permit required BP&P to conduct Confirmatory Sampling for SWMUs 5, 6, 7, and 11 (Reference 3). The EPA approved work plan was completed and implemented in 1991.

The Confirmatory Sampling (CS) report was finalized in 1991. Soil samples were taken from four locations from 0 to 18 inches in depth. Sample number 2 was taken immediately adjacent to the only significant crack in the concrete slab. A portion of each sample was analyzed for the total extractable content of Total Petroleum Hydrocarbons (TPH) and the K001 list of constituents found in Appendix VII, 40 CFR Part 261. A portion of each sample was extracted by the Toxicity Characteristic Leaching Procedure (TCLP) and the resulting filtered water extract was analyzed for metals, TPH, and for the K001 constituents.

The totals analyses of the four soil samples for the K001 Appendix VII compounds showed fluoranthene (7.2 mg/kg) and benzo(b)fluoranthene (13.7 mg/kg) in one sample. The analyses of the TCLP extracts for the same compounds reported no K001 Appendix VII compounds present at the method detection limit (MDL). The analyses for TPH reported a range of 11 mg/kg to 108 mg/kg. The TCLP extracts for metals contained barium (0.27 mg/kg to 1.63 mg/kg) but no metals were detected at or above the regulatory threshold (Reference 4).

After reviewing the report, ADEM required SWMU 5 to be assessed during the RFI (Reference 5).
The RFI report was finalized in 1999. The sampling planned for the RFI included two additional soil samples further removed from this unit. The sample results showed levels of K001 constituents similar to the prior confirmatory sampling, but a larger number of constituents were identified.

The results of the soil sampling conducted for this unit suggested that the soils in the immediate vicinity of the process area and treated pole storage area contain measurable preservative constituents. The results did not suggest that the source of these constituents was SWMU 5, as the levels of constituents did not decline with distance from this unit. The TCLP results indicate a low potential for mobility. Although several constituents were identified at above ingestion based thresholds of concern, the potential risk associated with these soils was small, and the proposed additional institutional controls (security fencing and deed use restrictions) should be sufficient to reduce exposure (Reference 6).

ADEM conditionally approved the report indicating all SWMUs and AOC A (as shown in the draft RFI) were shown to exceed action levels for different combinations of pentachlorophenol, benzo(a)anthracene, chyrsene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, dibenz(a,h)anthracene, napthalene, phenanthrene, and/or carbazole. As a result, ADEM required BP&P to submit a facility-wide proposal, including appropriate justification per Appendix C of the Post Closure Permit, for implementation of Corrective Measures (Reference 7).

The CMS was finalized in 2005. The study concluded that the existing groundwater treatment system, along with the installation of a security fence around the perimeter of the site and deed restrictions on use of the facility property would be sufficient to provide adequate protection for humans and the environment. These additional measures (deed restrictions and security fencing) were completed in 2005 (Reference 8). ADEM approved the revised CMS, and incorporated the revision through modification number two of the facility's AHWMMA Post-Closure Permit. SWMU 5 would be subject to corrective measures (Reference 9).

On November 5, 2014, ADEM personnel inspected SWMU 5. The former loading dock was not being used. The floor was clean. No stains or cracks were found (Photograph 18)

The security fence for the facility was inspected by ADEM personnel on November 5-6, 2014. It was installed as part of the corrective measures for this unit. Three areas of the security fence appeared to have some deficiencies. At the northern end of the facility property, the fence was open, allowing access to the facility (Photographs 8, 9). At the southwest corner of the facility, two stretches of the southern fence had gaps between the bottom of the fence and the ground (Photographs 10, 11) which would allow access to the facility.

Based on the unit history, the CS Report, the RFI, the CMS, and the findings of the current VSI, the probability of releases from SWMU 5 to soils is high, the probability of releases to groundwater is medium, while the probability of releases to air, surface water, and subsurface gasses is low. BP&P should continue groundwater remediation and institutional controls for SWMU 5 as required by the facility's Hazardous Waste Facility Permit and the Corrective Action Plan. In addition, the findings of the VSI indicated that the security fence requires re-evaluation.

4.6 SWMU 6 Buried Debris West of the Closed Impoundment

This unit is located at the north end of the Treated Pole Storage Area (SWMU 4) and west of the Closed Impoundment (SWMU 1) (Figure 13). The debris consisted of scrap metal including metal from the old tramway system and at least one drum. It is not known when the debris was buried.

In 1988, a RFA was completed for BP&P. The extent of this burial could not be determined during the VSI and the presence of contamination in these materials could not be determined. The report found the potential for releases of the hazardous constituents from this unit depended on the type of waste disposed in this area. If hazardous wastes or constituents were disposed, the absence of controls created a high potential for releases to soil and groundwater. The RFA concluded the facility should demonstrate that no material with hazardous constituents of concern was buried here or, alternatively, conduct sampling of the soil and groundwater to determine if releases occurred (Reference 2).

EPA and ADEM issued BP&P a Hazardous Waste Facility Permit in 1989. Paragraph III.C of the permit required BP&P to conduct Confirmatory Sampling for SWMUs 5, 6, 7, and 11 (Reference 3). The EPA approved work plan was completed and implemented in 1991.

The CS report was finalized in 1991. Soil samples were taken from ten locations within the unit. Samples numbered 1 through 6 were taken from 0 to 18 inches in depth from the face of a filled area which falls off abruptly from 2 to 10 feet into a hardwood thicket. Samples numbered 7 through 10 were taken from the upper 6 inches in areas in the hardwood thicket, below the first sample sites. A portion of each sample was analyzed for the total extractable content of TPH and the K001 list of constituents found in Appendix VII, 40 CFR Part 261. A portion of each sample was extracted by the TCLP and the resulting filtered water extract was analyzed for metals, TPH, and for the K001 constituents.

The totals analyses of the ten soil samples for the K001 Appendix VII compounds reported detectable levels of these compounds in several samples. Pentachlorophenol was reported in sample 1 (37 mg/kg), sample 2 (161 mg/kg), and sample 10 (109 mg/kg). Pentachlorophenol was the only acid extractable compound detected. Fluoranthene was reported in sample 1 (107 mg/kg), sample 9 (9.7 mg/kg), and sample 10 (33 mg/kg). Benzo(b)fluoranthene was reported in sample 1 (54 mg/kg) and sample 5 (7.6 mg/kg). Phenanthrene was detected in sample 10 (23 mg/kg) and chrysene was detected in sample 1 (42 mg/kg). All totals results exceeded the MCLs. The analyses of TCLP extracts from these samples for the same list of compounds reported pentachlorophenol in sample 2 (0.07 mg/L) and fluoranthene in sample 1 (0.04 mg/L). The analyses of the samples for TPH reported detectable levels in 9 of the 10 samples (<10 mg/kg-675 mg/kg). The analyses of the TCLP extracts for TPH reported all concentrations as less than the detection limit of 5 ppm. Analyses of the TCLP extracts for metallic compounds reported only barium in each sample (0.79 mg/L-2.97 mg/kg) above MDLs but the concentrations did not exceed the regulatory threshold for barium (Reference 4).

After reviewing the report, ADEM required SWMU 6 to be assessed during the RFI (Reference 5).

The RFI report was finalized in 1999. No additional sampling was proposed in the RFI for SWMU 6, other than that to be conducted in conjunction with investigations of SWMU 2 and SWMU 4, which overlay this unit. The investigations conducted for the overlying units (only sample 4-1 overlay the area of SWMU 6) did not reveal the existence of constituents of concern

which could be attributed to SWMU 6. The RFI concluded there was no environmental risk associated with this unit (Reference 6).

ADEM conditionally approved the report indicating all SWMUs and AOC A (as shown in the draft RFI) were shown to exceed action levels for different combinations of pentachlorophenol, benzo(a)anthracene, chyrsene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, dibenz(a,h)anthracene, napthalene, phenanthrene, and/or carbazole. As a result, ADEM required BP&P to submit a facility-wide proposal, including appropriate justification per Appendix C of the Post Closure Permit, for implementation of Corrective Measures (Reference 7).

The CMS was finalized in 2005. The study concluded that the existing groundwater treatment system, along with the installation of a security fence around the perimeter of the site and deed restrictions on use of the facility property would be sufficient to provide adequate protection for humans and the environment. These additional measures (deed restrictions and security fencing) were completed in 2005 (Reference 8). ADEM approved the revised CMS, and incorporated the revision through modification number two of the facility's AHWMMA Post-Closure Permit. SWMU 6 would be subject to corrective measures (Reference 9).

On November 5, 2014, ADEM personnel inspected SWMU 6. The disposal site contained concrete and metal roofing that was heavily overgrown with vegetation (Photograph 19). No new releases or disposal was observed.

The security fence for the facility was inspected by ADEM personnel on November 5-6, 2014. It was installed as part of the corrective measures for this unit. Three areas of the security fence appeared to have some deficiencies. At the northern end of the facility property, the fence was open, allowing access to the facility (Photographs 8, 9). At the southwest corner of the facility, two stretches of the southern fence had gaps between the bottom of the fence and the ground (Photographs 10, 11) which would allow access to the facility.

Based on the unit history, the RFI, the CMS, and the findings of the current VSI, the probability of releases from SWMU 6 to soils is high, the probability of releases to groundwater is medium, while the probability of releases to air, surface water, and subsurface gasses is low. BP&P should continue groundwater remediation and institutional controls for SWMU 6 as required by the facility's Hazardous Waste Facility Permit and the Corrective Action Plan. In addition, the findings of the VSI indicated that the security fence requires re-evaluation.

4.7 SWMU 7 Disposal Area

The disposal area consists of two areas located south and east of the Closed Impoundment (SWMU 1), along the eastern edge of the property line (Figure 13). Large quantities of scrap waste were present in these areas; including the heads of old wood treating cylinders, pipes, a pump, and broken treated poles. The operational dates for the unit are unknown.

In 1988, a RFA was completed for BP&P. The report found the potential for releases of the hazardous constituents from this unit depended upon the type of waste disposed in this area. If hazardous wastes or constituents were disposed, the absence of controls created a high potential for releases to soil and groundwater. The RFA concluded the facility should demonstrate that no material with hazardous constituents of concern was buried in the disposal areas or, alternatively, conduct sampling of the soil and groundwater in the disposal areas to determine if releases occurred (Reference 2).

EPA and ADEM issued BP&P a Hazardous Waste Facility Permit in 1989. Paragraph III.C of the permit required BP&P to conduct Confirmatory Sampling for SWMUs 5, 6, 7, and 11 (Reference 3). The EPA approved work plan was completed and implemented in 1991. The CS report was finalized in 1991. Soil samples were taken from six locations from 0 to 18 inches in depth. A portion of each sample was analyzed for the total extractable content of TPH and the K001 list of constituents found in Appendix VII, 40 CFR Part 261. A portion of each sample was extracted by the TCLP and the resulting filtered water extract was analyzed for metals, TPH, and for the K001 constituents.

The totals results for all six samples showed only one sample (Sample 2) contained any constituents (pentachlorophenol-192 mg/kg; P-Chloro-M-Cresol-40/mg/kg; and phenanthrene-59 mg/kg) while the TCLP analysis for the samples had one constituent present in one sample (Sample 5-pentachloropenol [0.06 mg/L]). The TPH concentrations range from <5 mg/kg to 397 mg/kg. The TCLP metals results showed only barium was present (0.87 mg/kg to 2.51 mg/kg) but not at concentrations which exceeded regulatory levels (Reference 4).

After reviewing the report, ADEM required SWMU 7 to be assessed during the RFI (Reference 5)

The RFI report was finalized in 1999. No additional sampling was proposed in the RFI work plan for SWMU 7, other than that associated with SWMU No.4. The only sample collected in association with SWMU 4 that overlay one portion of SWMU 7 was Sample 4-5. The totals results for this sample contained pentachlorophenol at 4.05 mg/kg and the TCLP result contained pentachlorophenol at 0.42 mg/L. The report concluded the investigations previously conducted, and the present investigations of SWMU No. 4, did not reveal conditions of environmental significance that could be attributed to SWMU 7 (Reference 6).

ADEM conditionally approved the report indicating all SWMUs and AOC A (as shown in the draft RFI) were shown to exceed action levels for different combinations of pentachlorophenol, benzo(a)anthracene, chyrsene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, dibenz(a,h)anthracene, napthalene, phenanthrene, and/or carbazole. As a result, ADEM required BP&P to submit a facility-wide proposal, including appropriate justification per Appendix C of the Post Closure Permit, for implementation of Corrective Measures (Reference 7).

The CMS was finalized in 2005. The study concluded that the existing groundwater treatment system, along with the installation of a security fence around the perimeter of the site and deed restrictions on use of the facility property would be sufficient to provide adequate protection for humans and the environment. These additional measures (deed restrictions and security fencing) were completed in 2005 (Reference 8). ADEM approved the revised CMS, and incorporated the revision through modification number two of the facility's AHWMMA Post-Closure Permit. SWMU 7 would be subject to corrective measures (Reference 9).

On November 5, 2014, ADEM personnel inspected both locations of SWMU 7. The disposal site, immediately north of the biological treatment area containment wall, was covered with grass (Photograph 20). No new releases or disposal was observed. The disposal site, located on the eastern property boundary and southeast of the biological treatment unit, was covered in sand and healthy vegetation (Photograph 21). No new releases or disposal was observed.

The security fence for the facility was inspected by ADEM personnel on November 5-6, 2014. It was installed as part of the corrective measures for this unit. Three areas of the security fence

appeared to have some deficiencies. At the northern end of the facility property, the fence was open, allowing access to the facility (Photographs 8, 9). At the southwest corner of the facility, two stretches of the southern fence had gaps between the bottom of the fence and the ground (Photographs 10, 11) which would allow access to the facility.

Based on the unit history, the RFI, the CMS, and the findings of the current VSI, the probability of releases from SWMU 7 to soils is high, the probability of releases to groundwater is medium, while the probability of releases to air, surface water, and subsurface gasses is low. BP&P should continue groundwater remediation and institutional controls for SWMU 7 as required by the facility's Hazardous Waste Facility Permit and the Corrective Action Plan. In addition, the findings of the VSI indicated that the security fence requires re-evaluation.

4.8 SWMUs 8-9 Oil/Water Separator Tanks

These units are in the southwest corner of the wood preserving plant (Figure 13). Each tank receives process and condensed water from the pentachlorophenol wood treating process. The tanks are converted railroad tank cars and have no internals. They are set on a concrete base and are surrounded by a partial concrete dike. After the oil and water separate into phases, water was sent to the waste water treatment plant and pentachlorophenol was pumped to the pentachlorophenol storage tank. The tanks separators have been in operation since 1958.

In 1988, a RFA was completed for BP&P. Stains were discovered on the concrete base in the general area of the separators. The RFA concluded the staining indicated releases may have occurred and the potential for releases to soils and groundwater was moderate to high. The report recommended examining the concrete pad to ensure it was free of cracks or other pathways to soil or groundwater, constructing a roof over the area and completion of the low dike (Reference 2).

EPA and ADEM issued BP&P a Hazardous Waste Facility Permit in 1989. Paragraph II.D.1 of the permit required BP&P to conduct a RFI for SWMUs 2, 3, 4, 8, 9, 10, 21, 22, and AOC A. The EPA approved work plan was completed and implemented in 1993 (References 3, 32).

The RFI report was finalized in 1999. Three soil samples were collected immediately outside of the existing secondary containment system, whose edge was just beyond the oil/water separators. The results showed measurable levels of preservative constituents in all samples. The analyses conducted for this unit confirmed the fact that soils in and around the process area contain wood preserving constituents. The report concluded these SWMUs, in present operating condition, presented very little environmental risk. The limited risk associated with general past operating practices was being effectively managed by environmental controls in place (Reference 6).

ADEM conditionally approved the report indicating all SWMUs and AOC A (as shown in the draft RFI) were shown to exceed action levels for different combinations of pentachlorophenol, benzo(a)anthracene, chyrsene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, dibenz(a,h)anthracene, napthalene, phenanthrene, and/or carbazole. As a result, ADEM required BP&P to submit a facility-wide proposal, including appropriate justification per Appendix C of the Post Closure Permit, for implementation of Corrective Measures (Reference 7).

The CMS was finalized in 2005. The study concluded that the existing groundwater treatment system, along with the installation of a security fence around the perimeter of the site and deed restrictions on use of the facility property would be sufficient to provide adequate protection for

humans and the environment. These additional measures (deed restrictions and security fencing) were completed in 2005 (Reference 8). ADEM approved the revised CMS, and incorporated the revision through modification number two of the facility's AHWMMA Post-Closure Permit. SWMUs 8 and 9 would be subject to corrective measures (Reference 9).

On November 5, 2014, ADEM personnel inspected SWMUs 8 & 9. The oil/water separators operation has undergone modification. After the oil and water separate into phases, the waters are sent to the wash water tank and oils are pumped to the work tank. Both tanks and the sump were intact (Photograph 22). No releases were found under or around the tanks or sump.

The security fence for the facility was inspected by ADEM personnel on November 5-6, 2014. It was installed as part of the corrective measures for this unit. Three areas of the security fence appeared to have some deficiencies. At the northern end of the facility property, the fence was open, allowing access to the facility (Photographs 8, 9). At the southwest corner of the facility, two stretches of the southern fence had gaps between the bottom of the fence and the ground (Photographs 10, 11) which would allow access to the facility.

Based on the unit history, the RFI, the CMS, and the findings of the current VSI, the probability of releases from SWMUs 8 and 9 to soils is high, the probability of releases to groundwater is medium, while the probability of releases to air, surface water, and subsurface gasses is low. BP&P should continue groundwater remediation and institutional controls for SWMUs 8 and 9 as required by the facility's Hazardous Waste Facility Permit and the Corrective Action Plan. In addition, the findings of the VSI indicated that the security fence requires re-evaluation.

4.9 SWMU 10 Sump at North end of Wood Preserving Plant

This unit was immediately below the doors of the two wood treatment cylinders at the north end of the Wood Preserving Plant (Figure 13). It began operation in 1958. Water and wood preservative accumulated in this sump when the retort doors were opened after treatment of poles. A blocking device (a bag filled with sand) was used to direct flows based on preservative type into different areas of the sump. The liquids were then pumped to the corresponding oil/water separator (SWMUs 3, 8 & 9). The sump was approximately 15 feet long and 6 feet wide with a stepped bottom. Liquids were withdrawn by the use of a suction line to a 2 inch centrifugal pump.

In 1988, a RFA was completed for BP&P. During the VSI, staining was found on the concrete walls of the sump which indicated overflow of liquids from the sump. The RFA concluded the potential for release to soil and groundwater was moderate to high. The report recommended sampling of soils immediately in front of the sump (Reference 2).

EPA and ADEM issued BP&P a Hazardous Waste Facility Permit in 1989. Paragraph II.D.1 of the permit required BP&P to conduct a RFI for SWMUs 2, 3, 4, 8, 9, 10, 21, 22, and AOC A. The EPA approved work plan was completed and implemented in 1993 (References 3, 32).

Sometime prior to 1992, the sump was cleaned. There was no evidence that the sump had leaked and the sump was filled with concrete (Reference 32)

The RFI report was finalized in 1999. At the first sample point, the surface sample contained levels of constituents typical of soils within the process area. The deeper sample was reported to be clean. At the second sample point, the surface sample had low, but measurable, levels of constituents reported, but the deeper sample showed higher levels. Since this could have indicated a leak in the sump, this same sample was reanalyzed, and the results were even

higher. Baldwin operating personnel, whose inspection of the sump at closure convinced them that the sump could not have been leaking, suggested that the results of sample 10-4 could have been the result of contaminated surface soils being used as fill around the sump when the forms were removed at the time of construction. To confirm this possibility, this point was resampled approximately 12 inches removed from the original sample point. The analysis of this sample, 10-4A, shows the soils to be clean.

The RFI concluded the sampling conducted for this unit revealed the presence of low levels of preservative constituents in the surface soil samples. The levels found were typical of those found elsewhere around the process area. The data did not suggest that the sump was leaking or that it was a significant source of any release. Also, as the sump had been filled, and was no longer active, it did not present any future environmental risk (Reference 6).

ADEM conditionally approved the report indicating all SWMUs and AOC A (as shown in the draft RFI) were shown to exceed action levels for different combinations of pentachlorophenol, benzo(a)anthracene, chyrsene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, dibenz(a,h)anthracene, napthalene, phenanthrene, and/or carbazole. As a result, ADEM required BP&P to submit a facility-wide proposal, including appropriate justification per Appendix C of the Post Closure Permit, for implementation of Corrective Measures (Reference 7).

The CMS was finalized in 2005. The study concluded that the existing groundwater treatment system, along with the installation of a security fence around the perimeter of the site and deed restrictions on use of the facility property would be sufficient to provide adequate protection for humans and the environment. These additional measures (deed restrictions and security fencing) were completed in 2005 (Reference 8). ADEM approved the revised CMS, and incorporated the revision through modification number two of the facility's AHWMMA Post-Closure Permit. SWMU 10 would be subject to corrective measures (Reference 9).

On November 5, 2014, ADEM personnel inspected the former location of SWMU 10. The former sump location is covered by concrete (Photograph 23). No releases were found on or around the former sump.

The security fence for the facility was inspected by ADEM personnel on November 5-6, 2014. It was installed as part of the corrective measures for this unit. Three areas of the security fence appeared to have some deficiencies. At the northern end of the facility property, the fence was open, allowing access to the facility (Photographs 8, 9). At the southwest corner of the facility, two stretches of the southern fence had gaps between the bottom of the fence and the ground (Photographs 10, 11) which would allow access to the facility.

Based on the unit history, the RFI, the CMS, and the findings of the current VSI, the probability of releases from SWMU 10 to soils is high, the probability of releases to groundwater is medium, while the probability of releases to air, surface water, and subsurface gasses is low. BP&P should continue groundwater remediation and institutional controls for SWMU 10 as required by the facility's Hazardous Waste Facility Permit and the Corrective Action Plan. In addition, the findings of the VSI indicated that the security fence requires re-evaluation.

4.10 SWMU 11 Buried Pipe to closed Surface Impoundment

A 6-inch cast iron underground pipe was used from 1975 to 1986 to transport wastewaters from the wood treating process to the surface impoundment (SWMU 1) (Figure 13). These waters

contained suspended and dissolved materials, including creosote and pentachlorophenol. With the closure of SWMU 1, the pipe was emptied and capped at both ends.

In 1988, a RFA was completed for BP&P. The report concluded the potential for release to soil and groundwater was dependent on the integrity of the pipe. The report recommended examining the closure records for SWMU 1 to determine if the pipe was cleaned and capped. Otherwise determine the location and integrity of the pipe. If the integrity was impaired, soil and groundwater sampling could be necessary (Reference 2).

EPA and ADEM issued BP&P a Hazardous Waste Facility Permit in 1989. Paragraph III.C of the permit required BP&P to conduct Confirmatory Sampling for SWMUs 5, 6, 7, and 11 (Reference 3). The EPA approved work plan was completed and implemented in 1991.

The CS report was finalized in 1991. The end of the buried pipeline nearest the closed surface impoundment was located and excavated. The pipeline was found to be 3 inches in diameter with schedule 40 steel and threaded coupling construction.

The elevation of the top of the buried pipe at the closed impoundment was determined to be 9.50 feet below the elevation of the top of the existing bell reducer fitted on the other end of the pipe located in the process area near SWMU No. 5.

A vertical riser of 10 feet in length was fitted to the lower end of the pipe. A vertical riser of 5.7 feet in length was fitted to the higher end of the pipe. City water was introduced into the riser at the upper end of the pipe until water flowed from the riser on the lower end. The riser on the lower end was then capped. Water was added until the upper end riser pipe was full. The system of riser pipes and caps was checked for leaks. A leak was found in the threads on the adapter in the 3-inch by 2-inch bell reducer at the upper end. This leak was corrected and the system was re-filled at 1333 hours, November 13, 1991. The system sat overnight. At 1000 hours, November 14, 1991, the water level was 4-1/2 inches below the top in the 2" ID PVC riser. This drop was due to thermal equalization.

A pressure transducer was lowered into the riser at the upper end and connected to a Hermit 1000 B data logger. The riser was refilled and the hermit was zeroed and programmed to read and record changes in water level (head) in feet at 15 minute intervals. The test was started at 11:21 hours, November 14, 1991 (Data logger time). At 1633 hours, November 14, 1991, the data logger was stopped. The riser pipe was still full at that time.

The data logger record was printed on November 15, 1991. There was no change in recorded water level for 45 minutes, and then the data logger recorded a gradual rise in water level in the next 120 minutes to +0.05 feet at 165 minutes followed by a decrease to +0.03 feet at 300 minutes. The open standpipe was full at the start of the test, so it was not possible for the water level to have risen. The transducer cable was securely taped in place, so the transducer could not have slipped downward. The barometric pressure recorded by the Weather Bureau office in Mobile (about 40 miles west of the site) reported a gradual decrease in pressure throughout the test period. The very minor change recorded by the transducer was attributed to instrument drift (Reference 4).

After reviewing the report, ADEM and EPA determined SWMU 11 required NFA (Reference 5)

On November 5, 2014, ADEM personnel inspected the former location of SWMU 11. The former pipe location was covered in soil and sand (Photograph 24). No releases were found along the path of the former pipeline.

Based on the unit history, the CS Report, and the findings of the current VSI, the probability of releases from SWMU 11 to soils, groundwater, air, surface water, and subsurface gasses is low. NFA is required for SWMU 11 at this time.

4.11 SWMUs 12-20 Wastewater Treatment Plant

These SWMUs were directly east and outside of the Wood Preserving Plant (Figure 13). The wastewater treatment plant began operation in 1984. Water was collected from plant operations, primarily condensers and oil/ water separators (SWMUs 3, 8 & 9), and sent to the 30,000 gallon process waste water and rainwater storage tank (SWMU 12). Next, the water was pumped by a centrifugal pump to a 2,800 gallon cone bottomed flocculation tank (SWMU 13). In this tank, polymeric flocculants were added to the water and the pH was adjusted. The water was mixed by dissolved air flotation, and the resulting "floc" particles would rise to the top of the cone-bottomed tank. The clear water exited through the bottom until DAF skimmings began to pass. Then the flow was directed to the 3,000 gallon Floc Sludge Tank (SWMU 14). The Floc Sludge Tank was periodically emptied by vacuum truck and the wastes were sent to Allied Chemical in Birmingham, Alabama for Incineration. Water from the Floc Tank was pumped through two Filter Beds (SWMU 15) and to a 4,000 gallon Flocced Water Storage Tank (SWMU 16). The water was pumped to an Activated Carbon Filter (SWMU 17), which holds a charge of 3,000 pounds of activated carbon. Spent activated carbon was returned to the manufacture (Calgon), where it was regenerated. Water flowed to the pH Adjustment Tanks (SWMUs 18 and 19) where the water was adjusted to a neutral pH and sent to the water treatment system of the Town of Bay Minette. The pumps and associated piping of this system comprised SWMU 20. With the installation of the corrective action system, upgrades were made to the facility's wastewater management. This entailed closing the old wastewater treatment plant in 1991 when the new plant became operational. (Reference 2)

The SWMUs were evaluated during the VSI, conducted on April 12, 1988. No releases were found at the wastewater treatment units and the potential for release to all environmental pathways was determined to be low. The 1988 RFA recommended NFA for these SWMUs. (Reference 2)

SWMUs12-20 were removed during the early 1990's (Reference 10).

On November 5, 2014, ADEM personnel inspected the former location of SWMUs 12-20. The former wastewater treatment plant location was covered in vegetation, soil, and concrete (Photograph 25). No releases were found on or around the former location of the wastewater treatment plant.

Based on the previous RFA, the unit history, and the findings of the current VSI, the probability of releases from SWMUs 12-20 to soil, groundwater, air, surface water, and subsurface gasses is low. NFA is recommended for SWMUs 12-20 at this time.

4.12 SWMU 21 Drainage Pond and Swamp

The swamp covers the northeastern portion of the facility extending from just north of the recovery wells on to the drainage pond (Figure 13). The drainage pond is at the far northern end of the facility property (Figure 13). The swamp is approximately 7 acres in size while the pond is 1-1/ 4 acres and ranges to 10 feet in depth. Beginning in 1958, untreated waters from

the processing areas exited the site west and north through the swamp and drainage pond. Free drainage of site waste waters was discontinued in 1975 when the spray pond (SWMU 1-Closed Surface Impoundment) became operational. From 1958 to the early 1990's, runoff from the treated pole storage area which contained creosote and pentachlorophenol, flowed through the swamp and accumulated in the pond (Reference 2).

In 1988, a RFA was completed for BP&P. The report concluded the potential for release to air and surface water was low due to waste waters no longer being discharged to the swamp and pond. The report recommended reviewing past sampling records to determine if additional sampling was necessary (Reference 2).

Prior to the issuance of the facility's Hazardous Waste Permit, BP&P completed a Groundwater Quality Assessment for the facility which included an assessment of the groundwater within the swamp. DNAPLs were present in the aquifer materials and overlying silt materials within the swamp (Reference 30). Based on the results of the groundwater assessment, BP&P developed a Corrective Action Plan which included the installation of 2 DNAPL groundwater recovery wells and one additional groundwater recovery well (RW-24) within the boundaries of the swamp to address the contaminant plume (Reference 31). The corrective action system was installed and became operational in 1991.

EPA and ADEM issued BP&P a Hazardous Waste Facility Permit in 1989. Paragraph II.D.1 of the permit required BP&P to conduct a RFI for SWMUs 2, 3, 4, 8, 9, 10, 21, 22, and AOC A. The EPA approved work plan was completed and implemented in 1993 (References 89 Permit, RIF WP).

The RFI report was finalized in 1999. Due to the shallow groundwater table in the swamp, the Eight soil samples collected in the swamp area from the surface to a depth of one foot were used to measure the soil and groundwater conditions. Low levels of wood preserving constituents were identified at 7 of the 8 sampling points. Sample 21-8 had the highest reported pentachlorophenol content and this point was resampled for chlorinated dioxins and furans analysis. The results of these analyses reveal chlorinated dioxins ranging from 10.5 ppt of 2378 2,3,7,8-Tetrachlorodibenzodioxin to .4 ppm of Octachlorodibenzodioxin.

Run-off samples were taken just ahead of the drainage pond during two separate rainfall events. These samples exhibited some variability. The first sample had a single constituent, naphthalene, reported at 10 ppb, which was the method detection limit. The second sample reported 5 constituents, with the highest being pentachlorophenol at 500 ppb. The report postulated it was possible that most of these constituents are associated with sediment, since historic sampling of the pond discharge has seldom shown the presence of preservative constituents, and prior sampling of the pond bottom sediments has shown the presence of these constituents.

The RFI concluded the swamp and drainage pond were significantly impacted by past operating practices, and storm water contaminated by contact with treated wood, continues to flow through these areas. The potential surface water transport pathway was being controlled through the existing NPDES permitting requirements. The existing groundwater contamination was being addressed through the corrective action system. The land surface in the area was generally inaccessible and was covered by a layer of decaying vegetation from the dense hardwood forest. Therefore, the swamp and drainage pond presented a minimal environmental risk due to present operating conditions and the corrective action system (Reference 6).

ADEM conditionally approved the report indicating all SWMUs and AOC A (as shown in the draft RFI) were shown to exceed action levels for different combinations of pentachlorophenol, benzo(a)anthracene, chyrsene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, dibenz(a,h)anthracene, napthalene, phenanthrene, and/or carbazole. As a result, ADEM required BP&P to submit a facility-wide proposal, including appropriate justification per Appendix C of the Post Closure Permit, for implementation of Corrective Measures (Reference 7).

The CMS was finalized in 2005. The study concluded that the existing groundwater treatment system, along with the installation of a security fence around the perimeter of the site and deed restrictions on use of the facility property would be sufficient to provide adequate protection for humans and the environment. These additional measures (deed restrictions and security fencing) were completed in 2005 (Reference 8). ADEM approved the revised CMS, and incorporated the revision through modification number two of the facility's AHWMMA Post-Closure Permit. SWMU 21 would be subject to corrective measures (Reference 9).

On November 5-6, 2014, ADEM personnel inspected SWMU 21. The swamp is divided into a east and west portion by a dirt road which leads from the recovered groundwater pre-treatment area (SWMU 25) north to the drainage pond. Photograph 26 shows a typical view of the swamp. It was taken about midway in the swamp on the west side of the dirt road. The sections of the swamp which were evaluated (mainly those areas around groundwater monitoring wells) were dry to damp. Some small streams were observed on the east of the dirt road. These streams were clear with normal aquatic vegetation being present. No releases or unauthorized disposal areas were found in the swamp. The southern bank of the drainage pond was inspected (Photographs 27-29). No releases were observed on the south bank. The pond waters were clear and no releases were evident within the pond.

The security fence for the facility was inspected by ADEM personnel on November 5-6, 2014. It was installed as part of the corrective measures for this unit. Three areas of the security fence appeared to have some deficiencies. At the northern end of the facility property, the fence was open, allowing access to the facility (Photographs 8, 9). At the southwest corner of the facility, two stretches of the southern fence had gaps between the bottom of the fence and the ground (Photographs 10, 11) which would allow access to the facility.

Based on the unit history, the RFI, the CMS, and the findings of the current VSI, the probability of releases from SWMU 21 to soils and groundwater is high, while the probability of releases to air, surface water, and subsurface gasses is low. BP&P should continue groundwater remediation and institutional controls for SWMU 21 as required by the facility's Hazardous Waste Facility Permit and the Corrective Action Plan. In addition, the findings of the VSI indicated that the security fence requires re-evaluation.

4.13 SWMU 22 Area of Former Direct Discharge of Wastes

Due west of the treatment plant and immediately north of US Highway 31 is a small intermittent stream which contained an area of extensive creosote contamination (Figure 13). The stream flows into the drainage ditch adjacent to the CSX railroad tracks for approximately 550 feet before turning east and entering the on-site swamp. The flow pathway continues through the swamp to terminate in the drainage pond (SWMU 21). From 1958 to 1975, all facility wastes drained offsite through this area (References 2, 6).

In 1988, a RFA was completed for BP&P. The report concluded the potential for release to air and surface water was low due to waste waters no longer being discharged to the stream. The

report recommended reviewing past sampling records to determine if additional sampling was necessary (Reference 2).

EPA and ADEM issued BP&P a Hazardous Waste Facility Permit in 1989. Paragraph II.D.1 of the permit required BP&P to conduct a RFI for SWMUs 2, 3, 4, 8, 9, 10, 21, 22, and AOC A. The EPA approved work plan was completed and implemented in 1993 (References 3, 32).

The RFI report was finalized in 1999. Three samples were collected from the natural drain (stream) prior to it entering the railroad drainage and one sample was collected where the railroad drainage entered the area of SWMU 21. Only one of the three samples taken in the natural drainage gully reported any detectable constituents. The two constituents detected were pentachlorophenol at 0.54 ppm and benzo(b)fluoranthene at 0.35 ppm. The sample taken at the entrance to SWMU No. 21 exhibited contaminant levels typical for that unit, with several constituents in the low ppm range. The TCLP results for sample 22-3 appear to be suspect as most of the constituents of K001 are hydrophobic and exhibit high partition coefficients which could result in low TCLP results.

The RFI concluded SWMU 22 did not present any significant environmental risk. The contaminants found at sample 22-4 were in some cases above ingestion based thresholds of concern, but the lack of access due to the security fence, the active groundwater remediation program, and the land use restrictions would effectively control this potential route of exposure (6).

ADEM conditionally approved the report indicating all SWMUs and AOC A (as shown in the draft RFI) were shown to exceed action levels for different combinations of pentachlorophenol, benzo(a)anthracene, chyrsene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, dibenz(a,h)anthracene, napthalene, phenanthrene, and/or carbazole. As a result, ADEM required BP&P to submit a facility-wide proposal, including appropriate justification per Appendix C of the Post Closure Permit, for implementation of Corrective Measures (Reference 7).

The CMS was finalized in 2005. The study concluded that the existing groundwater treatment system, along with the installation of a security fence around the perimeter of the site and deed restrictions on use of the facility property would be sufficient to provide adequate protection for humans and the environment. These additional measures (deed restrictions and security fencing) were completed in 2005 (Reference 8). ADEM approved the revised CMS, and incorporated the revision through modification number two of the facility's AHWMMA Post-Closure Permit. SWMU 22 would be subject to corrective measures (Reference 9).

On November 5-6, 2014, ADEM personnel inspected SWMU 22. SWMU 22 begins on southwest portion of property (Photographs 10, 11), follows the drainage along the south boundary, turns north at southwest corner, follows the railroad track drainage (east of railroad tracks) (Photograph 30), and near the north end of the tramways (SWMU 2) turns northeast onto facility property and into swamp (SWMU 21) (Photograph 31). The entire aforementioned area of SWMU 22 was evaluated, and no releases were observed. The intermittent stream was dry.

The security fence for the facility was inspected by ADEM personnel on November 5-6, 2014. It was installed as part of the corrective measures for this unit. Three areas of the security fence appeared to have some deficiencies. At the northern end of the facility property, the fence was open, allowing access to the facility (Photographs 8, 9). At the southwest corner of the facility,

two stretches of the southern fence had gaps between the bottom of the fence and the ground (Photographs 10, 11) which would allow access to the facility.

Based on the unit history, the RFI, the CMS, and the findings of the current VSI, the probability of releases from SWMU 22 to soils is high, the probability of releases to groundwater is medium, while the probability of releases to air, surface water, and subsurface gasses is low. BP&P should continue groundwater remediation and institutional controls for SWMU 22 as required by the facility's Hazardous Waste Facility Permit and the Corrective Action Plan. In addition, the findings of the VSI indicated that the security fence requires re-evaluation.

4.14 SWMU 24 New Liquid Unloading Area

The New Liquid Unloading Area was constructed in 1989. It is a concrete pad approximately 40 feet long and 25 feet wide and located between the process area and the product tank (Figure 13). It is sloped to drain to the southeast corner. Drainage from this unit flows into the process area containment system. BP&P designated this system as a SWMU in the 1993 RFI work plan (Reference 32).

On November 5, 2014, ADEM personnel inspected SWMU 24. The unloading area was empty (Photograph 32). The concrete floor was intact and no releases were observed.

Based on the previous RFA, the unit history, and the findings of the current VSI, the probability of releases from SWMU 24 to soil, groundwater, air, surface water, and subsurface gasses is low. NFA is recommended for SWMU 24 at this time.

4.15 SWMU 25 Corrective Action System

The Corrective Action System consists of 24 groundwater pumping wells, 2 DNAPL pumping wells, two oil/water separators, and a biological treatment system which treats contaminated groundwater and DNAPL. It has been in operation since April of 1991. BP&P designated this system as a SWMU in the 1993 RFI work plan.

Twenty three of the groundwater recovery wells (RW 1-23) are located along the downgradient perimeter of the closed surface impoundment (SWMU 1). The surficial aquifer in this area is approximately seven feet thick and the recovery wells capture the groundwater by using a liquid-liquid jet eductor. The design recovery rate was estimated at 20,200 gallons per day based on the average aquifer properties identified in the Groundwater Quality Assessment. The groundwater recovered by these wells is directed to a collection tank. The waters are transferred to the coalescing oil/water separator. The liquids from the coalescing separator are pumped to recirculation tank and then on to the biological treatment unit. These liquids are also use to provide water for the liquid educator system which provides vacuum for the 23 recovery wells. Oils recovered from the coalescing separator tank are pumped to a recovered oil accumulation tank. The oils collected in this tank are sent off-site for recovery.

The final groundwater recovery well at the site (RW-24) is approximately 700 feet north of the other recovery wells and is located at the leading edge of the contaminant plume. This well was expected to recover approximately 625 gallons per day based on the very small aquifer thickness and low permeability in the area. The final two wells that make up the corrective action system are DNAPL recovery wells (DNAPL #1 and #2) which are spaced between the closed impoundment and the leading edge recovery well. Due to the low production volumes, all three of the above mentioned wells operate on timers. Over the course of this system's life, BP&P has attempted to maximize recoveries from these wells, using a variety of pumps and pumping systems.

The recovered groundwater from the DNAPL wells and RW-24 is pumped into an oil/water separator in the pretreatment area. Liquids are pumped into the collection tank where liquids are transferred to the coalescing oil/water separator tank. Oils recovered from the oil/water separator tank are pumped to a recovered oil accumulation tank. The oils collected in this tank are pumped to the oil accumulation tank in the biological treatment system. These oils are periodically removed from the tank and sent off-site for disposal at a TSD (K001 hazardous waste).

The biological treatment system is a fixed-film or fixed-growth system utilizing commercial corrugated plastic media operating in a flooded fully-mixed mode. It receives contaminated groundwater and process wastewaters which have passed through a wastewater treatment system. Aeration and mixing are provided by fine bubble diffusers. Air is supplied by rotary blowers. Nutrient addition is made by use of soluble commercial fertilizers. The system utilizes a series three flow through tanks. Each tank is a fully mixed reactor. After treatment, the waters are discharged to the local POTW (References 32, 33)

On November 5, 2014, the components on the corrective action system were inspected by ADEM personnel. Groundwater recovery wells RW-1 to RW-23 and their associated piping are located north and northeast of the closed surface impoundment (SWMU 1). Each well was intact and appeared to be functioning normally. No releases were found around any of these wells or their associated piping. Photograph 33 shows an example of the recovery wells. DNAPL Wells 1 and 2, along with Recovery Well RW-24 are located east of the dirt road which runs along the central portion of the on-site swamp (SWMU 21). These wells and their associated piping were evaluated. No releases were found around these wells or their associated piping. Photograph 34 shows DNALP Well #1.

The groundwater pre-treatment area contains an oil/water separator (located in the northeast corner of the containment) which receives recovered oils (creosote and pentachlorophenol) from DNAPL Wells 1 and 2 and Recovery Well RE-24. The receiving tank (located in the northwest corner of the containment area) collects waters from the oil/water separator and recovered groundwater from RW-1 to 23. A coalescing oil/water separator, located east of the west wall of the containment, receives waters from the receiving tank. It discharges waters to the recirculation tank. The recirculation tank, located in the southwest corner of the containment area, provides water for the groundwater recovery system vacuum pumps. Pre-treated waters are pumped from the recirculation tank to the biological groundwater treatment area. The sludge accumulation tank, located in the southeast corner of the containment area, receives recovered oily sludges from the oil/water separator and the coalescing oil/water separator. Also, the pumps which move the pre-treated waters and the recovered oil sludges to the biological treatment area are located within the concrete containment (Photographs 35-38). The liquid eductor system for recovery wells RW 1-23 are located within the containment area on the west side (Photograph 39). No releases were found in or around the groundwater pre-treatment area.

The piping transferring waters and oily sludges from the groundwater pre-treatment area to the biological treatment area was evaluated (Photograph 40). The pipes were intact and no releases were observed along the path of the pipes.

The biological groundwater treatment area contains a sludge accumulation tank, located in the northwest corner of the containment area, receives oily sludges from the sludge accumulation tank in the groundwater pre-treatment area (Photograph 41). The sludges (K001) are periodically sent off-site for disposal at a TSD. There are three biological treatment tanks. The

first stage bio tank is located in the northeast corner of the containment area (Photograph 41). It receives the pretreated groundwater from the recirculation tank in the groundwater pre-treatment area. It also receives wash waters (F032) generated in the treatment plant via the mobile container (Photographs 41, 42). The second stage bio tank is located in the southeast corner of the containment area (Photograph 41). It receives waters from the first stage bio tank. The third stage bio tank is located in the southwest corner of the containment area (Photograph 42). It receives waters from the second stage bio tank. Treated groundwater is discharged from the third stage bio tank via outfall #2 (Photograph 41) to the local POTW. There is a small open top tank between the sludge accumulation tank and the third stage bio tank (Photograph 41). It was empty and was not connected to any other tanks within the containment for the biological groundwater treatment area. There was a release from a valve on the third stage bio tank (Photograph 43). It drained to the sump where it was being pumped into the first stage bio tank (Photograph 44). No other releases were discovered in or around the containment for the biological groundwater treatment area.

Based on the unit history, and the findings of the current VSI, the probability of releases from SWMU 25 to soil, groundwater, air, surface water, and subsurface gasses is low. BP&P should continue operation of the corrective action system as required by the facility's Hazardous Waste Facility Permit and the Corrective Action Plan.

4.16 SWMU 26 ≤90 Day Hazardous Waste Storage Area*

The ≤90 Day Hazardous Waste Storage Area is located in the central portion of the treatment plant and directly east of the treatment cylinders (Figure 13). It has been in operation since the early 1990's and is currently in use. Fifty-five gallon drums of hazardous waste (F032) are stored in this area. The storage area is designated by painted lines on the concrete, is 27.5 feet long, and 3.5 feet deep.

On November 5, 2014, the SWMU 26 was inspected by ADEM personnel. The storage area contained two 55-gallon drums. The drums were closed, labeled with the appropriate waste code (F032), and accumulation start dates (10/1/14 and 10/29/14) (Photograph 45). No releases were observed in or around the storage area.

Based on the unit history, and the findings of the current VSI, the probability of releases from SWMU 26 to soil, groundwater, air, surface water, and subsurface gasses is low. BP&P should continue to manage SWMU 26 as required by ADEM's Division 14 Regulations.

*NOTE-When BP&P notified ADEM of additional SWMUs (24 and 25), number 23 was inadvertently omitted. In order to alleviate confusion in the historical record, number 23 was not used when adding the additional SWMUs identified during the course of this RFA.

4.17 AOC A Raw Creosote Tanks

AOC A consisted of two 25 feet tall tanks used for storage of creosote preservative. They were located next to SWMU 3 and south of the wood preserving plant (Figure 13).

In 1988, a RFA was completed for BP&P. During the VSI, the inspector observed staining on the base but found no major cracks. Stains were found on the outside of the tanks. The RFA concluded the staining indicated releases may have occurred and the potential for releases to soils and groundwater was moderate to high. The report recommended examining the concrete pad to ensure it was free of cracks or other pathways to soil or groundwater, constructing a roof over the area, and completion of the low dike (Reference 2).

EPA and ADEM issued BP&P a Hazardous Waste Facility Permit in 1989. Paragraph II.D.1 of the permit required BP&P to conduct a RFI for SWMUs 2, 3, 4, 8, 9, 10, 21, 22, and AOC A. The EPA approved work plan was completed and implemented in 1993 (References 3, 32). AOC A was evaluated in conjunction with SWMU 3. All evaluations of this AOC, along with the conclusions and recommendations can be found in Section 4.3 of this report.

5 HUMAN AND ENVIRONMENTAL TARGETS

This section briefly discusses an overview of potential human and environmental targets of hazardous waste release to the environment from the SWMUs and AOCs at BP&P. Potential contaminant pathways include soil, surface water, groundwater, air, and subsurface gas.

BP&P is located in Baldwin County near the city of Bay Minette. The facility has eleven employees. Baldwin County has a total area of 2,027 square miles, of which 1,590 square miles is land and 438 square miles (21.6%) is water. It is the largest county by area in Alabama. It is bordered to the west by Mobile Bay and Mobile County, to the south by the Gulf of Mexico, to the east by Escambia County, Florida, and Escambia County, Alabama, and to the north by Monroe, Clark, and Washington Counties (Reference 34).

The only population center within a 4-mile radius of the facility is Bay Minette which has a population of 9,729 people. The schools within a 4-mile radius of the facility include: Bay Minette Intermediate School, 1.1 miles; Bay Minette Elementary School, 1.1 miles; Baldwin County High School, 2.2 miles; Bay Minette Middle School, 2.3 miles; North Baldwin Center for Technology, 2.4 miles; Pine Grove Elementary School, 1.8 miles; and Faulkner State Community College, 3.0 miles (Reference 10).

There are four wells within 0-1 mile of the facility. They include 1 domestic supply well, 1 public supply well, 1 industrial supply well, and 1 well not in use. There are 3 wells within 1-2 miles of the facility. They include 2 livestock/domestic supply wells and 1 public supply well. There are nine wells within 2-3 miles of the facility. They include 1 irrigation/domestic supply well, 1 stock/domestic supply well, 1 domestic supply well, 4 public supply wells, and 2 wells not in use. There is one well within 3-4 miles of the facility and it is a domestic supply well (Reference 22).

There are no wildlife management areas, state parks, national parks, national forests, or forever wild management areas within a 4-mile radius of the facility (References 35-37).

There is an on-site wetland at BP&P (the swamp-SWMU 21). Approximately 50% of the area within a 1 mile radius of the facility contains wetlands. Approximately 60% of the area within a 1-2 mile radius of the facility contains wetlands. Approximately 75% of the area within a 2-3 mile radius of the facility contains wetlands. Approximately 75 % of the area within a 3-4 mile radius of the facility contains wetlands (Figure 14).

5.1 SOIL

Soils at SWMUs 2-10, 21, 22, and AOC A contain different combinations of pentachlorophenol, benzo(a)anthracene, chyrsene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, dibenz(a,h)anthracene, napthalene, phenanthrene, and/or carbazole. The existing groundwater treatment system (SWMU 25), along with the installation of a security fence around the perimeter of the site and the deed restrictions on use of the facility property have been deemed sufficient by ADEM to provide adequate protection for humans and the environment.

Based on the findings of the current VSI (November 5-6, 2014) the perimeter fence does not appear to secure the entire site. The northern boundary and the southwest boundary did not appear secure. Based on these observations, the potential for exposure via the soils pathway is medium.

5.2 SURFACE WATER

There have been no documented releases via the surface water pathway at BP&P; therefore, the potential for exposure via the surface water pathway is low.

5.3 GROUNDWATER

The Groundwater Quality Assessment concluded the surface impoundment and other facility practices resulted in the uppermost aquifer at the facility being contaminated by soluble constituents of creosote and pentachlorophenol. The facility developed a Corrective Measures Plan which included the installation of 23 recovery wells in the top of the aquiclude underlying the surficial aquifer . Contaminated groundwater would be treated on-site before discharge to the local POTW. Semi-annual corrective action reports (groundwater monitoring) are submitted to ADEM which determine progress in remediation of the groundwater plume. This corrective action was incorporated into the facility's RCRA permit and continues to be active.

Groundwater quality at the facility was evaluated as part of this RFA and it was concluded that the corrective active system is operating appropriately; therefore, the potential for exposure via the groundwater pathway is low.

5.4 AIR

There have been no documented releases via the air pathway at BP&P; therefore, the potential for exposure via the air pathway is low.

5.5 SUBSURFACE GAS

There have been no documented releases of subsurface gas at BP&P; therefore, the potential for exposure via the subsurface gas pathway is low.

6 CONCLUSIONS AND RECOMMENDATIONS

Based on the file review, and conditions observed during this VSI, ADEM has the following recommendations for the SWMUs and AOCs at BP&P:

- BP&P should continue to maintain SWMU 1 as required by the facility's Hazardous Waste Facility Permit. BP&P should address the maintenance deficiencies discovered at groundwater monitoring wells TP-9, MW-12, MW-6, MW-5, and P2, the security fence (north boundary, and southwest boundary in particular) should be re-evaluated to ensure there is no unauthorized access to the facility, and the benchmark for SWMU 1 should be added to the quarterly inspection checklist.

- BP&P should continue corrective measures for SWMUs 2-10, 21, 22, 25, and AOC A as stipulated in the facility's Hazardous Waste Facility Permit and the approved Corrective Action Plan. The security fence (north boundary, and southwest boundary in particular) should be re-evaluated to ensure there is no unauthorized access to the facility. The production process measures to prevent all drippage from treated poles stored in SWMU 4 should be re-evaluated.

- BP&P should continue to manage SWMU 26 as required by ADEM's Division 14 Regulations.

- NFA is required for SWMUs 11-20, and 24 at this time.

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APPENDIX A

VISUAL SITE INSPECTION SUMMARY

APPENDIX A
VISUAL SITE INSPECTION SUMMARY

Baldwin Pole & Piling, Inc.
Bay Minette, Alabama
EPA Identification # ALD 031 490 501

Inspection Dates: November 5-6, 2014

Facility Representatives:	Andy McMillan	BP&P
	Archie McMillan	BP&P
	Ray Long	BP&P
	Jason Rollins	H. M. Rollins Co., Inc.
Inspection Team:	Teresa Estes	ADEM
	Robert B. Stanley	ADEM
	Clethes Stallworth	ADEM
	Brad Johnson	ADEM
Photo Documentation:	Teresa Estes	ADEM
	Robert B. Stanley	ADEM

Weather Conditions: fair

Summary of Activities:
November 5, 2014
The inspection team arrived at the facility at 12:00 pm. Some questions regarding the PIN were addressed. Mr. Stallworth had additional questions regarding facility operations. After the opening discussions were completed, Ms. Estes, Mr. Stanley, Mr. Johnson, Messrs. McMillan, and Mr. Rollins (the VSI team) proceeded to conduct the Visual Site Inspection (VSI). Mr. Stallworth and Mr. Long remained at the office for Mr. Stallworth to conduct the records review.

The VSI team's inspection began with the treatment plant (which included the SWMUs and AOC within the plant). The inspection findings for the SWMUs and AOC can be found in Section 4 of the RFA report. The satellite accumulation area was evaluated. It is directly north of the <90 Day Hazardous Waste Storage Area (SWMU 26). It contained one 55 gallon drum of hazardous waste. The drum was closed and labeled (Photograph 46). No releases were observed in or around the satellite accumulation area. The collection system for materials released when the retort doors are opened was evaluated. Any remaining pentachlorophenol solution and other wastes (sand, dirt, and wood contaminated with pentachlorophenol) are collected by the new metal lined sump under the retort doors (Photograph 47). The liquids (pentachlorophenol solution) drain to a nearby sump where they are pumped back to the work tank (Photographs 48, 49). The remaining solid wastes (sand, dirt, and wood contaminated with pentachlorophenol-F032) are removed from the metal lined sump and placed in 55 gallon drums. No wastes or liquids were present in the sump under the retorts. The second sump contained some liquid. No releases were found around these sumps. The drum is stored in the satellite accumulation area until full, at which time it is labeled and transferred to the <90 Day Hazardous Waste Storage Area (SWMU 26).

The concrete trench which runs the length of the treatment building on the east side

(Photograph 50) collects rain water for the wash water tank (Photograph 50). The wash water tank also receives wastewaters from the oil/water separators (SWMUs 8, 9). The trench was clean and had no visible cracks. No releases were found around the wash water tank and the tank appeared to be in good condition. When the wash water tank becomes too full, the excess waters are pumped into a mobile container for transport to the biological treatment system. The mobile container consists of a tank mounted on a flatbed trailer. It was parked south of the biological treatment system (Photograph 42). The container appeared to be in good condition and no releases were found on the trailer or on the ground around the mobile container.

The pumps for the treatment plant are in the northern portion of the treatment plant and west of the retorts. The pressure pumps have collection trays to collect any leaks. The liquids are piped to the collection sump and pumped to the oil/water separators. Two of the collection trays contained treatment solution but no releases were found under or around the collection trays or piping.

The used oil storage area was inspected. It is on the central western edge of the treatment plant. BP&P generates used oil by servicing the on-site machinery. Used oil is placed in a tote (Photograph 51). The tote was labeled "Used Oil" and closed. No releases were found around the tote. The tank farm was inspected. It is southwest of the treatment plant. It has two upright tanks and two vertical tanks (Photographs 52, 53). The upright tanks contain pentachlorophenol solution used in the treatment plant. The vertical tanks were empty, they serve as back-up storage tanks for pentachlorophenol. No releases were found in or around the tank farm. The "boiler building" contained maintenance supplies for the treatment plant. The boiler was removed in the early 90's when the treatment process was modified and steam treatment of the charges was eliminated.

Next, the VSI team inspected the remaining on-site SWMUs, the corrective action system, and the on-site groundwater monitoring wells. In addition, Outfalls Nos. 1-3 were inspected. No releases were found at these outfalls.

Mr. Stallworth reviewed select hazardous waste records and documents: uniform hazardous waste manifests (EPA Form 8700-22) for the past three years, generator notification form (ADEM Form 8700-12) for the current year, personnel training records (i.e., job descriptions and titles) and training materials, contingency plan (the Facility's combined preparedness and prevention; emergency action; and spill prevention, control and countermeasure plans), 2013 biennial report, quarterly post-closure inspection checklists for the past three years, weekly hazardous waste container storage area inspection logs for the past three years; drippage cessation documentation; and waste removal log. The records and documents appeared to be up-to-date and accurate with the following exceptions:

- Land Disposal Restrictions (LDR) Notifications or Certifications were not attached to any of the manifests for wastes transported to Giant Resource Recovery-Attalla, Inc. (EPA Identification Number ALD070513767).

- Weekly inspection records included the initials rather than the name of the inspector.

- The post-closure inspection checklist for the 3rd quarter of 2014 included a notation that the outer protective casing of Monitoring Well #5 was severely rusted and needed to be repaired; however, the post-closure inspection checklist for the 4th quarter of 2014 indicated that the problem had been addressed but did not include the date and nature of the repairs.

It was noted that there was no record of wastes being removed from the collection pan in front of the retorts. This waste removal should be included with records kept to meet the generator requirement for documenting the amount of hazardous waste generated during a calendar month.

After the records review was completed, Mr. Stallworth and Mr. Long proceeded with an inspection of the treatment plant and treated pole storage area. They rejoined the VSI team for a closing meeting with the facility representatives. ADEM representatives departed at 3:30 pm. Mr. Johnson returned to Montgomery while the remainder of the team stayed to complete the inspection.

November 6, 2014

The inspection team returned to the facility at 8:00 am to complete the VSI. Mr. Archie McMillan, Mr. Long, and Mr. Rollins, accompanied the ADEM personnel during the remainder of the inspection. The remaining groundwater monitoring wells and the facility's security fence were evaluated. Concerns with the groundwater monitoring wells are documented in Section 4.1 of the RFA report. Concerns with the security fence are documented in Sections 4.1-4.9, 4.12, and 4.13 of the RFA report.

While traversing the storage yard en route to an adjoining property to inspect groundwater wells located outside of the perimeter fence, Mr. Ammons was observed in the treated pole storage yard (SWMU 4) carrying a 5-gallon plastic bucket and a shovel. In the bucket Mr. Ammons had collected material that appeared to be mostly wet sandy soil mixed with minute bits of wood. Mr. Ammons indicated he checked there each day to remove wet soil and debris. The collected materials would be placed in the satellite accumulation drum in the treatment plant.

The inspection concluded at 10:30 am and after an exit briefing the ADEM personnel departed.

APPENDIX B

PHOTOGRAPH LOG

Appendix B
Photograph Log



Photograph 1-Groundwater Monitoring Well TP-9
The well casing is not marked and the hole in the casing allows access to the well.



Photograph 2-Groundwater Monitoring Well MW-12
The hinge for the lid was rusted through allowing access to the well and the pad was broken.

Photograph Log
(continued)



Photograph 3-Groundwater Monitoring Well MW-6
The soil under the well pad is eroded.



Photograph 4-Groundwater Monitoring Well MW-5
The outer well casing is rusted through.

Photograph Log
(continued)



Photograph 5-Groundwater Monitoring Well P2
Well heaving has resulted in inner casing rising such that the outer casing cap cannot be closed.



Photograph 6-SWMU 1
The view of the cap of SWMU 1 is to the east.

Photograph Log
(continued)



Photograph 7-SWMU 1
This is a northeast view of the cap on SWMU 1.



Photograph 8-northeast end of fence
The view is to the east.

Photograph Log
(continued)



Photograph 9-northwest end of security fence
The view is to west.



Photograph 10-gap under security fence
This view is to the east along the southwest boundary.

Photograph Log
(continued)



Photograph 11-gap under security fence
This view is to the west along the southwest boundary.



Photograph 12-SWMU 2
The view is to the north with SWMU 4 on east and west side.



Photograph 13-SWMU 2
The view is to the south with a portion of SWMU 4 on the west.



Photograph 14-SWMU 3 and AOC A
The view is to the south with a retort is on the left; an empty tank in the center; and SWMU 8 visible to the right



Photograph 15-SWMU 4
The view is to the southwest in the untreated pole area.



Photograph 16-SWMU 4

The view is to the south in the treated pole area.



Photograph 17-SWMU 4
The view is to the southeast in the treated pole area.



Photograph 18-SWMU 5
The view is to the south.

Photograph Log
(continued)



Photograph 19-SWMU 6
The view is to the northeast with the former unit location being just past the untreated poles. There is a sharp drop-off down into the former disposal area.



Photograph 20-SWMU 7
This photograph shows the former location of the part of SWMU 7 that was north of the biological treatment unit {part of SWMU 25}.



Photograph 21-SWMU 7
This photograph shows the former location of the part of SWMU 7 that was along the eastern facility boundary and north of the office building.



Photograph 22-SWMUs 8-9
This photograph shows the oil/water separators along with the associated pump and sump. The view is to the south.



Photograph 23-SWMU 10 (former location)
The view is to the southeast.



Photograph 24-SWMU 11
The view is to the northeast in the direction the pipe took from the facility to the surface impoundment (SWMU 1).



Photograph 25-SWMUs 12-20 (former location)
The view is to the southeast and the SWMUs were located on the concrete slab (south of the truck) and in the area where the truck is parked.



SWMU 21-typical view of the swamp
This photograph is a view west of the dirt road which bisects the swamp.



Photograph 27-SWMU 21
This is a photograph of the northeastern portion of the pond.



Photograph 28-SWMU 21
This is a photograph of the northern portion (center) of the pond.



Photograph 29-SWMU 21
This is a photograph of the northwestern portion of the pond.



Photograph 30-SWMU 22
View is to the north following the drainage along the railroad tracks.

Photograph Log
(continued)



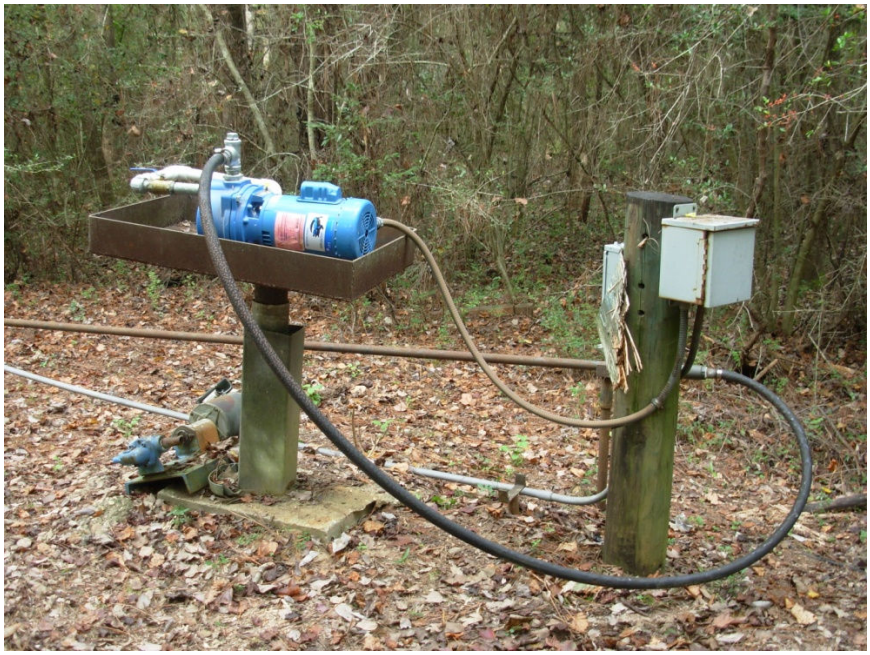
Photograph 31-SWMU 22
This is the area along the western boundary where the ditch turns east; enters the facility; then proceeds on to the swamp.



Photograph 32-SWMU 24
This is the new liquid unloading area (the concrete pad) and the photograph view is to the south.



Photograph 33-SWMU 25
These are recovery wells located along the northern portion of SWMU 1. The view is to the east.



Photograph 34-SWMU 25
This photograph is of DNAPL Recovery Well #1. It is located in the swamp (SWMU 21) on the eastern side of the dirt road. The view is to the north.

Photograph Log
(continued)



Photograph 35-SWMU 25
The components of the groundwater pre-treatment area are (from right to left) the sludge accumulation tank; the oil/water separator for the DNAPL wells and RE-24; and the receiving tank.



Photograph 36-SWMU 25
The components of the groundwater pre-treatment area are (from right to left) the sludge accumulation tank; the receiving tank; and the coalescing oil/water separator.



Photograph 37-SWMU 25
The components of the groundwater pre-treatment area are (from right to left) the coalescing oil/water separator; the recirculation tank; and the sludge accumulation tank.



Photograph 38-SWMU 25
This is a photograph of the pumps that pump the wastewaters from the groundwater pre-treatment unit to the biological treatment unit.

Photograph Log
(continued)



Photograph 39-SWMU 25

These pumps pull water from the circulation tank and push the water through the jet deucators to create a vacuum for the groundwater recovery wells.



Photograph 40-SWMU 25

These are the pipes which transfer the wastewaters from the groundwater pre-treatment unit to the biological treatment unit. The view is to the north.



Photograph 41-SWMU 25

The components of the biological treatment unit (from right to left) are: the third stage bio tank; the second stage bio tank, an empty open topped tank, the first stage bio tank, and the sludge accumulation tank. The mobile container is to the far right and outside the containment of the biological treatment unit.



Photograph 42

In the foreground is the mobile container. Outfall #2 is the pipe to the far left which is leaving the containment area for the biological treatment unit. The components of the biological treatment unit (located within the containment) are (from right to left) the second stage bio tank, the third stage bio tank, and the sludge accumulation tank.

Photograph Log
(continued)



Photograph 43-SWMU 25
This photograph shows a release from the valve of the third stage bio tank in the biological treatment unit (SWMU 25).



Photograph 44-SWMU 25
This photograph shows the release from photograph 43 continuing along the base of the third stage bio tank and into the sump where it is collected and pumped into the first stage bio tank.



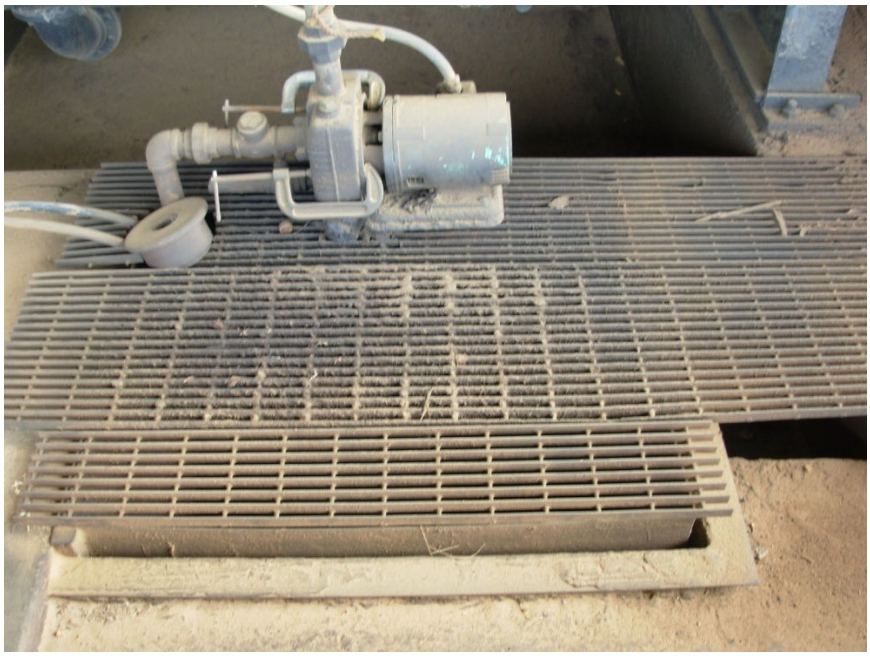
Photograph 45-SWMU 26
This is a photograph of the ≤90 Day Hazardous Waste Storage Area which is located east of the retorts in the treatment building. The view is to the south.



Photograph 46-satellite accumulation area
The satellite accumulation area is located in the treatment building to the east of the retorts and north of the ≤90 Day Hazardous Waste Storage Area.



Photograph 47-metal sump for retorts
This photograph shows the retorts' metal sump which is on the north end of the treatment building.



Photograph 48-sump and pump
This photograph shows the sump that receives the liquids from the retorts' sump. It is to the east of the retorts in the treatment building.



Photograph 49-Penta Work Tank
The work tank is located in the central western portion of the treatment building.



Photograph 50-rainwater trench and wash water tank
This trench runs the length of the treatment building on the east side. The wash water tank is in the top right hand corner of the photograph. The view is to the south.



Photograph 51-Used Oil Storage Tote
The tote is located on the western side of the treatment building and northwest of the penta work tank. The view is to the east.



Photograph 52-Tank Farm
The two horizontal black tanks were fabricated from rail tanker cars. They are used in case the two main storage tanks are full. They are empty at this time. The view is to the west.



Photograph 53-Tank Farm
The two white vertical tanks are the storage tanks for pentachlorophenol solution. One of the back-up storage tanks (horizontal) is to the left. The view is to the northwest.

FIGURES



FIGURE 1

Baldwin Pole & Pile Facility Location Map

WOOD TREATMENT PROCESS AND CORRECTIVE ACTION SYSTEM

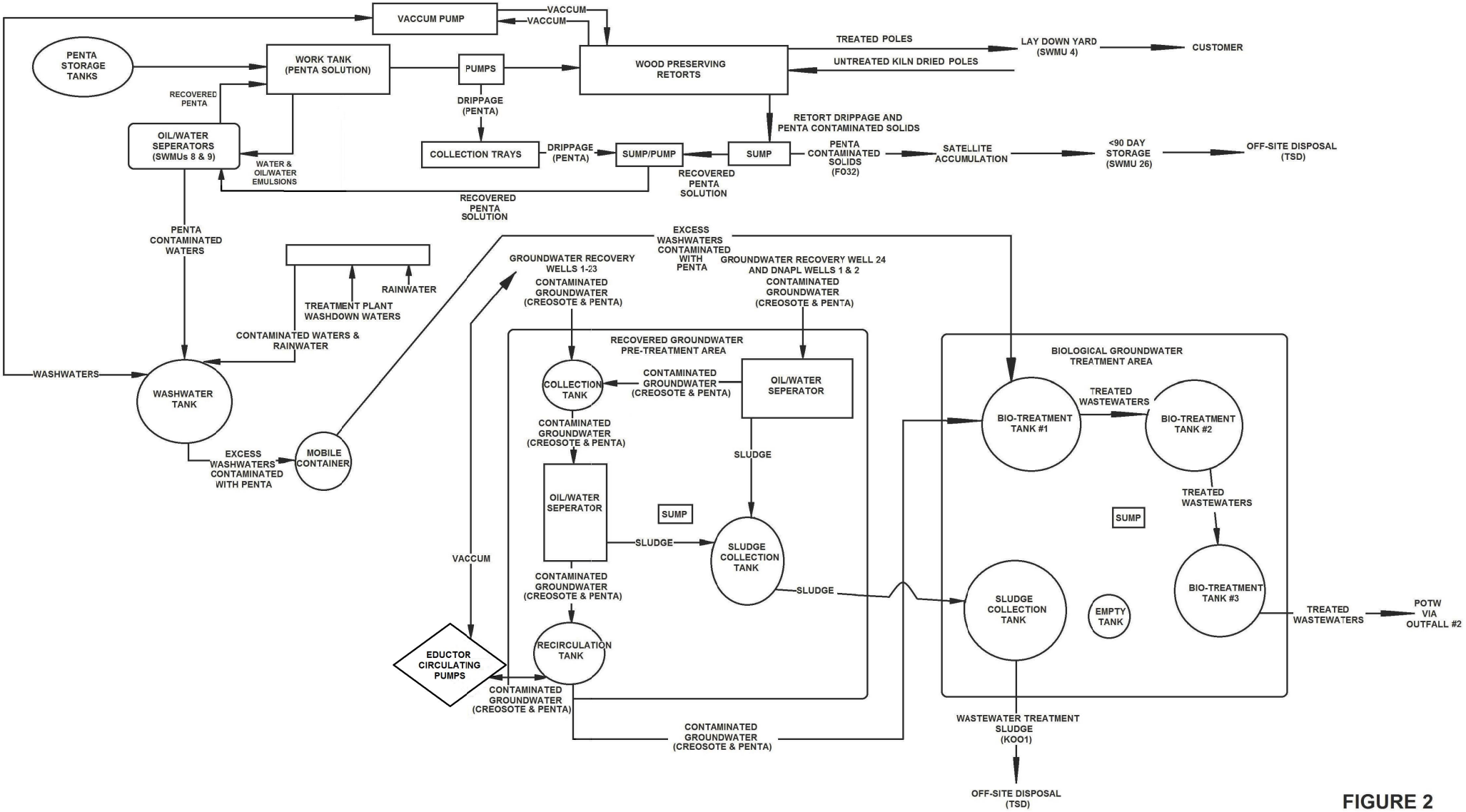
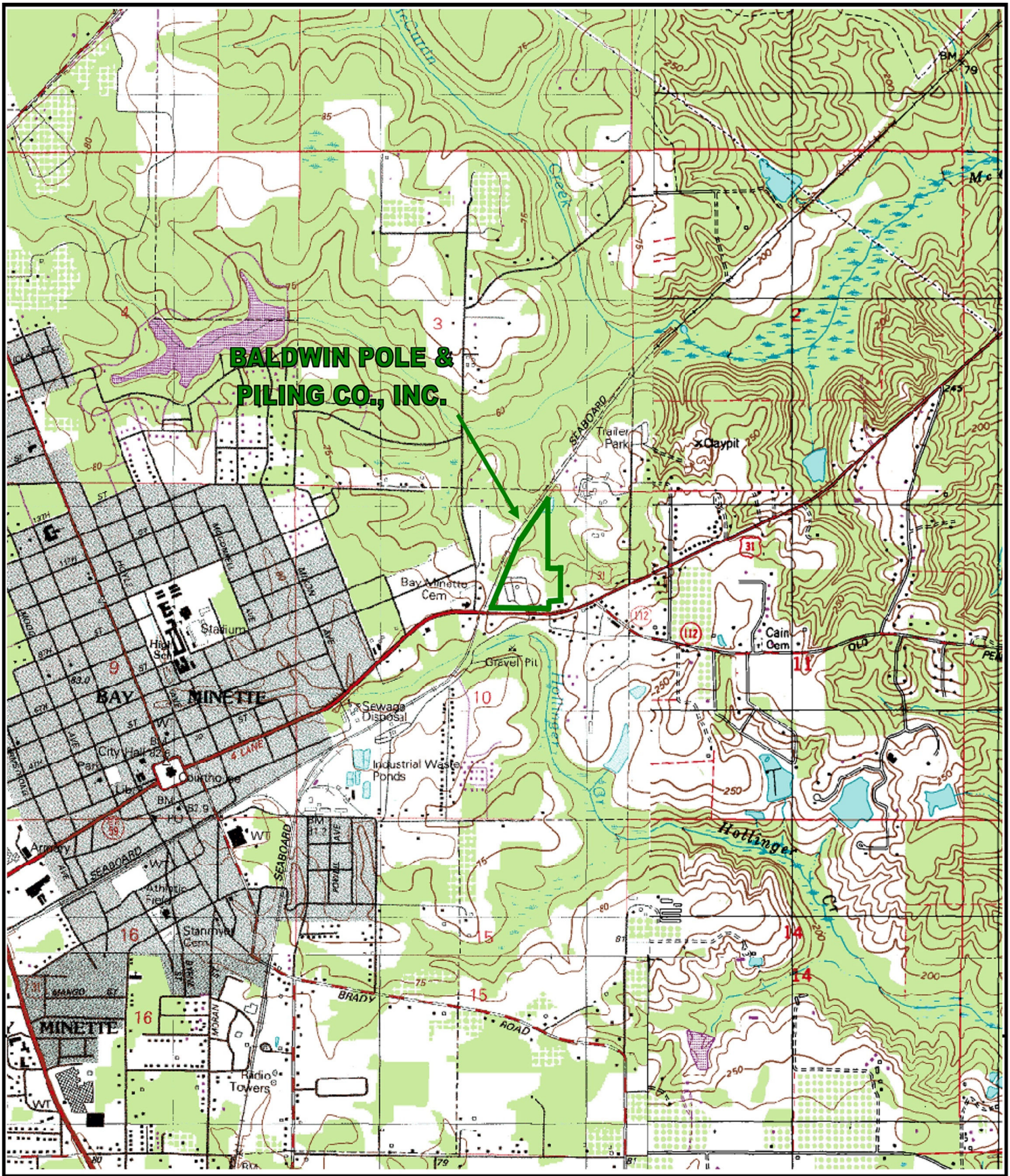
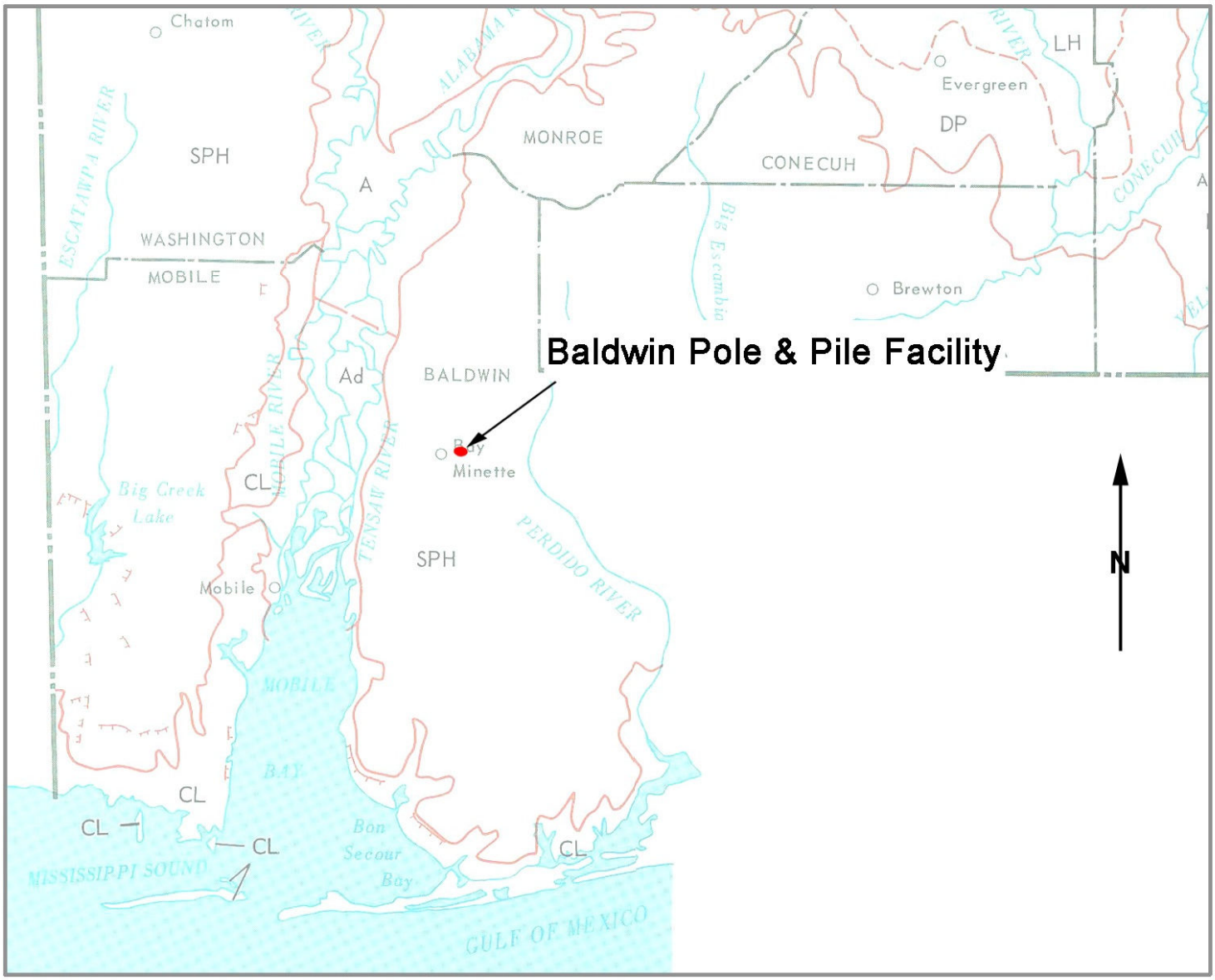


FIGURE 2



BALDWIN POLE & PILING CO., INC. BAY MINETTE, ALABAMA	U.S.G.S. TOPOGRAPHIC MAP QUAD: BAY MINETTE NORTH	SCALE: 1" = 1980'	**FIGURE 3**

FILENAME: BaldwinUSGS



LEGEND

LH	Lime Hills
DP	Dougherty Plain
SPH	Southern Pine Hills
CL	Coastal Lowlands
A, Ad	Alluvial Deltaic Plain

FIGURE 4

Baldwin Pole & Pile Facility Physiographic Map

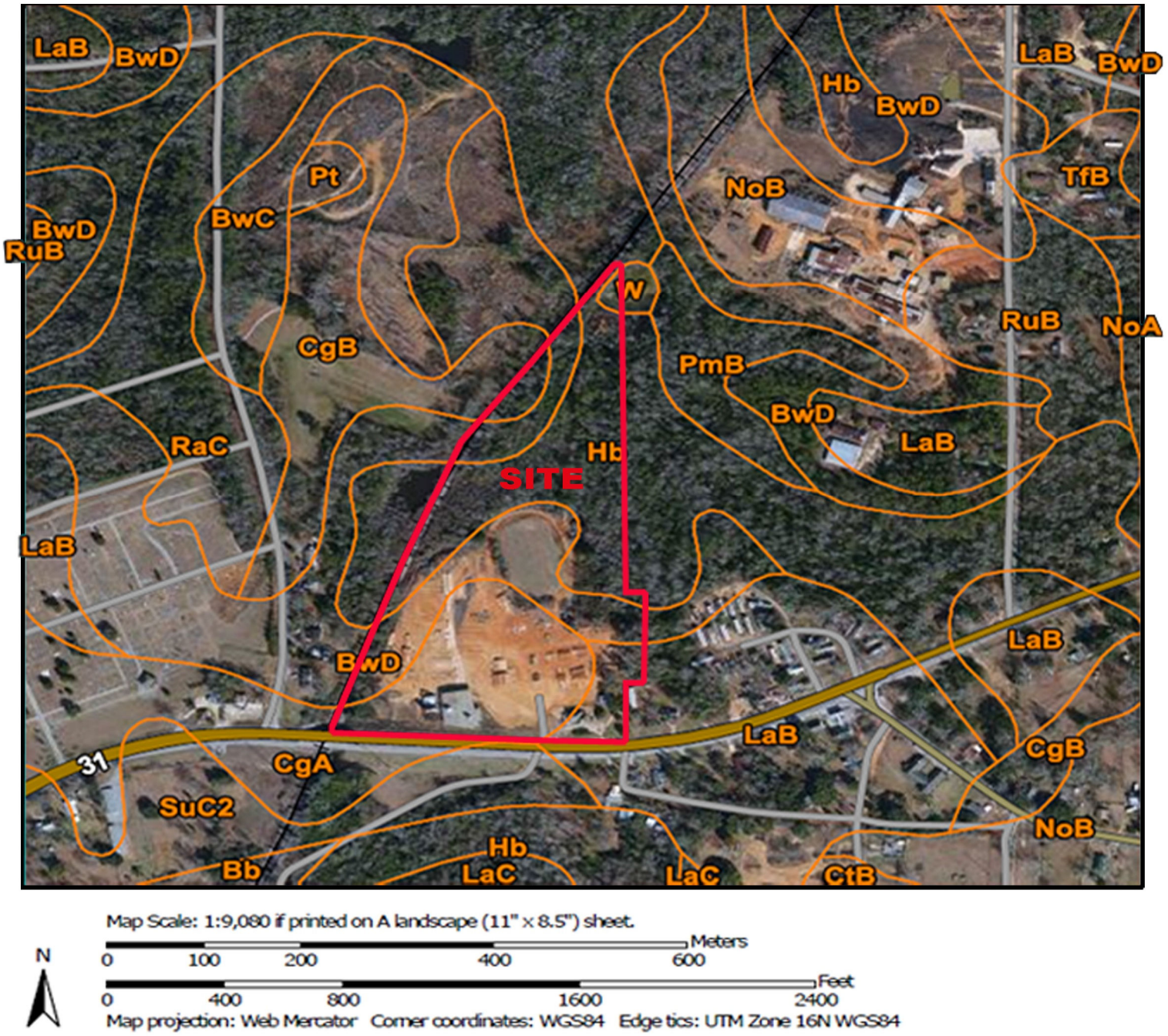


FIGURE 5

Baldwin Pole & Pile Facility Soil Map

Soil Map Unit Legend

Baldwin County, Alabama (AL003)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
Bb	Bibb and Mantachie soils, local alluvium	1.3	0.4%
BwC	Bowie, Lakeland, and Cuthbert soils, 5 to 8 percent slopes	13.2	4.3%
BwD	Bowie, Lakeland, and Cuthbert soils, 8 to 12 percent slopes	65.1	21.2%
CgA	Camegie very fine sandy loam, 0 to 2 percent slopes	21.1	6.9%
CgB	Camegie very fine sandy loam, 2 to 5 percent slopes	18.0	5.9%
CtB	Cuthbert fine sandy loam, 2 to 5 percent slopes	0.7	0.2%
Hb	Hyde, Bayboro, and Muck soils	64.4	21.0%
LaB	Lakeland loamy fine sand, 0 to 5 percent slopes	48.1	15.7%
LaC	Lakeland loamy fine sand, 5 to 8 percent slopes	1.7	0.5%
NoA	Norfolk fine sandy loam, 0 to 2 percent slopes	1.9	0.6%
NoB	Norfolk fine sandy loam, 2 to 5 percent slopes	20.2	6.6%
PmB	Plummer loamy sand, 0 to 5 percent slopes	6.0	2.0%
Pt	Pits, sand or gravel	1.2	0.4%
RaC	Rains fine sandy loam, 5 to 8 percent slopes	17.3	5.6%
RuB	Ruston fine sandy loam, 2 to 5 percent slopes	9.9	3.2%
SuC2	Sunsweet fine sandy loam, 5 to 8 percent slopes, eroded	12.4	4.0%
TfB	Tifton very fine sandy loam, 2 to 5 percent slopes	3.6	1.2%
W	Water	0.7	0.2%
Totals for Area of Interest		**306.8**	**100.0%**

FIGURE 6

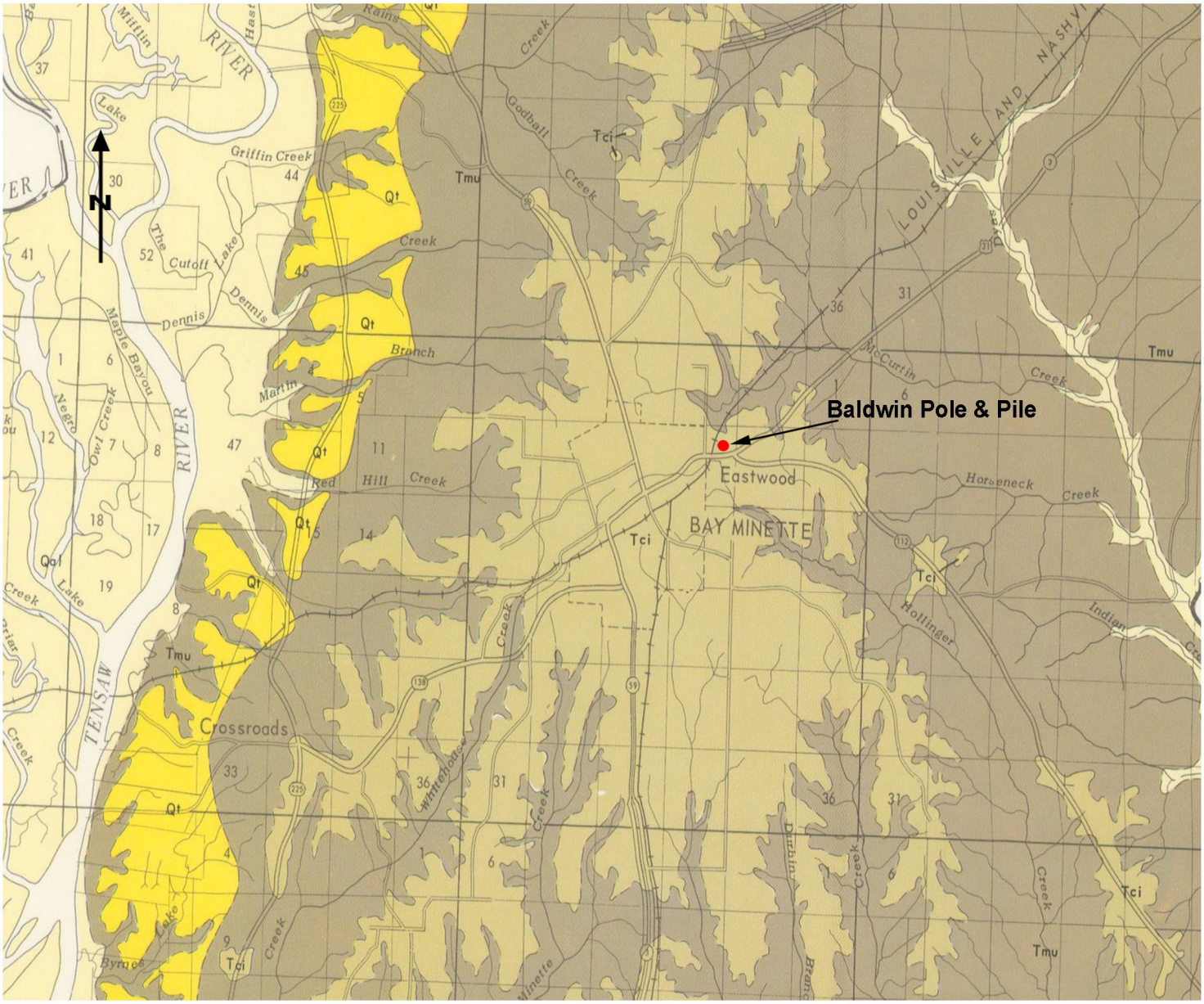
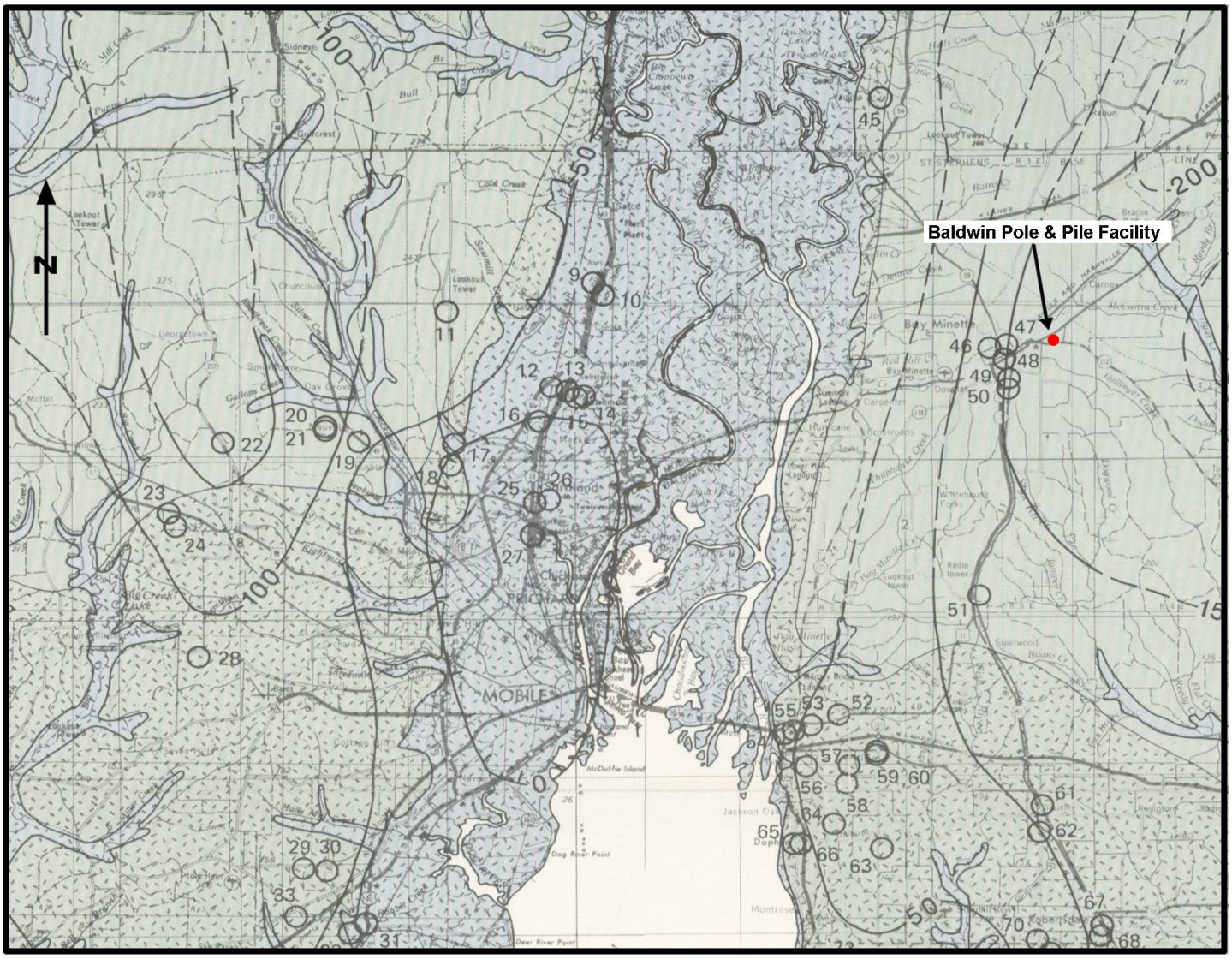


FIGURE 7

Baldwin Pole & Pile Facility Geologic Map



LEGEND

RECHARGE AREAS OF THE MAJOR AQUIFERS
(Areas susceptible to surface contamination, modified from J. F. Riccio and others, 1973)

- Alluvial–coastal aquifer
- Pliocene–Miocene aquifer
- Highly susceptible area
- BOUNDARY OF STUDY AREA
- —50— POTENTIOMETRIC SURFACE CONTOUR FOR THE HYDROLOGICALLY CONNECTED PLIOCENE–MIOCENE AND ALLUVIAL–COASTAL AQUIFERS--Shows altitude at which water level would have stood in tightly cased wells (1987). Dashed where approximately located. Hachures indicate depression. Contour interval is 50 feet. Datum is sea level
- O_{15} PUBLIC WATER SUPPLY WELL--Numbers correspond to those given in table 2

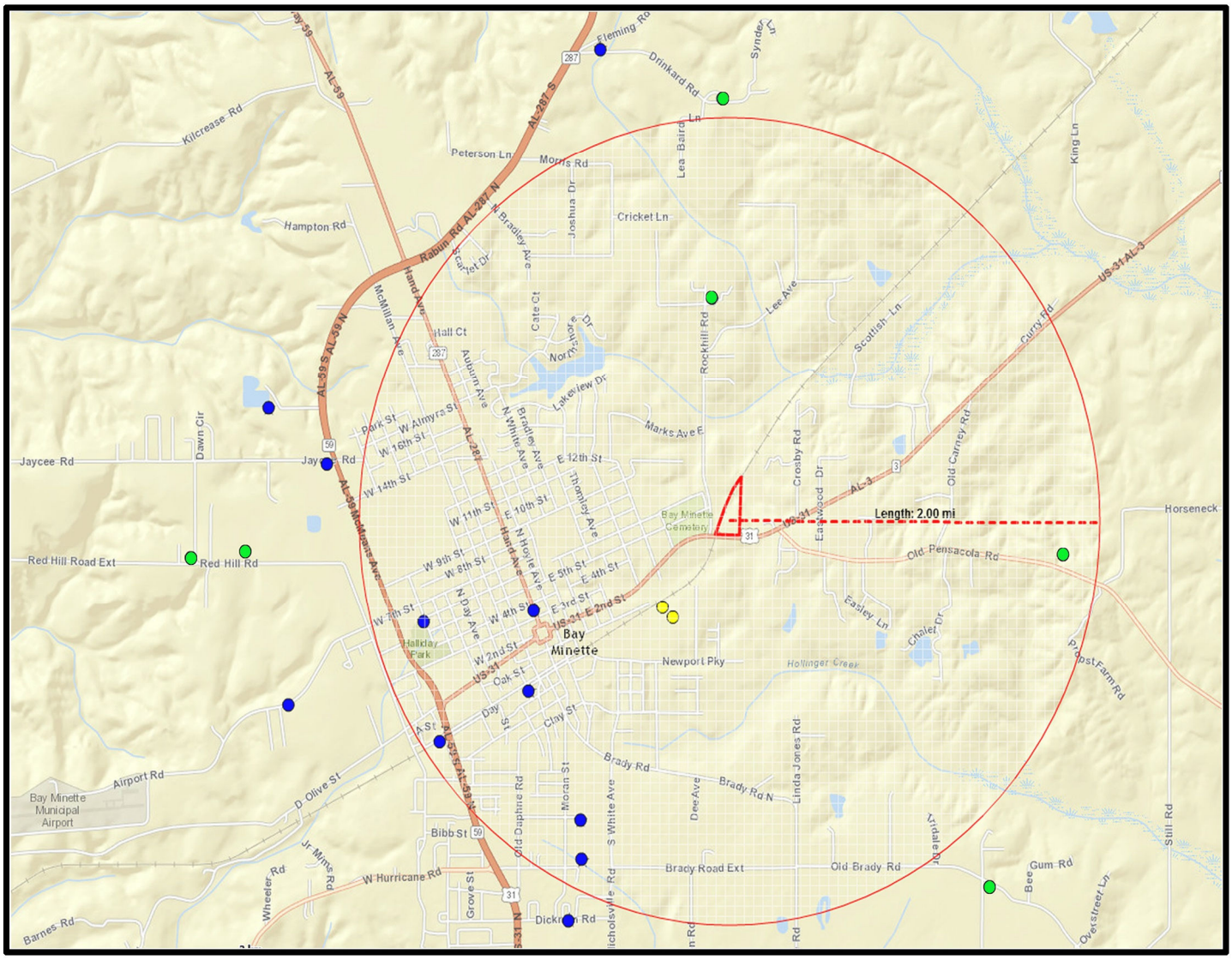
SCALE

1 5 10 15 20 Miles

1 5 10 15 20 Kilometers

FIGURE 8

Baldwin Pole & Pile Facility Aquifer Map



LEGEND

- Public Supply Wells
- Private Wells
- Industrial Wells

FIGURE 9

Area Water Well Locations

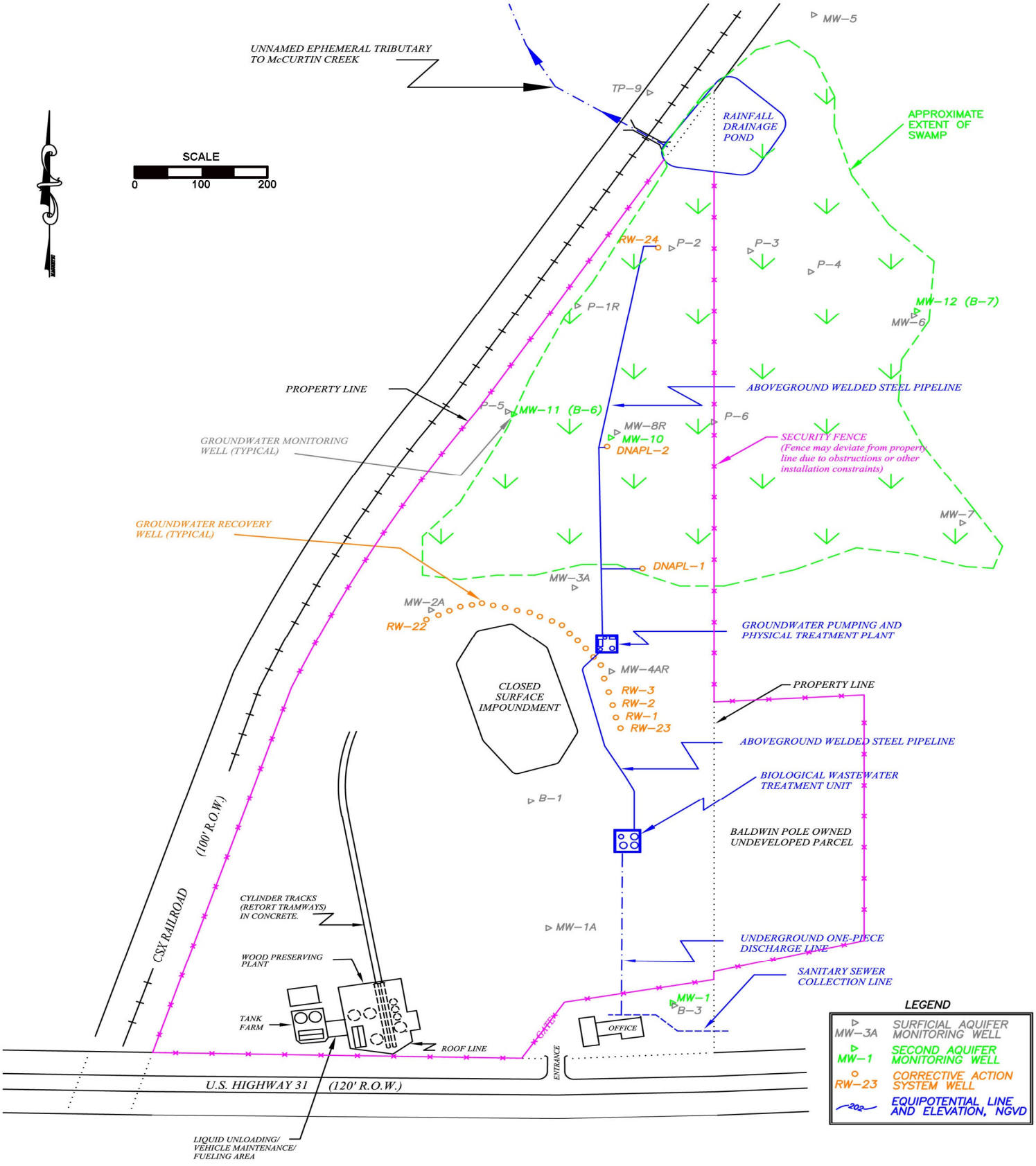


FIGURE 10

Baldwin Pole & Pile Facility Well Location Map

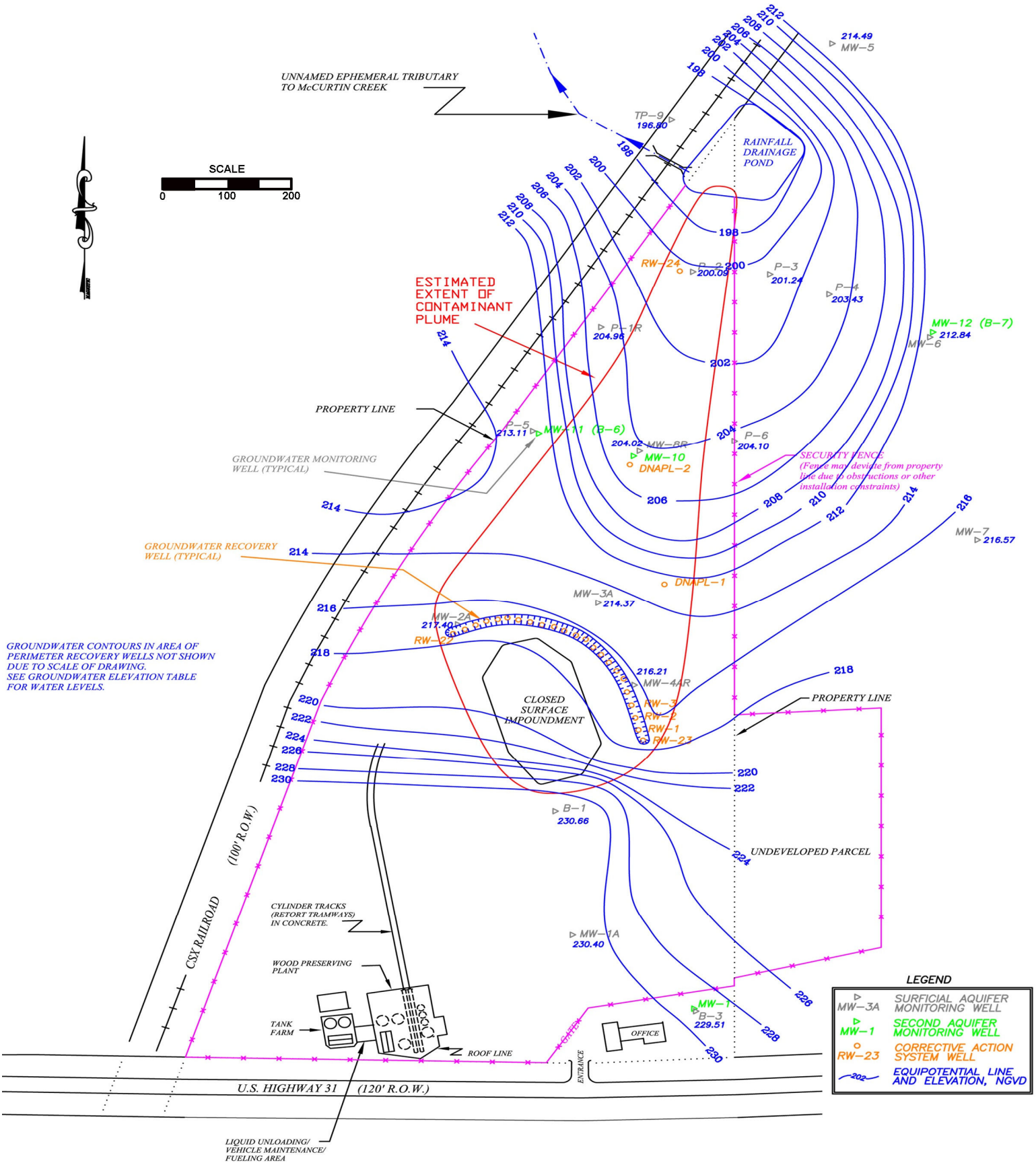


FIGURE 11

Baldwin Pole & Pile Facility Potentiometric Map

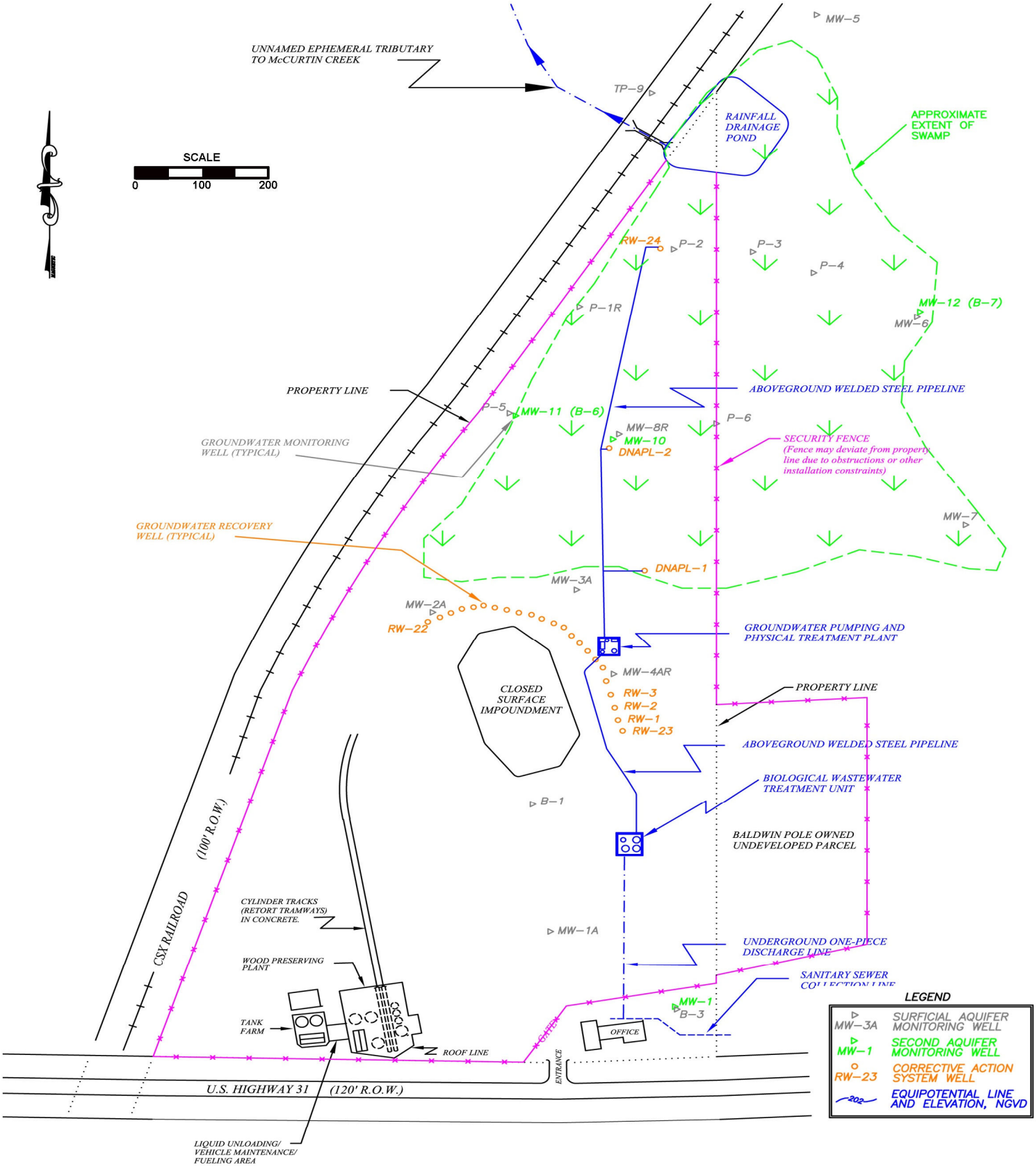
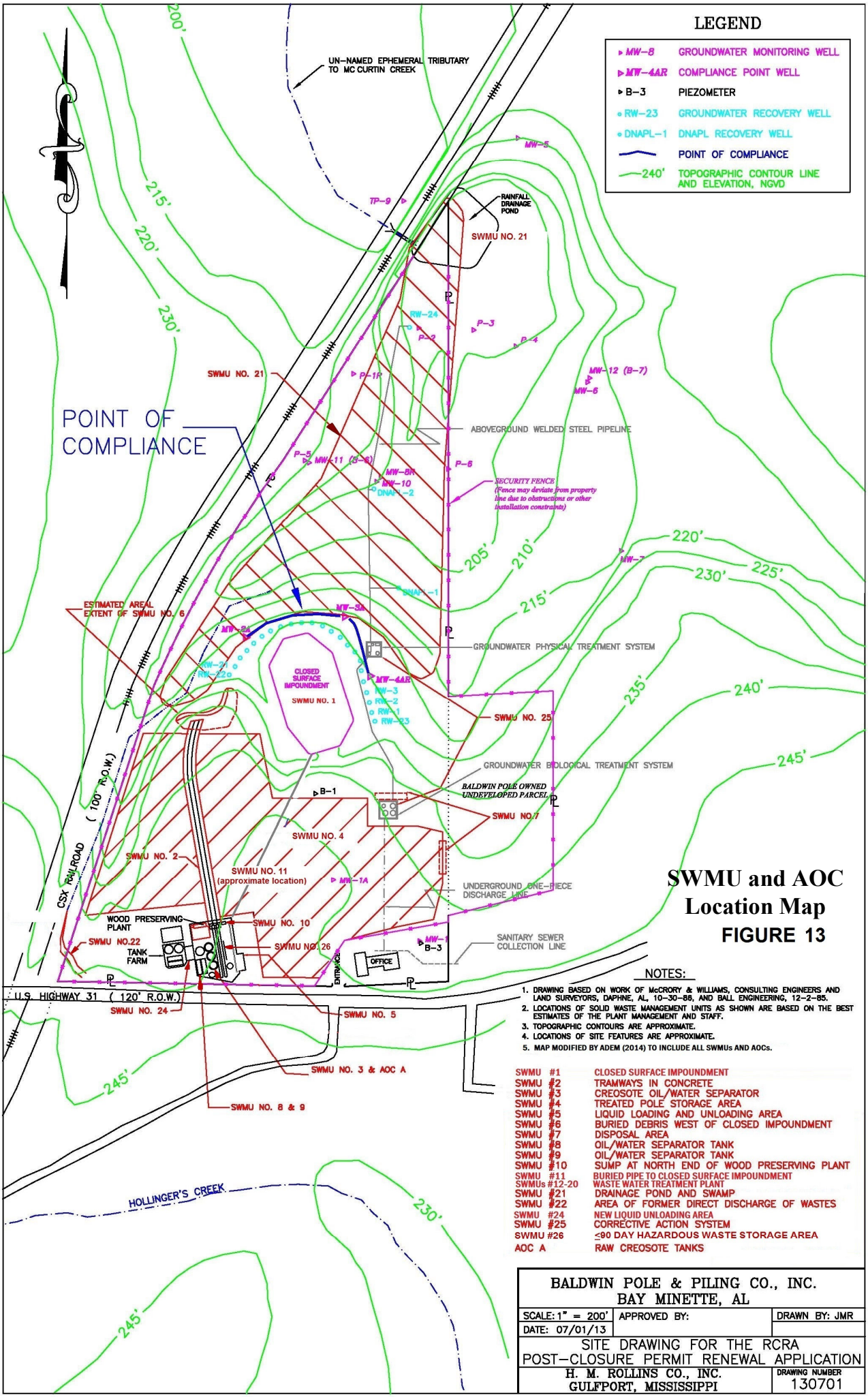


FIGURE 12

Baldwin Pole & Pile Facility Corrective Action System



SWMU and AOC Location Map

FIGURE 13

NOTES:

1. DRAWING BASED ON WORK OF McCRORY & WILLIAMS, CONSULTING ENGINEERS AND LAND SURVEYORS, DAPHNE, AL, 10-30-86, AND BALL ENGINEERING, 12-2-85.
2. LOCATIONS OF SOLID WASTE MANAGEMENT UNITS AS SHOWN ARE BASED ON THE BEST ESTIMATES OF THE PLANT MANAGEMENT AND STAFF.
3. TOPOGRAPHIC CONTOURS ARE APPROXIMATE.
4. LOCATIONS OF SITE FEATURES ARE APPROXIMATE.
5. MAP MODIFIED BY ADEM (2014) TO INCLUDE ALL SWMUs AND AOCs.

SWMU #1	CLOSED SURFACE IMPOUNDMENT
SWMU #2	TRAMWAYS IN CONCRETE
SWMU #3	CREOSOTE OIL/WATER SEPARATOR
SWMU #4	TREATED POLE STORAGE AREA
SWMU #5	LIQUID LOADING AND UNLOADING AREA
SWMU #6	BURIED DEBRIS WEST OF CLOSED IMPOUNDMENT
SWMU #7	DISPOSAL AREA
SWMU #8	OIL/WATER SEPARATOR TANK
SWMU #9	OIL/WATER SEPARATOR TANK
SWMU #10	SUMP AT NORTH END OF WOOD PRESERVING PLANT
SWMU #11	BURIED PIPE TO CLOSED SURFACE IMPOUNDMENT
SWMUs #12-20	WASTE WATER TREATMENT PLANT
SWMU #21	DRAINAGE POND AND SWAMP
SWMU #22	AREA OF FORMER DIRECT DISCHARGE OF WASTES
SWMU #24	NEW LIQUID UNLOADING AREA
SWMU #25	CORRECTIVE ACTION SYSTEM
SWMU #26	≤90 DAY HAZARDOUS WASTE STORAGE AREA
AOC A	RAW CREOSOTE TANKS

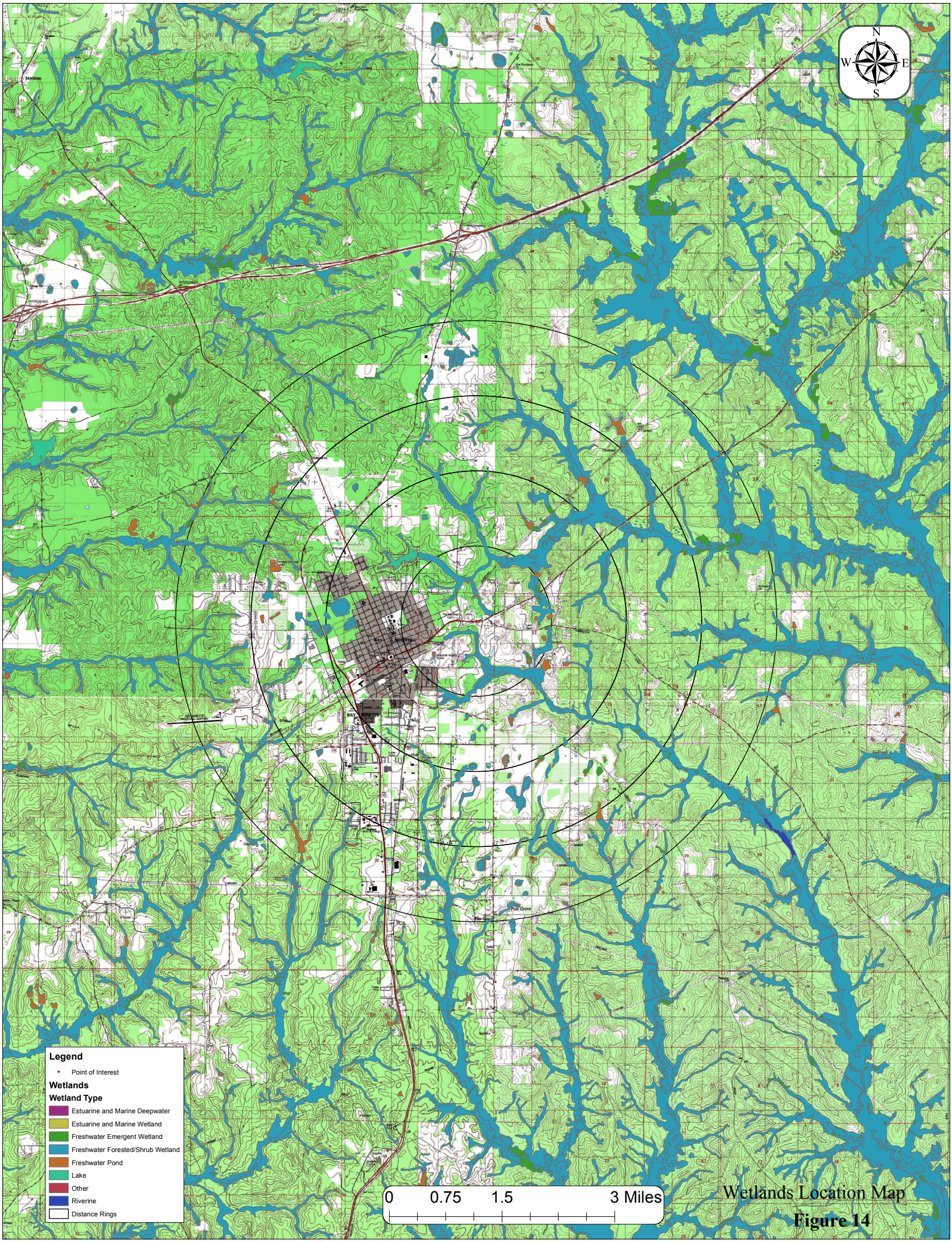
BALDWIN POLE & PILING CO., INC.
BAY MINETTE, AL

SCALE: 1" = 200'	APPROVED BY:	DRAWN BY: JMR
DATE: 07/01/13		

SITE DRAWING FOR THE RCRA
POST-CLOSURE PERMIT RENEWAL APPLICATION

H. M. ROLLINS CO., INC.
GULFPORT, MISSISSIPPI

DRAWING NUMBER
130701



Wetlands Location Map

Figure 14

EXHIBIT 28

Exhibit 28

This exhibit contains the narrative portion of the original Corrective Action Plan for the facility submitted by Baldwin Pole & Piling Co., Inc., in 1989. Stella-Jones Corporation (Stella-Jones) acquired the facility in July of 2023, and is continuing the approved corrective actions.

As part of this application for renewal of the RCRA Post-Closure Permit, Stella-Jones is proposing to amend the corrective actions to eliminate the use of the two DNAPL recovery wells. The reason for this request is that the historic operation of these two wells has been unproductive, and their continued operation will not provide any environmental benefit as no DNAPL is produced from these wells.

BALDWIN POLE
AND
PILING COMPANY, INC.

BAY MINETTE, AL

EPA ID #ALD031490501

CORRECTIVE ACTION PLAN

10/14/88

REVISED 1/24/89

REVISED 3/22/89

REVISED 6/19/89

H. M. ROLLINS COMPANY, INC.

P. O. BOX 3471

GULFPORT, MS 39505

PHONE: 601 - 832-1738

BALDWIN POLE AND PILING COMPANY, INC.
BAY MINETTE, ALABAMA

CORRECTIVE ACTION PLAN

LIST OF REVISIONS

REVISION #3 6/19/89

REPLACED	-	PAGE 30
REPLACED	-	PAGE 34
REPLACED	-	PAGE 37
ADDED	-	PAGE 37-A
REPLACED	-	PAGE 47

PLEASE INSERT AT FIRST PAGE OF THE TABLE OF CONTENTS.

BALDWIN POLE AND PILING COMPANY, INC.
BAY MINETTE, ALABAMA

CORRECTIVE ACTION PLAN

LIST OF REVISIONS

REVISION #2 3/22/89

EXHIBIT 1 - PLEASE CHANGE LISTED ELEVATION OF P-3
FROM 203.85 TO 204.85

PLEASE INSERT AT FIRST PAGE OF THE TABLE OF CONTENTS.

BALDWIN POLE AND PILING COMPANY, INC.
BAY MINETTE, ALABAMA

LIST OF REVISIONS

REVISION #1 1/24/89

REPLACED - TABLE OF CONTENTS
REPLACED - EXHIBIT LIST

REPLACED - PAGE 2
REPLACED - PAGE 17
REPLACED - PAGE 19

REPLACED 10/14/88 PAGES 22-30 WITH 1/24/89 PAGES 22-37

ADDED - PAGES 38-53

EXHIBITS 1/24/89

ADDED - EXHIBIT 13
ADDED - EXHIBIT 14
ADDED - EXHIBIT 15

BALDWIN POLE AND PILING, INC.
BAY MINETTE, AL

CORRECTIVE ACTION PLAN

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BALDWIN POLE AND PILING, INC.
BAY MINETTE, AL

CORRECTIVE ACTION PLAN

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BALDWIN POLE AND PILING, INC.

BAY MINETTE, AL

CORRECTIVE ACTION PLAN

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EXHIBITS 1-15

BALDWIN POLE AND PILING COMPANY, INC.

BAY MINETTE, ALABAMA

CORRECTIVE ACTION PLAN

EXHIBIT LIST

EXHIBIT #	DESCRIPTION
1	SITE LAYOUT AND LOCATION WITH COMPLIANCE POINT
2	EXTENT OF SOLUBLE PLUME
3	EXISTING SITE GROUNDWATER CONTOURS
4	GROUNDWATER/NAPL WELL DETAIL
5	RECOVERY WELL LOCATIONS
6	RESSQ SIMULATION, 10 WELLS
7	RESSQ SIMULATION, 22 WELLS
8	DRAWDOWN CALCULATIONS
9	JET EDUCTOR LITERATURE
10	NAPL PUMP LITERATURE
11	RECOVERY SYSTEM FLOW DIAGRAM
12	CHAIN OF CUSTODY
13	OIL/WATER GRAVITY SEPARATOR DESIGN
14	CONSTRUCTION SCHEDULE FOR CORRECTIVE ACTION SYSTEM
15	FEASIBILITY ANALYSIS

REVISION 1/24/89

1.0 INTRODUCTION

Past management practices at this facility for handling solid waste and hazardous waste K001 have adversely affected the quality of the groundwater in the uppermost aquifer under this site. Information regarding the distribution and rate of movement of the contaminants can be found in the completed groundwater quality assessment (GWQA) submitted by Baldwin Pole and Piling Company, 2/15/88. The assessment is incorporated in this corrective action plan by reference.

This Corrective Action Plan is to establish procedures to be used to implement a Corrective Action Program in accordance with 40 CFR 264.100 and 101, and ADEM Admin. Code R. 335-14-5-.06.

This Corrective Action Plan, when implemented, will eliminate further migration of the pollutant plumes and will begin to correct the contamination by removal, treatment and proper disposal of the contaminants.

This document is the final technical requirement necessary to complete the Part B Post-Closure Permit Application and is considered part of that permit application.

2.0 CORRECTIVE ACTION PLANNING

The horizontal and vertical extent of soluble and dense non-aqueous phase liquid (DNAPL) contamination was described in the Groundwater Quality Assessment report, 2/15/88. The estimated extent of contamination is shown in Exhibit 2 of this report.

Baldwin Pole and Piling Company has investigated all known corrective action remedial measures, including those discussed in "Handbook: Remedial Action at Waste Disposal Sites", PB82-239054, EPA-625/6-82-006, U.S. EPA, 1982, "Leachate Plume Management", EPA-540/2-85/004, U.S. EPA 1985, and "Guidance for Closure and Remedial Action at Hazardous Waste Surface Impoundments--Wood Treatment Industry", report by Radian Corporation to U.S. EPA, January, 1984. A feasibility analysis of slurry wall containment, as requested by ADEM, is included as Exhibit 15.

After evaluation of the alternatives, Baldwin Pole and Piling Company has chosen to use groundwater pumping to capture and remove the contaminant plume. The contaminated groundwater will be discharged into the sewer system of the City of Bay Minette. Baldwin Pole and Piling Company recognizes that a permit for the discharge must be obtained from ADEM, Water Division, and is currently awaiting their decision on discharge limits to be imposed on the discharge. Treatment of the groundwater prior to discharge will be provided in order to comply with discharge limits as needed.

2.1 COMPLIANCE POINT

Baldwin Pole and Piling Company proposes that Monitoring Well 2A, 3A, and 4A be used as the compliance point for the corrective action program. Wells 2A, 3A, and 4A are at or near the hydraulically downgradient limit of the waste management area. Location of the Compliance Point is shown on Exhibit 1.

2.2 GROUNDWATER PROTECTION STANDARD

ADEM Admin. Code R. 335-14-5-.06 (3), (4), and (5) established procedures to be used to set groundwater protection standards and states that such standards shall be either the background levels of contaminants in the groundwater or an alternate concentration limit. The alternate concentration limit is a concentration which will not pose substantial present or future hazard to human health or the environment.

Scientifically acceptable data concerning allowable groundwater and surface water concentrations for many of the contaminants of concern are not available at this time. Therefore, Baldwin Pole and Piling Company does not choose to propose alternate concentration limits for the organic contaminants of concern. Baldwin Pole and Piling does propose to maintain the right to petition ADEM for establishment of alternate concentration limits at any time during the corrective action or post-closure permit period.

Baldwin Pole and Piling Company proposes that the groundwater protection standard for the organic contaminants of concern shall be the current method detection limit of 10 micrograms per liter as shown in the American Laboratories and Research Services, Inc., Hattiesburg, MS, report on their sample ID# AA00243, March 28, 1988, previously submitted.

2.3 CONTAINMENT, REMOVAL AND TREATMENT OF SOLUBLE PLUME

As discussed in the GWQA report, page 22, the geometry and characteristics of the aquifer and topography at this site do not make numerical analysis of groundwater flow by computer modeling cost effective or productive. The use of standard analytical or semi-analytical methods of groundwater flow will not adversely affect the effectiveness of the corrective action activities. A drawing of existing groundwater equipotential contours is found in Exhibit 3.

Capture of a contaminant plume by groundwater pumping requires careful analysis of the groundwater flow at a site along with the contaminant plume location, extent and shape. Given sufficient knowledge of these conditions, the proper number of recovery wells, their locations, spacing, and pumping rates may be specified. Improper selection of these variables may result in failure to capture the contaminant plume and an acceleration in its flow past the capture zone (6).

A semi-analytical method of design of a withdrawal system to capture a contaminant plume is explained in references 1, 2, and 6. This method is based upon application of complex potential theory to the flow path of a particle impacted by regional flow and stresses from groundwater recovery pumping (6). Javandel and Tsang present solutions to the optimum distance between wells, width of the capture zone at the line of wells and width of the capture zone far upstream of the line of wells in Table 1 of reference 6. This method can also be used to predict the downgradient distance to the stagnation point, beyond which regional flow continues. The distance to the stagnation point is also the downgradient limit of the capture zone. These solutions are expressed in terms of Q/BU, where Q = flow rate from each well (L^3/T), B = aquifer thickness (L), and U = regional (Darcy) flow velocity (L/T). Analysis of the Q/BU factor used in reference 6 reveals that Q/BU is the width of the zone of the aquifer contributing flow to the capture well. From Darcy's equation, Q = KIA, where K = conductivity, I = gradient, A = area = thickness (B) x width (W). Therefore Q = KIBW. Darcy flow velocity, U, = KI. Then Q = UBW and Q/BU becomes UBW/BU, or Q/BU = W, the width of the zone contributing flow to the capture zone. Further analysis of the Q/BU factors given in Table 1 (6) show that in order to capture the flow across a given width at the line of withdrawal wells, the

design pumping rate will have to be equal to the regional flow through twice that width, as the capture zone width far upstream is twice the capture zone width at the line of the wells. For example, in order to capture a plume with a 100 foot width at the desired well location, it is necessary to pump at a volume equal to the Darcy flow through a 200 foot width of the aquifer. Earlier work, as given in Kruseman and DeRidder, page 135, (9), present methods for determining the downgradient distance to the stagnation point and the width of the aquifer contributing flow to the well which agree with the values found by Keely, Javandel and Tsang.

The most efficient method for capture of a plume is the use of one well. The controlling factor for selection of the number of wells is the amount of available or allowable drawdown compared with the estimated drawdown computed for the required pumping rate. In the event that one well will produce excessive drawdown, multiple wells must be used. The proper spacing of these wells is essential to prevent flow between the wells. Javandel and Tsang present data for optimum spacing of two, three, and four recovery wells (6).

Javandel and Tsang (6) state that finding the optimum distance between more than four wells becomes quite cumbersome. However, the optimum distances between wells for two and three wells, as shown in Table 1, reference 6, has the apparent form of $(n-1)^{1/n} \div (n \pi Q_t/BU)$, where n = number of wells and Q_t = total flow from all wells. In this format, their "approximate distance" between two wells in a 4 well case is listed as $0.3\ Q_t/\pi BU$. Use of the apparent form yields spacing of $0.33\ Q_t/BU$, or a variation of 10%.

The danger with selection of well spacing is that wells spaced too far apart will allow flow to escape between the wells (6). Manipulation of the apparent form of the spacing formula given above reveals that the distance between the outside wells in a line of wells increases with the number of wells up to and including 10 wells and then would begin to decrease. Since the reason for using more than 1 well is to decrease drawdown, and since the drawdown of one well in another is inversely proportional to the square of the distance between wells, it appears that 10 wells would be the upper limit for use of the apparent form factor for computing well spacing. To test the validity of the apparent form, well spacing was computed for 10 wells. For this case, Q/BU was chosen as 1,000 ft. The resultant

spacing was calculated to be 39.6 feet. A computer run, using the semi-analytical model RESSQ (1), with 10 wells spaced at 39.6 ft. center to center, was run to test the validity of the well spacing. The computer run shows stagnation occurring downstream and no flow occurring between the wells. The output file and plot of this run are found in Exhibit 6.

In order to strictly apply this semi-analytical approach, it is necessary to assume the aquifer is isotropic, homogeneous, and of uniform thickness. The regional groundwater flow is assumed to be uniform and constant in direction and velocity. As discussed in the GWQA and shown in Exhibit 3, these conditions do not exist at this site. The aquifer is anisotropic, non-homogeneous and of varying thickness. The hydraulic conductivity, gradient, and direction of flow vary widely. However, on a conservatively safe basis, some of the methods presented will be used to assist in design of the corrective action system for this site.

2.3.1 DESIGN FOR CAPTURE OF IMPOUNDMENT PLUME

As reported in the GWQA, a large portion of the groundwater flow from the higher elevations changes to surface flow through seeps and springs in the vicinity of the 210 ft. groundwater equipotential all

around the low swampy area to the north of the closed impoundment. A great deal of this surface flow is lost through evapotranspiration through the mature swamp forest and the balance flows to the drainage pond created by the elevated railroad fill at the north end of the site. The subsurface contaminant plume is relatively narrow, thin, and slow moving at its northern limit at the drainage pond.

In order to "capture" the plume of contaminated groundwater passing beneath the closed impoundment, the line of wells, or capture line, must be upgradient from the surface seeps and springs. Baldwin Pole and Piling proposes to capture the groundwater flow at a line approximating the present 215 foot groundwater equipotential as shown in Exhibit 3. Capture of the plume flow at this location will stop further additions to groundwater contamination in the swamp area and will minimize the conversion of contaminated groundwater flow into contaminated surface flow. Baldwin Pole and Piling also proposes to install one additional recovery well in the vicinity of P-2 to capture the contaminated groundwater flow in the swamp.

In the GWQA, page 38, contaminated groundwater flow across a 505 ft. length of the 215 ft. groundwater equipotential was estimated to be 20,200 gpd using the following hydraulic characteristics:

Q, flow, ft^3/day = KiA; where
K, conductivity, ft/day = 16.5
i, gradient, ft/ft = 0.0465
A, area, ft^2 = BW; where
B, aquifer thickness, ft = 7
W, width, ft = 505.

As seen in Exhibit 3, the 215 ft. equipotential curves around the downgradient edge of the surface impoundment with groundwater flow perpendicular to this line at all points. If this line were straight rather than curved, the methods of Javandel et al. (1,2,6) state that the pumping rate would need to be twice the expected flow across the equipotential in order to capture all of the flow occurring within the 505 foot length. Once again, this method assumes an aquifer of constant flow velocity and direction with a width far upstream (more than 4,000 feet in this case) of at least 1,000 feet to supply the required flow volume. In the case of a curving equipotential, the cones of depression on

the upstream side of each well will overlap much more than would the parallel axes in a uniform flow field, thereby creating more than expected drawdowns in the interior regions of the zone of influence and reducing the velocity gradient available for flow to escape between the wells.

For a conservatively safe estimate of flow quantity needed to capture the plume along a 505 foot length at approximately the 215 ft. equipotential, Baldwin Pole and Piling will use the quantity predicted for a uniform flow field, or twice the calculated estimated flow now occurring across that line. The estimate of present flow is 20,200 gpd. The design flow for capture of the plume immediately downgradient from the closed impoundment will then be 40,400 gpd, or 5,400 ft^3/day.

From the data in the boring logs from MW-2A, 3A, 4A and B-4, the top of the aquiclude underlying the 215 ft. equipotential is expected to be at 202 ft. to 204 ft. NGVD. With the existing water level at 215 ft. NGVD, there will be approximately 11-13 feet of total drawdown available at the wells. Calculations of expected steady state drawdowns by the

methods given in Javandel et al.(6) or Bouwer (8) reveal that the drawdown from pumping at the design flow rate from one through four wells will exceed total available drawdown. This fact, combined with the known conditions of variable aquifer thickness and permeability which will cause varying capacities to produce water, are the controlling factors in the final design of the corrective action plan.

The computer simulation with 10 wells spaced at 39.6 ft. discussed above appears to show "capture" of the design flow under the idealized conditions. The lateral distance between the outside wells is 9 spaces at 39.6 ft., or 356 feet. Drawdown calculations were made for the two center wells and the outside wells. These calculations are found in Exhibit 8. The center two wells would have 19.9 ft. of drawdown and the outside wells would have 16.3 ft. of drawdown. Both of these figures are greater than the total available drawdown. There appears to be insufficient aquifer thickness available to allow the gradient increase necessary to cause flow to occur at the design rate.

Since lowering of the pumping rate will decrease the gradient toward a well and increase the probability of escape between wells or around the line of wells, Baldwin proposes to install more wells at closer spacing with lateral coverage of 420 feet along the 215 ft. equipotential. This will allow more flexibility in dealing with expected variations in aquifer thickness and permeability. The system will either produce at the design flow of 40,400 gpd or allow very close control of the groundwater level along the line of wells. Either option will achieve the design objective.

To capture the impoundment plume, Baldwin Pole and Piling proposes to install 22 wells at 20 foot spacing at the locations shown on Exhibit 5. This system of wells will insure that flow between wells will not occur and will create sufficient gradients to divert all flow under the impoundment to the well system. A run of the RESSQ program for this system is included in Exhibit 7.

The wells will be installed to the top of the aquiclude underlying the shallow surficial aquifer. The well screens will extend from the bottom of the well to within 5 feet of the land surface to insure maximum possible yield.

The groundwater pumping system will be designed to pump at 5400 ft^3/day. Once again, drawdown at all wells is expected to exceed available drawdown. Known non-uniform conditions indicate that varying yields may be expected from the individual wells. To compensate for these factors, the wells will be pumped by a system utilizing self-priming liquid-liquid jet eductors mounted on the top of each well with a suction pipe which will extend to near the bottom of each well. The liquid supply line to the eductor will come from a common supply line of recirculated water. The discharge lines from each eductor will join a common discharge line for return to the recirculation tank. The total quantity pumped from the wells will overflow from the recirculation line to the first treatment system tank. A line drawing of this system is found in **Exhibit 11.**

The pumping capacity of a jet eductor is dependent on size, operating pressure, discharge head, and suction lift. After installation of all wells, slug tests will be performed to estimate the ability of each well to produce water and the proper jet size will be chosen for that well to minimize operating liquid flow and maximize

pumped volume relative to anticipated well production ability. After the system is installed and operating, final adjustments in operating conditions or eductor size will be made to insure withdrawal of the design flow or management of the groundwater level in each well to assure complete capture of the contaminant plume.

2.3.2 DESIGN FOR CAPTURE OF THE SWAMP PLUME

The GWQA report for this site shows an estimated contaminant plume flow of 325 gpd in the vicinity of Well P-2 as a result of the following parameters:

Width, perpendicular to flow, ft.	200
Aquifer thickness, ft.	5
Hydraulic gradient, ft/ft	0.014
Hydraulic conductivity, ft/day	3.1

Flow conditions in the immediate area of this plume appear to more closely approach idealized conditions and again the methods of Javandel et al.(6) will be used to compute expected flow necessary to capture the plume. The volume of withdrawal to capture the plume along a line perpendicular to the plume flow and through the pumping well must equal twice the normal flow across that line. With an estimated normal flow of 325 gpd, the design pumping rate will be 650 gpd.

Steady state drawdown calculations at this flow estimate drawdown to be approximately 6 feet, which should be acceptable in this location.

2.3.3 DESIGN FOR DENSE NON-AQUEOUS PHASE LIQUID REMOVAL

As explained in the GWQA, no large masses of dense non-aqueous phase liquids (DNAPL) were found in the area, and migration of DNAPL as a separate phase free liquid is not believed to be occurring. Due to the phenomena of two phase flow and the lack of large masses or pools of DNAPL, efforts to remove DNAPL are expected to yield very poor results.

Baldwin Pole and Piling proposes to install two (2) wells at the locations shown on Exhibit 5 to remove DNAPL from the surficial aquifer. The wells will be equipped with non-emulsifying pumps and the pumping rate will be adjusted after installation to yield the maximum amount of DNAPL. It is expected that the output of these wells will have to pass through a gravity oil/water separator tank to allow separation of the DNAPL from water prior to collecting the DNAPL for recycling. The water from the separator will be mixed with the water from the groundwater recovery wells.

3.0 PROPOSED CORRECTIVE ACTION PROGRAM

Baldwin Pole and Piling proposes to implement the following corrective action program. The corrective action program is contingent upon approval of the program by ADEM, Land Division, Hazardous Waste Branch and issuance of a discharge permit for the withdrawn groundwater by the Water Division, Industrial Branch. An application for the discharge permit has been submitted to the Water Division concurrent with this submittal to the Land Division. Baldwin Pole and Piling proposes to have the proposed corrective action program installed and fully operational within 1 year following receipt of approval of this plan and the required discharge permit. A detailed schedule of construction goals is found in Exhibit 14.

3.1 CORRECTIVE ACTION FOR THE SOLUBLE CONTAMINANT PLUME

Baldwin Pole and Piling proposes to install twenty-three (23) groundwater recovery wells at the approximate locations shown on Exhibit 5. As shown, twenty-two (22) of the wells will be installed near the closed impoundment. These wells will fully penetrate the surficial aquifer and will be equipped with a pumping system capable of pumping at a rate of 5,400 ft^3/day (40,400 gallons/day). After installation of these wells, the pumping rate for each individual well will be adjusted as necessary. Due to the cumulative effects of drawdown from wells on 20 ft. spacing with the site aquifer conditions, drawdowns are expected to approach 100% of aquifer thickness.

The pumping system for these wells will be liquid-liquid jet eductors, equal to Penberthy-Houdaille Model LM (described in **Exhibit 9**). As shown in **Exhibit 11**, these eductors will be operated by one pump which will circulate water from a tank through the eductors and back to the tank, with the extracted volume overflowing into a surge tank ahead of the treatment/disposal system. These eductors have the ability to pump gas as well as liquid and are self priming to a suction lift of 25 feet. Final selection of eductor size for each well will be made following installation, development, and testing of the wells. All eductors and the pumping system will be selected in accordance with the procedures outlined in **Exhibit 9**. As seen in **Exhibit 9**, pumping volume at constant discharge head may be reduced by lowering operating water pressure, which can be easily done by throttling the flow ahead of the eductor with a resultant savings in operating volume. This volume will then be available to furnish additional motive power to larger eductors mounted on higher yielding wells if needed.

One groundwater recovery well will be installed in the vicinity of P-2, as shown in **Exhibit 5**. This well will be fully penetrating and will be equipped with a pump designed to operate at 87 ft^3/day (650 gal/day). To protect against the

possibility of DNAPL micelle or droplet migration to this pump under pumping induced stresses, the flow from this well will be piped to the oil/water separator to be installed and the water will then flow to the surge tank ahead of the treatment/disposal system.

All groundwater recovery wells will be installed using hollow stem auger drilling methods. The wells will terminate at the top of the aquiclude and will be screened throughout the aquifer zone and any semi-pervious material overlying the aquifer. The wells will be 2 inch ID continuous slot screens and casing, constructed of 304 stainless steel. The well tops will be adequately secured with locking covers and a 4' by 4' by 4" concrete surface seal will be poured around each well. A typical well construction diagram is found in Exhibit 4.

3.2 CORRECTIVE ACTION FOR THE DENSE NON-AQUEOUS PHASE LIQUID CONTAMINATION

Baldwin Pole and Piling proposes to install two wells in the approximate locations shown on Exhibit 5 for withdrawal of any available DNAPL. These wells locations were selected from evidence found during the GWQA investigation.

These two wells will be equipped with non-emulsifying pumps similar to those described in

Exhibit 10. The flow rate from these wells will be adjusted to maximize production of DNAPL's, and is not expected to exceed 250 gallons total DNAPL and water flow per well per day.

The flow from these two wells will be piped to an oil/water separator where gravity separation of the water and DNAPL will occur. The water will flow from the separator into the surge tank ahead of the treatment/disposal system.

These wells will be constructed of 4 inch ID 304 stainless steel screen and casing and will be installed by hollow stem augering. They will be equipped with a locking cap and a 4'x4'x4" concrete surface seal will be poured.

3.3 WATER TREATMENT AND DISPOSAL

Baldwin Pole and Piling currently manages process wastewater through a treatment system in tanks with discharge into the sewer system of Bay Minette under a Standard Industrial Discharge permit. Concurrent with the submittal of this Corrective Action Plan, Baldwin Pole and Piling is requesting a modification to the SID permit to allow discharge of the recovered groundwater into the sewer system.

Baldwin is requesting permission to discharge up to 45,000 gpd (.045 mgd) into the sewer system

from the groundwater corrective action. Based upon decisions by ADEM Water Division, Industrial and Municipal Branches, the groundwater may have to be pretreated prior to discharge in order to meet discharge limits which may be imposed by ADEM. If treatment is required prior to discharge, a system capable of consistently meeting the discharge limits will be installed.

3.4 DENSE NON-AQUEOUS PHASE LIQUID DISPOSAL

The DNAPL recovered from the oil/water separator will be stored in an above ground steel tank, properly designed and constructed, to accumulate economic shipment quantities and will then be: shipped to a creosote manufacturer for recycling; re-used in Baldwin's processes; or sent to a waste fuel dealer. The appropriate requirements of ADEM Admin. Code R. 335-14-3 and 40 CFR Part 268 will be followed.

3.5 FUTURE ALTERNATE CONCENTRATION LIMIT REQUEST

Baldwin Pole and Piling will at some time in the future request a permit modification to incorporate Alternate Concentration Limits to allow for a reduction or cessation of corrective action measures.

4.0 CORRECTIVE ACTION MONITORING PLAN

This Corrective Action Monitoring Plan is to specify the monitoring program which Baldwin Pole and Piling proposes to implement during the corrective action period. This program is intended to satisfy the requirements of ADEM Admin. Code R. 335-14-5-.06(11)(d). Changes in groundwater quality are expected to occur very slowly during corrective action.

4.1 SAMPLING LOCATIONS

Baldwin Pole and Piling proposes to establish 2 categories of sampling locations for corrective action monitoring for inclusion in post-closure permit conditions. The two categories will be referred to as "effectiveness monitoring locations" and "boundary monitoring locations". The locations of all sampling locations are shown on Exhibit 5.

4.1.1 EFFECTIVENESS MONITORING LOCATIONS

Baldwin Pole and Piling proposes that MW-2A, 3A, 4A, MW-8, and P-2 shall be designated "effectiveness monitoring locations".

The "effectiveness monitoring locations" are selected to monitor the gradual changes in contaminant concentration with time and will provide the data needed to show attainment of the groundwater protection

standard specified in the post-closure permit. Due to the high octanol/water and organic carbon/water partition coefficients of the contaminants of concern, the age of the plume, and the locations of the "effectiveness monitoring locations", the contaminant concentrations at these locations are expected to remain fairly constant for a number of years and then begin to show a slow gradual decline as desorption begins to take place.

4.1.2 BOUNDARY MONITORING LOCATIONS

Baldwin Pole and Piling proposes that TP-9, P-6, P-1, MW-10 and the rainfall drainage pond be designated "boundary monitoring locations".

The "boundary monitoring locations" are chosen as the closest sampling locations downgradient from the sources of contamination which do not exhibit contamination and which were used to delineate the areal and vertical extent of the plume. These sampling locations will be used to provide analytical verification that the plume is not migrating beyond its present areal and vertical limits.

4.2 SAMPLING FREQUENCY

All effectiveness monitoring locations shall be sampled on a semi-annual basis throughout the corrective action period. This schedule shall begin within 90 days after initiation of corrective action.

All boundary monitoring locations shall be sampled semi-annually for 2 years (4 sampling events) beginning within 90 days after initiation of corrective action. At the end of this period, if groundwater gradients, physical evidence, and analytical absence of contamination at these locations show that the corrective action appears to be performing as designed, the sampling frequency for the boundary monitoring locations will be changed to once per year.

Baldwin Pole and Piling Company, Inc. has chosen these monitoring frequencies after realistic evaluation of several factors. The first factor is that there is no current regulatory requirement for corrective action monitoring to be conducted at intervals more frequent than semi-annually. The only known requirement for more frequent sampling is found in ADEM Admin. Code R. 335-14-05-.06(10), Compliance Monitoring Program. The requirements for a corrective action monitoring program are found in ADEM Admin. Code R. 335-14-05-.06(11)(d) and state, in part, "Such

a monitoring program" (corrective action) "may be based on the requirements for a compliance monitoring program". Baldwin Pole and Piling Company, Inc. believes "may" is used in its permissive form and that if the requirement were intended to be mandatory, the cited regulation would read ". . . shall be based on the requirements . . ."

Baldwin Pole and Piling Company, Inc. acknowledges that there could be instances when quarterly monitoring would be very desirable, if not mandated, during corrective action. For example, if an operating active disposal site capable of generating a non-reactive, non-degradable, non-sorptive leachate, (which would be expected to travel slightly faster than the groundwater due to dispersion) had just discovered a statistically significant increase in a downgradient well, that facility would move from the detection mode (semi-annual monitoring) into the compliance mode (quarterly monitoring). This would be advantageous to the operator because confirmation of further increases to above the groundwater protection standard would be gained earlier. This earlier knowledge would limit the amount of further investigation needed and would allow corrective action to begin earlier. Under this scenario, the plume would only have traveled to the hydraulic downgradient limit of

the site. With the character of the assumed leachate, corrective action might be expected to be completed within a relatively short (1-5 years) period of time. Under these conditions, contaminant concentration would be expected to be only slightly above the groundwater protection standard and would be expected to increase and then decrease fairly rapidly. In this instance, a quarterly monitoring might be considered necessary during corrective action in order to gain statistically valid data that further corrective action was not needed.

In the case of the contamination at Baldwin Pole and Piling Company, Inc., the plume has progressed far beyond the hydraulic downgradient limit of the closed surface impoundment. The contaminants are exhibiting high sorptive characteristics and move at a highly retarded rate relative to groundwater as a result of this phenomenon. The same characteristics which caused the retardation in travel velocity will occur in reverse during cleanup of the groundwater and aquifer matrix. Changes in groundwater quality will occur very slowly at this site and corrective action is expected to be required for approximately 30 years.

The corrective action system will create significant depressions in groundwater elevations. These depressions will be sufficient to insure that the physical laws of fluid flow will cause hydraulic capture of all present contaminant flow by the 25 pumping wells. Analysis of the groundwater elevations is required to be performed semi-annually by ADEM Admin. Code R. 335-14-5-.06(11). In the event that capture of the plume is not indicated by analysis of this data, Baldwin Pole and Piling Company, Inc. is required to submit permit modifications to ADEM. It is felt that the physical establishment of groundwater gradients in conjunction with limited monitoring of the "boundary monitoring locations" will be effective evidence of the cessation of plume areal or vertical migration.

Based on these site-specific factors, Baldwin Pole and Piling Company, Inc., maintains that this monitoring plan will demonstrate the effectiveness of the corrective action program.

In a discussion of the impact of corrective action costs on small business (FR, Vol. 51, No. 206, pgs. 37854-37867, Oct. 24, 1986), the Environmental Protection Agency recognizes that the corrective actions may often take 50 years to complete and may take as long as 100 years. They further recognized that the costs for corrective

action will be typically several times larger than the costs for closure and post-closure care, and that more stringent financial requirements may induce bankruptcies, thus increasing the number of unfunded corrective actions. They recognize that this would be counter productive to the aim of owner/operator funded corrective action.

4.3 ANALYTICAL PARAMETERS FOR CORRECTIVE ACTION MONITORING

The groundwater at this site has been impacted by constituents of the hazardous waste designated K001 in ADEM Admin. Code R. 335-14-2-.04(3). The basis for the listing of this waste is found in ADEM Admin. Code R. 335-14-2-.13. During the corrective action period, all samples will be analyzed for the list of parameters found in ADEM Admin. Code R. 335-14-2-.13 for waste K001. listed as:

K001.... Pentachlorophenol, phenol, 2-chlorophenol, p-chloro-m-cresol, 2,4-dimethylphenol, 2,4-dinitrophenol, trichlorophenols, tetrachlorophenols, creosote, chrysene, naphthalene, fluoranthene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, benz(a)anthracene, dibenz(a)anthracene, acenaphthalene.

The pH, specific conductance, and temperature of each sample will be measured and recorded.

These compounds are generally very stable in aqueous solution, and are not expected to undergo hydrolysis or rapid biological degradation in an anaerobic nutrient deficient environment (16).

The appropriate analytical procedures and expected detection limits in this groundwater are found in Exhibit 4, Volume II, Part B Post-Closure Permit Application.

4.4 COMPLIANCE MONITORING

In the event that any analyses of all effectiveness monitoring locations report concentrations of all corrective action parameters less than the limits specified in the groundwater protection standard, Baldwin Pole and Piling will sample the effectiveness and boundary sampling locations for analysis for the list of compounds currently found in 40 CFR Part 264, Appendix IX. Based upon the results of these analyses, Baldwin Pole and Piling will petition for a change in this groundwater monitoring plan.

4.5 SAMPLING PROCEDURES AND QUALITY ASSURANCE/ QUALITY CONTROL MEASURES

Prior to flushing or sampling, static water levels will be taken using the wetted tape technique. A minimum of two measurements per well will be taken. If the two results differ by more than 1/4", additional readings will be taken until two consecutive readings are within this range. Measurements will be recorded on the sampling chain of custody document attached. The measuring point at all wells is the highest elevation of the casing or protective standpipe with the well cap removed, and is plainly marked.

The monitor wells will be flushed a minimum of 3 well volumes prior to sampling. The monitoring wells will be sampled with a teflon bailer. A separate dedicated sampling bailer will be used for each monitoring well. At the completion of each sampling event, all bailers will be thoroughly cleansed by washing with phosphate free biodegradable detergent, rinsed in tap water, then distilled water, then acetone, then pesticide-quality hexane. The bailer shall be dried and then double wrapped in aluminum foil. At the next sampling event, each bailer shall be rinsed with distilled water after removing the aluminum foil and before sampling.

New 1/4 inch nylon ropes will be used for each bailer at each sampling event. The sampling person will wear new surgical gloves at each well and shall touch nothing except the new rope and sampling bailer until sampling at that well is completed.

The rainfall drainage pond shall be sampled by use of a dipper as described in U.S. EPA SW-846. The dipper shall be thoroughly cleansed as above prior to sampling.

The laboratory chosen to perform the analyses will be carefully examined to insure they possess the requisite equipment, personnel, experience and quality control/assurance programs. As a minimum, they must be participants in the U.S. EPA Water Supply Evaluation Performance Study and the results of their last 4 analytical evaluations will be checked. The laboratory will provide sample kits conforming to EPA 600/4-79-020 and EPA SW-846. The sample containers will be one liter glass containers with teflon lid liners. Preservatives are not currently specified for organic analyses by gas chromatographic methods.

The laboratory will be directed to furnish 3 more empty containers than the number of samples to be taken. This will allow for possible glass breakage

and additional containers for preparation of a field blank and a duplicate sample, discussed later. In addition, the laboratory will be directed to furnish one container filled with distilled water. This container will not be marked or identified by the laboratory, and will serve as a trip blank.

Care will be taken to completely fill each sample container. Sample containers will not be rinsed with sample. Sample containers will be marked with sample number, Baldwin Pole and Piling Company, Inc., date and time of sampling, and sampler's name. One duplicate sample will be taken from MW-2A, 3A, or 4A. The trip blank furnished by the laboratory will be labeled and marked as a field sample. One of the extra empty containers will be filled with the distilled water available for use in the field. This container will also be marked and labeled as a field sample. The trip blank will be marked MW-14, the field blank will be marked MW-15, and the duplicate sample will marked MW-16.

Samples will be refrigerated at approximately 4°C (39°-40°F.) immediately after taking, and will be transported to the laboratory within 24 hours.

A chain of custody record will be prepared for each well and will accompany the shipment. The laboratory must return a signed copy of the custody document. A sample chain of custody record is included in Exhibit 12.

The person responsible for sampling shall maintain a field log of activities, events, and circumstances occurring during sampling. The field record will reflect the sample numbers assigned to the trip and field blank samples and the duplicate sample. This field log shall be filed with copies of the chain of custody documents.

The analytical results of each sampling event shall be analyzed immediately following receipt of the results from the laboratory. Particular attention will be given to the following items:

1. The fit of the data from each sample with the previously reported data.
2. The reported results of the analysis of the trip and field blanks.
3. The reported results of laboratory spikes of the samples.
4. The results of the duplicate sample.

Apparent abnormalities, outliers, or possible errors will be investigated by thorough review of the field log and discussions with the laboratory QA/QC manager. In the event that unresolved abnormalities exist which would indicate the need for a change in the corrective action measures, resampling of the wells and replicate analyses will be performed within 30 days in order to resolve the issues.

4.6 ANALYTICAL PROCEDURES AND QUALITY ASSURANCE/ QUALITY CONTROL

The samples will be analyzed in accordance with the procedures found in "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, revised March 1983, or latest edition and "Test Methods for Evaluating Solid Wastes", EPA SW-846, latest edition. The laboratory will be required to furnish a certification that procedures followed conform to the above references.

The laboratory quality assurance/quality control procedures will be compared to the required minimum QA/QC measures found in SW-846 for each procedure used to insure that appropriate QA/QC measures are being taken. The regular occurrence of observed abnormalities in laboratory data will result in selection of another laboratory.

4.7 GROUNDWATER FLOW RATE AND DIRECTION

Baldwin Pole and Piling will determine groundwater flow rates and directions annually during the permit period.

The corrective action program will eliminate flow beyond the present limits of contamination.

4.8 STATISTICAL EVALUATION

4.8.1 BACKGROUND DETERMINATION

Based upon all past analyses of the upgradient well, the background limits for the contaminants of concern are below current method detection limits. Statistical procedures are unusable in these circumstances.

4.8.2 STATISTICAL EVALUATION AT COMPLIANCE POINTS

At this time, Baldwin Pole and Piling is not applying for alternate concentration limits. The limits at the compliance points will be the background limits which are less than method detection limits. Statistical evaluation is therefore not applicable.

In the event that Baldwin Pole and Piling applies for Alternate Concentration Limits, this monitoring plan will be amended to allow for statistical evaluation of the

analytical results in accordance with Appendix B, RCRA Groundwater Monitoring Technical Enforcement Guidance Document (9) and/or other appropriate statistical methods. The required changes to this plan, including statistical methodology, will be submitted with the Alternate Concentration Limit Demonstration.

5.0 REPORTING

Baldwin Pole and Piling will submit written reports to ADEM semi-annually during corrective action. These reports will contain the results of all previously unreported analytical data and groundwater levels, as well as a description of the operation of the correction action system. Annually, the report will contain the analysis of groundwater flow rate and direction as described in 4.7 above.

Should any analysis of the data from the corrective action program indicate that the corrective action program is not functioning properly, Baldwin Pole and Piling Company will address these issues in their report and will submit an application for necessary modifications to the post-closure permit within 90 days.

Improper functioning of the corrective action plan would be indicated by the presence of confirmed contamination in the boundary monitoring wells, groundwater flow analysis which does not indicate capture of the plume, or lack of gradual improvement over time in groundwater quality.

The initial semi-annual report shall be submitted 6 months after issuance of the Post-Closure Permit and each 6 months thereafter. Annual reports will be submitted on the permit anniversary dates. The reports will contain, at a minimum but not limited to, the following information:

1. Sampling logs.
2. Chain of custody documents.
3. Laboratory results and certifications.
4. Written narrative of corrective action evaluation.
5. Analyses of groundwater flow rate and direction (annually).
6. A request for necessary permit modifications (if needed).

6.0 CORRECTIVE ACTION COST ESTIMATE

This corrective action cost estimate is prepared to satisfy the requirements of ADEM Admin. Code R. 335-14-5-.06 (11) and (12). The cost estimate is prepared in two parts. The first part covers the cost estimate for purchase and installation of the physical corrective action system. The second part is the cost estimate for annual operating expenses of the system.

6.1 COST ESTIMATE FOR THE CORRECTIVE ACTION PHYSICAL SYSTEM

This estimate is based upon quotations received from reputable vendors of products and services in the local area.

PURCHASE AND INSTALLATION OF SYSTEM

Building, Metal, Pre-engineered approx. 40' x 60', including site preparation and foundation	$ 24.000
Electrical Service	10,000
Tankage for Groundwater Recovery (see Exh. 11) 1-1,000 gal., 2-2,000 gal., 1-5,000 gal. tank, 2-10,000 gal., 1-850 gal.(o/w separator)	21.875
Pump, Recirculation, 100 gpm @ 100 psig, 2 ea.	3.000
Discharge Pump, 40 gpm @ 40 psig, 2 ea.	1,500
Air Compressor, 2 hp, 7.5 SCFM @ 100 psig, 2 ea.	2.000
Bladder Pumps, 3 ea.	2,000
Controller for Bladder Pumps, 3 ea.	4,800
Oil Transfer Pump, 2 ea., 20 gpm @ 40 psig	1,000
Oil Loading Pump, 200 gpm @ 40 psig	1.500
Galvanized Pipe, T & C,	
2" ID - 3,000 LF @ $2.60	
3" ID - 500 LF @ $5.72	
3/4" ID - 500 LF @ $0.88	
1/2" ID - 100 LF @ $0.66	$ 11,200
Misc. 1/2"-3" screwed fittings	700
Plumbing Crew, 200 hrs. @ $20/hr.	4,000
Eductors, 3/4" Liquid/Liquid; Liquid/Air 22 each @ $70	1.540
Drill Rig w/Crew, 4 days @ $680/day	2,720
Well Completion Crew, 5 days @ $400/day	2,000
Supervising Engineer, 10 days @ $500/day	5.000

Well Material: 304 SS, 2" ID	
25 - 10' screens @ $295 ea.	
25 - 5' screens @ $167 ea.	
25 - 10' risers @ $105 ea.	
25 - wash down valves @ $65 ea.	
25 - protective well casings @ $50/ea.	$ 17,050
Wastewater Treatment System	$ 50,000
Subtotal	$165,885
Allowance for Contingencies, 10%	16,600
TOTAL	$182,485

6.2 COST ESTIMATE FOR ANNUAL OPERATING EXPENSES FOR THE CORRECTIVE ACTION PROGRAM

This portion of the cost estimate is prepared to cover the annual operating expenses of the corrective action program. The operating costs are divided into major divisions of:

1. Labor and Engineering Supervision.
2. Electrical Power.
3. Miscellaneous chemicals and supplies.
4. Analytical Expenses.
5. Reserve for equipment maintenance, replacement, and contingencies

and are discussed below.

Certain portions of the operating expenses have been previously listed in the post-closure care cost estimate found in Section II, Volume I, Part B Post-Closure Permit Application. The costs for the major divisions will be subtotaled and that portion of these costs previously listed in the post-closure cost estimate will be subtracted from the subtotal, leaving the net remaining corrective action program costs.

6.2.1 LABOR AND ENGINEERING SUPERVISION

The system is designed to function without the need for constant operator assistance. The proper use of back-up systems, safety shut-down devices, and system sizing will prevent any threat to human health or the environment during non-attended hours.

The system will be attended for 2 hours each day. During this time, checks of the operating parameters and safety systems, oil transfer operations, preventive and routine maintenance, and discharge sampling will be conducted.

The system operator will work 8 hours/day twice per year to assist the supervising engineer in sampling of groundwater wells and measurements of groundwater levels.

The supervising engineer will visit the site once per quarter. Two of these trips will be for 1/2 day and two will be for full days to accomplish sampling and measurements.

Costs:

Operator Labor:	
2 hrs./day x 365 days/yr. = 730 hrs.	
6 additional hrs. x 2 days/yr. = 12 hrs.	
742 hours @ $8/hr.	$5,936.00
Supervising Engineer:	
1/2 day @ $250 x 2/year	500.00
1 day @ $500 x 2/year	1,000.00
Subtotal Labor	$7,436.00
Amount included in Post-Closure cost estimate:	
Site Inspections 4/yr. @ $250	-1,000.00
Net Labor Cost Remaining	$6,436.00

6.2.2 ELECTRICAL POWER

The groundwater pumping and treatment system will run continuously and will consist of the listed electrical devices.

A. 10 hp pump (eductors)
B. 2 hp air compressor (bladder pumps)
C. 2 hp transfer pump (to POTW)
D. 10 hp (aerators and pumps, treatment system)
24 hp - Subtotal

The following listed equipment will be manually operated by the system operator as shown:

A. Oil transfer pump (to storage)
1 hp @ 0.5 hr./day = .5 hp hr./day
B. Oil loading pump (to transport)
5 hp @ 2 hrs./month (max) - 10 hp hrs./month

Security lighting is assumed at 500 watts, 11 hours/day, or 5.5 KW hrs./day.

Estimate of power consumption by the District Manager, Alabama Power Company, for the above service was 110,635 KW hrs./year. The rate quoted for this additional new service was $0.05842/KW hr.

Total Electric Power Cost = $6,463/year.
Less amount previously listed.
Part B Post-Closure cost estimate 0
Net Electric Power Cost Remaining $6,463/yr.

6.2.3 MISCELLANEOUS CHEMICALS AND SUPPLIES

An allowance of $100/wk. is made for miscellaneous chemicals and supplies.

$100/wk. x 52 wks./yr. = $5,200/yr.
None previously included 0
Net Miscellaneous Cost Remaining $5,200/yr.

6.2.4 ANALYTICAL EXPENSES

(1) Groundwater Analysis

(a) First 2 years:

Boundary wells:
4 wells & 1 pond x 2/yr. x $100 = $1,000
Effectiveness wells:
5 wells x 2/yr. x $100 = 1,000
Subtotal, 2 years = $2,000/yr.

(b) Last 28 years:

Boundary wells:
4 wells, 1 pond x 1/yr. x $100 = $ 400
Effectiveness wells:
5 wells x 2/year x $100 = 1,000
Subtotal, 28 years = $1,400/yr.

Analytical expenses are in large part already listed in the post-closure cost estimate.

The subtotal of expected costs in the first two years, from above, is $2,000/year. The amount previously listed in the post-closure cost estimate is $1,600/yr. The net analytical expenses remaining for the first 2 years is $400/year.

The subtotal of expected costs for the last 28 years is $1,400/year. The amount previously listed is $1,200/year. The net analytical expense remaining for the last 28 years is $200/year.

6.2.5 COST ESTIMATE FOR EQUIPMENT MAINTENANCE, REPLACEMENT, AND CONTINGENCIES

An allowance of $1,000/year is estimated to be sufficient to cover this category of expenses. There has been no previous listing of this expense. The net allowance for maintenance, replacement, and contingencies is $1,000/year.

6.2.6 CERTIFICATION OF COMPLETION OF CORRECTIVE ACTION AND POST-CLOSURE CARE

At the completion of the corrective action/post-closure care program, the supervising independent registered professional engineer will furnish the required certification.

1 Day @ $500/day = $500

SUMMARY

The total net remaining costs for operation of the system per year are:

Labor and engineering supervision	$ 6,436.00
Electrical power	6,463.00
Miscellaneous chemicals & supplies	5,200.00
Allowance for maintenance, replacement	1,000.00
Subtotal, no analytical expense	$19,099.00
Analytical Expenses, first 2 years	$ 400.00
Total Remaining Expenses First 2 years	$19,499.00
Analytical Expenses, last 28 years	$ 200.00
Total Remaining Expenses Last 28 years	$19,299.00
Final Certification	$ 500.00

Sum of yearly expenses, net, 30 years:

2 years @ $19,499/yr.	=	$ 38,998.00
28 years @ $19,299/yr.	=	$540,372.00
Final Certification	=	500.00
SUM	=	$579,870.00

6.3 FINANCIAL ASSURANCE FOR CORRECTIVE ACTION COSTS

Baldwin Pole and Piling Company, Inc. proposes to establish financial assurance for corrective action during the "corrective action" period as required in ADEM Admin. Code R. 335-14-5-.06 (12).

This financial assurance is in addition to the financial assurance mechanism presently in place for the assurance of post-closure care of the closed surface impoundment, as required by ADEM Rule 335-14-8-.02 (5)(b)16. As discussed in Section 6.2 of this document, certain analytical and engineering supervision expenses were originally listed in the post-closure cost estimate and are covered by the present financial assurance mechanism. Allowances for the covered portions of these expenses were made in arriving at the net remaining corrective action costs presented in 6.2.

Baldwin Pole and Piling Company, Inc. has submitted a detailed schedule of construction goals covering installation of the corrective action system. Baldwin Pole and Piling anticipates that this schedule or a modified schedule will be incorporated into the post-closure permit as a compliance schedule with mandatory reports and certifications by Baldwin that the compliance schedule is being met. Given these conditions and the anticipated 12 month time schedule for completion of these activities, Baldwin Pole and Piling does not propose to provide financial assurance for the construction and installation costs. ADEM may easily monitor the proper construction and installation and therefore the expenditure of these funds.

To provide financial assurance for the operating expenses for corrective action. Baldwin Pole and Piling Company proposes the following:

1. Baldwin Pole and Piling has prepared a corrective action cost estimate. (Cost Estimate).

2. The cost estimate to complete the remaining corrective action shall be adjusted annually, for inflation, within 60 days following the anniversary date of the post-closure permit.

   This adjustment will be made in the manner prescribed for adjustments of post-closure care, ADEM Admin. Code R. 335-14-5-.08(5)(b).

3. In the event that changes in the specified corrective action measures are made, the cost estimate will be adjusted to reflect these changes within 30 days following permit change approval by ADEM.

4. Baldwin Pole and Piling Company, Inc. will establish a standby trust fund for corrective action. An originally signed duplicate of the trust agreement will be forwarded to ADEM within 60 days after issuance of the post-closure permit. The trustee will be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency.

The wording of the trust agreement will be identical to that specified in ADEM Admin. Code R. 33-124-5-.08(12)(a)2. except that the words "closure and/or post-closure care": "Closure and Post-Closure Care": "closure and post-closure"; shall in each instance be replaced by the words "corrective action".

5. Baldwin Pole and Piling Company, Inc. shall compute the "required corrective action trust fund balance" annually within 60 days after the anniversary date of the post-closure permit, using the latest adjusted cost estimate from item 2 or 3 above. The "required corrective action trust fund balance" means the sum of all costs of performing corrective action for each year that corrective action must be performed after the end of the pay-in period.

   Baldwin Pole and Piling Company, Inc. believes that the corrective action will require 30 years to complete and proposes that the trust fund pay-in period shall be one-half of this time, or 15 years.

6. Baldwin Pole and Piling Company, Inc. proposes to calculate the yearly amount for which financial assurance is required as follows:

First year (within 60 days after issuance of post-closure permit).

Required amount = required corrective action trust fund balance divided by the number of years in pay-in period.

Subsequent years (within 60 days after anniversary date of post-closure permit).

Required additional amount = (RB - CV) ÷ Y where RB is the most recent estimate of the required corrective action trust fund balance; CV is the present amount of financial assurance provided; and Y is the most recent estimate of the number of years remaining in the pay-in period.

7. Baldwin Pole and Piling Company, Inc. will establish a standby irrevocable letter of credit in favor of ADEM, payable to the standby trust fund established as described in item 4. above. The initial amount of the letter of credit shall be for the initial first year required amount, computed as in item 6. above. Annually, within 60 days after the anniversary date of the post-closure permit, Baldwin shall compute the required additional amount, as in item 6. above, and shall increase the amount of the letter of

credit by the required additional amount. The amended letter of credit shall be furnished to ADEM annually within 60 days following the anniversary date of the post-closure permit.

The irrevocable letter of credit shall conform to the requirements of ADEM Admin. Code R. 335-14-5-.08(4)(d) and shall be worded in accordance with the instructions in 335-14-5-.08(12)(d).

In summary, Baldwin Pole and Piling Company, Inc. proposes these specific actions to provide financial assurance for corrective action during the post-closure period:

1. A cost estimate for corrective action has been prepared.

2. The cost estimate shall be adjusted annually within 60 days following the anniversary date of the post-closure permit and within 60 days following changes in permit conditions affecting the cost of corrective action.

3. A standby trust fund for corrective action will be established within 60 days following issuance of the post-closure permit.

4. A thirty (30) year corrective action period and a fifteen (15) year pay-in period will be

used to calculate the required corrective action fund balance and yearly payments to the fund.

5. Yearly payments to the fund shall consist of a standby irrevocable letter of credit which shall be increased yearly within 60 days following the anniversary date of the post-closure permit by the required payment amount. The initial amount of the standby irrevocable letter of credit shall be $19,500 and will be forwarded to ADEM within 60 days following post-closure permit issuance.

6.4 CALCULATION OF "REQUIRED CORRECTIVE ACTION TRUST FUND BALANCE" AND AMOUNT OF INITIAL FINANCIAL ASSURANCE REQUIRED

From 6.2.5, Corrective Action Cost Estimate, the "required corrective action trust fund balance", which equals the sum of all costs for corrective action in the last 15 years of corrective action is calculated as:

yearly costs x 15 years plus certification costs, or:

$19,299/yr. x 15 years	=	$289,485.00
+ Certification Costs	=	500.00
Required Balance	=	$289,985.00

The initial financial assurance required (FAR) is calculated as:

FAR = Required Balance ÷ Years of Pay-In Remaining

or:

FAR = $289,985.00 ÷ 15 = $19,332.33.

This number will be rounded to $19,500.00

EXHIBIT 29

Exhibit 29

This Exhibit contains the narrative portion of the approved Solid Waste Management Unit (SWMU) Corrective Measures Study, submitted by Baldwin Pole & Piling Co., Inc., in 2005. Stella-Jones Corporation (Stella-Jones) acquired the facility in July of 2023 and is continuing these corrective measures. Exhibits referenced in this narrative are found in the original plan submittal.

BALDWIN POLE & PILING COMPANY, INC.
BAY MINETTE, ALABAMA

Solid Waste Management Unit
Corrective Measures Study

Prepared By:
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October 1, 1999
Revised June 15, 2005

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1.0 INTRODUCTION

Baldwin Pole & Piling Company, Inc. (Baldwin) operates a wood preserving facility in Bay Minette, Alabama. The facility previously employed a surface impoundment for the management of process wastewaters from the wood preserving processes. This impoundment was closed in accordance with the requirements of the Resource Conservation and Recovery Act (RCRA). Baldwin was issued a State Hazardous Waste Management Permit by the Alabama Department of Environmental Management (ADEM) for the post-closure care of the closed surface impoundment site, including the requirement to operate a groundwater corrective action system.

The U.S. EPA (EPA) concurrently issued a permit implementing the provisions of the Hazardous and Solid Waste Amendments of 1984 (HSWA). That permit required the investigation of certain "solid waste management units" (SWMUs) and "areas of concern" (AOCs). Those investigations have been completed and reported to ADEM and EPA in a Draft RFI Report dated June 17, 1994. The draft RFI was conditionally accepted by ADEM by correspondence dated August 3, 1999. A final RFI Report dated September 1, 1999, is being submitted concurrently with this document.

In the correspondence dated August 3, 1999, ADEM required that Baldwin submit a Corrective Measures Study for all SWMUs and AOC A. This document was prepared to fulfill that requirement.

In correspondence to ADEM dated February 23, 2005, Baldwin requested a minor modification to the proposed fencing on the northeast property line and a 60 day time extension. On April 22, 2005, Baldwin submitted to ADEM a document entitled "Request to Modify RCRA Post-Closure Permit and Corrective Measures Study" which further detailed the requested changes. On May 20, 2005, ADEM requested that these changes be directly incorporated into the Corrective Measures Study, which is the purpose of this revision dated June 15, 2005.

2.0 BACKGROUND AND HISTORY

Baldwin began operating a wood preserving plant on the 22-acre site on U.S. Highway 31 North in 1958. The site location is shown on a section of the U.S.G.S. map found in Exhibit 1. A site drawing may be found in Exhibit 2.

The products produced at the plant have been primarily pressure treated wood utility poles and foundation piling. The original wood preservative used was creosote, a distillate of coal tar. Pentachlorophenol dissolved in a petroleum carrier was also used as a preservative system for many years, and is now the only preservative used at this facility. The SIC code for this facility is 2491.

In compliance with the requirements of the RCRA and HSWA regulations and permits, Baldwin has performed extensive investigations of environmental conditions at and near its site. The information developed during these studies has been previously reported to both ADEM and EPA in various submittals between 1985 and 1999. These reports have not been reproduced for this submittal, but they should be considered a part of this study. These documents include the Part B Post-Closure Permit Application[(1)], Groundwater Quality Assessment[(2)], Corrective Action Plan[(3)], Report of Confirmatory Sampling[(4)], Draft RCRA Facility Investigation Report[(5)], RCRA Post-Closure Permit Renewal Application[(6)], RCRA Facility Investigation (RFI) Report[(7)], and numerous Semiannual Corrective Action Effectiveness Reports[(8)].

The RCRA and HSWA permits issued to Baldwin required the investigation of 11 SWMUs and one AOC. These investigations were completed in accordance with plans approved by ADEM and EPA, and the results were furnished in the Report of Confirmatory Sampling (December 27, 1991) and the Draft RFI Report (June 17, 1994).

The Draft RFI Report was modified on March 8, 1996, in response to comments from ADEM dated November 28, 1995. Additional comments, dated September 11, 1997, were received from ADEM concerning the revised Draft RFI Report. A meeting was held at the Baldwin site on October 22, 1997. ADEM responded to that meeting with a letter dated June 9, 1998. That letter directed Baldwin to provide additional information regarding groundwater flow directions in the surficial aquifer. This information was provided to ADEM on July 6, 1998. ADEM responded to the additional information with a letter dated August 3, 1999, which conditionally approved the RFI and required the preparation and submittal of this Corrective Measures Study.

This Corrective Measures Study is a concise presentation of the viable corrective measures available for this site, and it is based on guidance contained in the RCRA and HSWA permits and on proposed corrective action rules published in the Federal Register on May 1, 1996. EPA has directed that these proposals be used as current guidance for corrective action activities. A copy of the proposed rules and the EPA guidance directive are included as Exhibit 3.

The issue of SWMU corrective measures at this site must be viewed in the context of the ongoing wood preserving operations currently performed at the site. The wood preserving operations utilize wood preserving chemicals which are classified as pesticides under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). These chemicals must exhibit toxicity toward wood destroying organisms such as fungi and termites in order to be effective as wood preservatives. The products produced at this facility are impregnated with a 5% to 7% solution of pentachlorophenol at levels ranging between 8 pounds and 12 pounds of solution per cubic foot of wood (14.5% to 20% by weight). The wood preservative creosote (a coal-tar distillate), previously used at the facility, was applied at the same approximate levels as the pentachlorophenol solution.

The use of pesticides is closely regulated by the EPA under the provisions of FIFRA. A pesticide can only be manufactured or sold in the U.S. after it has been approved by EPA during a registration and labeling procedure. This procedure requires numerous tests and studies regarding potential health and environmental effects resulting from the manufacture and use of the pesticide. These tests and studies cost many millions of dollars to perform. The only pesticides that are registered and approved for continued use under the requirements of the label are those for which EPA has determined that the benefits to society substantially exceed the risk of potential health and environmental effects. Both creosote and pentachlorophenol are registered and approved for use as wood preservatives. The application of these products is performed in accordance with the requirements of the registration label.

The use of any pesticide product will result in some amount of environmental and human exposure. This is the case with pesticides applied for agricultural use, lawn and garden use, household use, and industrial use. EPA has specified the conditions under which Baldwin applies these products, and it is acknowledged that some environmental release and exposure occurs during the manufacture of treated wood and during its subsequent end use as utility poles, piling, deck material, fence posts, landscape materials, and other structural building products.

All of the hazardous waste constituents of concern at Baldwin are associated with the wood preservatives used at the facility. These preservatives have been well studied and approved for use, as employed by Baldwin, under the terms of the pesticide regulations. The environmental issues associated with these compounds are, therefore, viewed from multiple competing regulatory perspectives. These perspectives, though promulgated by different programs of the same regulatory agency, with the common goals and objectives of protection of human health and the environment, are sometimes markedly different in

their assessment of the risks associated with the same compound. The pesticide regulatory program has the most knowledge regarding the health and environmental issues associated with these preservatives, because it is under the provisions of this program that all of the health and environmental data is developed, and under which the overall risk evaluation is made.

Therefore, the issue of potential corrective actions for part-per-million level soil contamination must be evaluated in the context that Baldwin does now use, and will continue to use, millions of pounds of wood preservative solutions, and will annually manufacture millions of cubic feet of treated wood containing 14% to 20% by weight of these pesticide products. These products will continue to be stored in open storage yards and will continue to be used where direct human exposure to the preservatives is likely to occur.

3.0 DESCRIPTION OF CURRENT SITUATION

The closure of the regulated unit, investigation and delineation of a groundwater contamination plume, preparation, implementation, and operation of a corrective action program, issuance of the initial post-closure permits and investigations of solid waste management units have been accomplished in a period of approximately 15 years. During this time period, there have been substantial changes in the regulatory programs applied to the wood preserving industry, with subsequent changes in the methods of operations of these facilities. There have also been physical changes at the Baldwin facility. The regulatory and physical changes have greatly reduced the potential environmental impacts at the facility, and, although not intended to function as corrective measures for solid waste management units, these changes effectively function as corrective measures.

As described in earlier documents, the corrective action system for remediating the groundwater contamination originating from the closed surface impoundment has been operational since April 1991. That system, a pump-and-treat system, with discharge to the local Publicly Owned Treatment Works (POTW), consists of 24 groundwater recovery wells and two dense non-aqueous phase liquid (DNAPL) recovery wells. That system has functioned to halt migration of the contaminant plume and to remove the contaminated groundwater from the aquifer. This system of recovery wells lies immediately downgradient from all of the SWMUs and AOCs at the site. This system will effectively control any potential groundwater contamination associated with any identified SWMU at the site. ADEM completed an Environmental Indicator Evaluation of the site dated August 19, 1999, and concluded that the "migration of contaminated groundwater" was under control. The drawing in Exhibit 4 shows the estimated extent of the existing groundwater contamination, the locations of the recovery wells, and estimated equipotential lines based on measured groundwater elevations.

The wood preserving process area has been physically modified by the addition of a roof over the previously open plant area. The areas under the roof have been covered with a concrete slab. These actions eliminate the potential for direct exposure to contaminated soil and limit, if not eliminate, the potential for groundwater contamination by removing the source of contaminant transport through the soil into the groundwater. These actions also eliminate the potential for storm water runoff contamination from this area by eliminating contact in the areas that have been paved and/or roofed.

The wood preserving process at this facility has been modified in recent years to minimize the occurrence of preservative drippage. The freshly treated wood is now held in the wood preserving retort until the wood is certified to be drip-free. Records of the inspection and certification are maintained at the facility. Federal and State regulations

now also require a daily inspection of the treated wood held in storage, with immediate response required to any evidence of preservative drippage which may have occurred after the wood leaves the retort. Clean-up to visibly clean levels is required, and any soil removed is managed as hazardous waste. Baldwin has a Drippage Management Contingency Plan required by these regulations which details the procedures that it follows in minimizing the impact of continuing operations.

The facility is now subject to the requirement to obtain a National Pollutant Discharge Elimination System (NPDES) permit for the storm water runoff from the site. Baldwin has been issued permit number AL0059943, which requires the periodic monitoring of storm water runoff, with analyses required for 11 specific chemicals associated with the wood preservatives that have been used at the site as well as four conventional parameters. Reports of these analyses are submitted to ADEM as Discharge Monitoring Reports (DMR) semiannually, and the analytical results presented in earlier documents have shown that there is very little or no measurable impact on the environment from storm water discharges from the facility.

4.0 IDENTIFICATION AND SCREENING OF CORRECTIVE MEASURES ALTERNATIVES

Many wood preserving sites in the nation have been the subject of investigations during the implementation of the regulations required by RCRA. The EPA guidance document, "Presumptive Remedies for Soils, Sediments, and Sludges at Wood Treater Sites," EPA/540/R-95/128, December, 1995, lists bioremediation, thermal desorption and incineration as the presumptive remedies for wood treater sites contaminated with organic constituents.

Incineration is the only technology that will effectively and rapidly treat the constituents of concern in soils to the residential levels contemplated by ADEM. Thermal desorption would be no less expensive and would not be chosen at this site because of the possibility of the formation of toxic by-products. Bioremediation would require a very long treatment time to achieve these levels. None of these technologies would provide any long-term improvement unless employed after wood preserving operations have stopped at the site. At that point, bioremediation (either active measures or enhanced monitored natural attenuation) would become the technology of choice.

So long as the present land use remains as an industrial wood preserving site, attempts to meet residential soil screening levels would be unproductive. In these situations, institutional and engineering controls to limit direct exposure become the only practical alternatives.

5.0 CORRECTIVE ACTION OBJECTIVES

The objectives of the corrective measures for this site are to control releases to the environment of, and to control human exposure to, the contaminants identified at the site. It has been accepted that there is negligible potential for contaminant release or exposure to contaminants via the air pathway. The available data presented in earlier reports indicate that the potential for release or exposure via the surface water pathway is very low to non-existent. It has been documented that there is groundwater contamination from the use of the surface impoundment at the site. It has been documented that there are contaminants present in various areas of the site at various depths which were reported to be at levels which exceed residential soil action levels. The groundwater contamination corrective action system is currently controlling the impact of the

groundwater contamination. Baldwin will focus the Corrective Measures Study on the management of releases from or exposure to the contaminated soil at the site.

There are several factors which will affect the selection and implementation of the corrective measures for this site. The factors include:

1. Wood preservatives will continue to be used at the site to produce treated wood products;

2. The wood products produced will contain preservatives and preservative solutions at 14% to 20% by weight;

3. There are environmental releases of wood preservatives from treated wood;

4. The treated wood products themselves present a direct exposure risk many times higher than that of the underlying contaminated soils;

5. Physical, process, and regulatory changes at the facility have minimized any additions to the contamination found in earlier investigations;

6. Any potential groundwater impact from the SWMUs at the site will be controlled by the existing groundwater corrective action system and the associated groundwater monitoring program; and

7. The wood preserving contaminants found at the site are biodegradable at low concentrations.

The corrective measures objectives for this site are:

1. Minimize the potential for third-party exposure to the contaminated soil and sediment at the site from all SWMUs and AOC A; and

2. Control and contain any potential groundwater impact from these soils at all SWMUs and AOC A .

6.0 EVALUATION OF CORRECTIVE MEASURES ALTERNATIVES

The EPA guidance in Exhibit 3 suggests that an abbreviated development of a corrective measures plan is appropriate where site conditions clearly lead to a limited number of alternatives. Baldwin believes that this site qualifies for this abbreviation of the detailed provisions in Appendix C of the RCRA permit based on the considerations of ongoing wood preserving plant operations and the operational status of the existing groundwater corrective action system.

The alternatives for corrective measures for the soil contamination at the SWMUs and AOC at the site are limited. The system for control of releases of, or exposure to, the contaminated groundwater is in place and operating. Based on the nature of the contaminants, the groundwater corrective action system is expected to be operational for several decades. This corrective action system cannot be discontinued until all groundwater monitoring wells have been found to be free of contamination. The groundwater monitoring system is downgradient from the SWMUs and AOC A. Given these facts, any potential groundwater impact from the SWMUs or AOC A would be identified and remediated by the existing groundwater corrective action and monitoring system.

There are two potential remedial actions for control of exposure to the contaminated soil at the SWMUs and AOC A. These two actions are removal of all soils which contain contaminants at levels above acceptable residential exposure thresholds, or imposition of engineering and administrative controls to limit the present and future human exposure to the soils.

The alternative of removing the contaminated soil is infeasible for several reasons. At a wood preserving plant (as well as at electric and telephone utility yards), it is an environmentally acceptable practice to store treated wood in open storage yards. If the surface soil contamination were totally removed in the operational and storage areas of the plant, the soil would become recontaminated at above the very low residential exposure limits in a very short time. The investigation, quantification, and removal process would then have to be repeated time after time. The second reason that removal is infeasible is that the cost to implement this alternative would be prohibitive given the wide spread area and conditions where this action would be required. The area occupied by the largest of the four SWMUs, where various samples reported levels above residential thresholds, is 626,500 square feet. Excavation of these areas to a depth of two feet would create a volume of 46,500 in-place cubic yards, or approximately 60,000 loose cubic yards. Incineration and disposal of this volume is estimated to cost $90,000,000 (at $1,500 per loose yard including excavation, transportation and disposal). In addition, the excavation in SWMU 21, the drainage pond and swamp, would all be conducted in and below the water table, necessitating soil and sediment dewatering as well as storm water rerouting and storm water/groundwater treatment to insure that no surface water impacts occurred as a result of the soil remediation activities. It is conservatively estimated that this additional activity would raise the costs several million dollars. The costs for additional testing, analyses, reporting, supervision, and backfilling would also add substantial additional costs to this alternative. Baldwin does not have the financial

resources to undertake this project, and the expenditure of these funds would not result in any long-term elimination of contaminated soil if wood preserving operations are continued at the site. In addition, the absolute elimination of the soil direct exposure risk would not result in a reduction in overall site direct exposure risk since the potential risk from direct exposure to the treated wood products at the site is higher than the potential risk from exposure to the low level soil contamination at the site.

The remaining alternative, elimination of third-party direct exposure risk through the application of engineering and administrative controls, provides the only viable long-term solution for the solid waste management issues at this site. The risks to the employees of Baldwin are mitigated by training and work practices required by FIFRA and OSHA, which include the use of personal protective equipment and personal hygiene practices.

7.0 PROPOSED CORRECTIVE MEASURES

The following corrective measures for all of the solid waste management units are proposed based on the evaluation of site-specific conditions, potential exposure pathways, economic and technical conditions and operational considerations.

1. Install a fence around the perimeter of the site with the exception of that portion which lies in the drainage pond at the north part of the site and the site office building. All gates in the fence will be lockable and will be kept locked when the plant is not in operation. The fence will be clearly marked at 100-foot intervals with signs saying “Danger - Keep Out - Authorized Personnel Only”, or similar wording, readable at 50 feet. The majority of the perimeter fencing will be 6-foot high chain link with a 3-strand barbed wire cap. The northeastern property line lies in a heavily wooded hardwood

swamp bottom with poor soil conditions that prohibit the construction of a chain link fence due to ground stability and equipment inaccessibility concerns. In this area, Baldwin will hand install a barbed wire fence from tree to tree as close as possible to the property line. The top strand will be installed approximately six feet from the ground and additional strands will be installed on 8-inch centers to create a 9-strand 6-foot high barbed wire barrier. Exhibit 5 contains a site drawing detailing the approximate location and type of fencing that will be constructed around the site perimeter. The fence and signs will eliminate all unknowing entry into the site and inadvertent exposure to the solid waste management units.

2. Baldwin will record, in accordance with State law, a notation on the deed to the entire property that will in perpetuity notify any potential purchaser of the property that the property has been used as a wood preserving plant; that soil and groundwater contamination has been documented; that any potential use of the site must address potential exposure to these chemicals; and that non-industrial uses of the site are inappropriate. A survey plat of the site along with a site drawing showing areas of known soil and groundwater contamination will be filed with the authority with jurisdiction over local land use, with the Alabama Department of Environmental Management and with the U.S. EPA, Region IV.

These actions will ensure that all future users of the site are made aware of the conditions at the site and should guarantee that unknowing misuse of the site does not occur.

3. Baldwin will submit an annual report to the Agency which discusses the effectiveness of these measures. This separate report will be submitted on March 15th of each year in conjunction with the Semiannual Corrective Action Effectiveness Reports already being submitted.

8.0 CORRECTIVE MEASURES IMPLEMENTATION AND COST

The corrective measures described above will be completed within 240 days of approval of these measures by ADEM. The costs for the fencing, surveying, and deed notation are estimated at $45,000 based on quotes from local fencing contractors and land surveyors.

REFERENCES

1. Part B Post-Closure Permit Application,
Baldwin Pole & Piling Company, Inc.,
dated 09/27/87 with revisions.

2. Groundwater Quality Assessment,
Baldwin Pole & Piling Company, Inc.,
dated 02/15/88 with revisions.

3. Corrective Action Plan,
Baldwin Pole & Piling Company, Inc.,
dated 10/14/88 with revisions.

4. Report of Confirmatory Sampling,
Baldwin Pole & Piling Company, Inc.,
dated 12/27/91.

5. Draft RCRA Facility Investigation Report,
Baldwin Pole & Piling Company, Inc.,
dated June 17, 1994, with revisions.

6. RCRA Post-Closure Permit Renewal Application,
Baldwin Pole & Piling Company, Inc.,
dated June 15, 1999.

7. RCRA Facility Investigation Report,
Baldwin Pole & Piling Company, Inc.,
dated September 1, 1999.

8. Semiannual Corrective Action Effectiveness Reports,
Baldwin Pole & Piling Company, Inc.,
dated September and March, 1991 through 1999.