DrinkerBiddle&Reath LLP

Bonnie Allyn Barnett
215-988-2916
bonnie barnett@dbr com

Law Offices
One Logan Square
18TH and Cherry Streets
Philadelphia, PA
19103 6996

215-988 2700
215-988 2757 fax
www drinkerbiddle com

NEW YORK
WASHINGTON
LOS ANGELES
SAN FRANCISCO
PRINCETON
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BERWYN
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June 11, 2003

EPA Region 5 Records Ctr.
202441

VIA FEDERAL EXPRESS

Eileen L. Furey, Esquire
Associate Regional Counsel
U.S. Environmental Protection Agency C-14J
77 West Jackson Boulevard
Chicago, Illinois 60604

RE: CERCLA 104(e) Submission of Information – Allied Paper/Portage Creek/Kalamazoo River Superfund Site in Kalamazoo and Allegan Counties, Michigan

Dear Eileen:

This letter responds to the United States Environmental Protection Agency's ("EPA") letter of March 4, 2003 to our client, Millennium Holdings, Inc. (now known as Millennium Holdings LLC)(hereinafter "MH") requesting information about the Allied Paper/Portage Creek/Kalamazoo River Superfund Site in Kalamazoo and Allegan Counties, Michigan. We appreciate your courtesy in providing us an extension of time within which to respond.[1]

General Objections/Responses:

MH asserts the following General Objections and Responses to EPA's Request for Information, including Attachments 1 through 6:

As you know, Plainwell, Georgia-Pacific, Mead and MH are parties to a confidential Mediation regarding the above referenced Site. Some of EPA's information requests go beyond factual information, seeking MH's analysis and evaluation of that information, as well as potentially seeking MH's advocacy position in the Mediation. To the extent the 104(e) request was intended to cover evaluative and mediation materials, we respectfully object to providing that information.

Section 104(e)(2)(A) gives EPA the right to seek information or documents relating to "the identification, nature, and quantity of materials which have been or are generated, treated, stored, or disposed of . . ." The statutory language does not extend to

[1] We received the letter on March 11, 2003; it had a 60 day response period. We requested and received from EPA an additional thirty (30) days, to June 12, 2003, within which to respond.

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parties' analysis and evaluation of such information; nor does it extend to parties' advocacy and settlement positions. By their very nature these evaluations and positions are not factual, but rather extrapolation, assumption and argument.

In addition to being beyond the scope of Section 104(e), these materials are covered by a number of privileges. Evaluations prepared by MH's counsel are quintessential attorney work product. Internal evaluations are protected by the attorney-client privilege. And, as the Mediation Agreement itself provides, the proceedings themselves are covered by the joint defense privilege and are fundamentally in the nature of confidential settlement negotiations, protected by Rule 408. Furthermore, the materials sought are protected confidential business information.

In addition to applicable privileges, federal and state law incorporate strong policies protecting the confidentiality of communications exchanged during alternative dispute resolution ("ADR") proceedings. On the federal side, in addition to Rule 408, the Administrative Dispute Resolution Act ("ADRA") 5 U.S.C. §571 *et. seq.*, protects the confidentiality of ADR communications where the government is a party. While not directly applicable, it nonetheless evidences a strong policy on the part of the federal government to protect confidentiality and encourage ADR.[2]

Likewise, Michigan recognizes the importance of confidentiality in the mediation context, as evidenced by Michigan's Rule of Court 2.411 – Mediation, which was adopted in 2000, and provides, among other things:

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[2] Section 574 of the ADRA specifically provides that parties to ADR cannot be required to disclose dispute resolution communications unless the communication falls into one of the following exceptions:

1) the party seeking disclosure prepared the communication
2) all parties consent in writing
3) the communication has already been made public
4) a statute requires disclosure
5) a court determines disclosure is necessary
6) the communication is relevant to a dispute about the agreement or award from ADR, or
7) unless prepared by a neutral, it was available to all parties to the dispute resolution proceeding.

None of the exceptions apply here.

> - "(C)(5) Confidentiality. Statements made during the mediation, including statements made in written submissions, may not be used in any other proceedings, including trial. Any communications between the parties or counsel and the mediator relating to a mediation are confidential and shall not be disclosed without the written consent of all parties...."

Perhaps most importantly, the scope of the 104(e) request at issue is inconsistent with EPA's own Policies and Guidelines. As EPA explained in its Final Guidance on the Use of Alternative Dispute Resolution Techniques in Enforcement Actions (1987):

> "C. Confidentiality – Unless otherwise discoverable, records and communications arising from ADR shall be confidential and cannot be used in litigation or disclosed to the opposing party without permission. . . . . Public policy interests in fostering settlement compel the confidentiality of ADR negotiations and documents...."

EPA echoed this sentiment in its Policy on Alternative Dispute Resolution (published in Federal Register Dec. 27, 2000), which provides:

> "A thorough discussion of confidentiality is often critical to success in ADR. It is EPA's policy to maintain confidentiality in ADR processes consistent with the ADRA and other applicable law."

Legislatures, courts and the EPA have all taken pains to protect the confidentiality of ADR communications, recognizing the "chilling effect" of a contrary rule. To the extent that the current 104(e) is intended to cover communications created for a confidential mediation, it flies in the face of EPA's own policies.

As you know, the Mediation Parties have exchanged answers to a detailed questionnaire as part of the mediation process. Virtually all of the factual information sought in EPA's 104(e) request is included in MH's responses to that Mediation Questionnaire. Thus, notwithstanding and without waiving the objections and privilege assertions set forth in this letter, MH is producing its answers to the Mediation Questionnaire in response to EPA's Request for Information. EPA has agreed that such production will not be deemed a waiver of any applicable privilege for any other mediation materials. We also believe that the attached information constitutes "Confidential Commercial or Financial Information," which is exempt from disclosure under the Freedom of Information Act ("FOIA"). Please treat this response and all attachments as Confidential Business Information and, in accordance with the FOIA implementing regulations, notify MH if EPA receives a FOIA request that includes these submitted materials.

Note that for many of the types of information sought in both the Mediation Questionnaire and in EPA's 104(e) request (*e.g.,* PCB wastewater data), there is little or no direct quantitative information available for any of the parties' facilities. In some instances, there was sufficient data from which the parties could estimate or extrapolate with some reliability to make up for the data gaps. In many instances, however, there was an insufficient factual basis from which to draw reliable estimates or extrapolations. Estimates or extrapolations that are not based on sufficient factual data are misleading and do not provide reliable information relating to the "identification, nature, and quantity of materials which have been or are generated, treated, stored or disposed of . . ." or to the "release or threatened release of a hazardous substance or pollutant or contaminant at . . . a facility."

Specific Responses:

Fiber Furnish and Paper Production

1. Identify all persons consulted in the preparation of the answers to these Information Requests.

Response: These responses were prepared by counsel, based upon available documents. See also, MH Questionnaire Response 1(e).

2. Identify all documents consulted, examined, or referred to in the preparation of the answers to these Requests, and provide copies of all such documents.

Response: See General Objections and Responses. Subject to and without waiver of the foregoing objections and responses, see all documents cited in MH's June 29, 2001 and August 9, 2001 Supplemental Responses to the Kalamazoo River Superfund Site Mediation General Site Information Questionnaire (hereinafter "Questionnaire Response"). A copy of the Questionnaire Response, along with Appendices and all documents cited therein are being produced in response to this request. A complete set of all documents in MH's possession relating to the MH mills, comprised of approximately 60 boxes, is available for review upon request.

3. If you have reason to believe that there may be persons able to provide a more detailed or complete response to any Information Request, or who may be able to provide additional responsive documents, identify such persons.

Response: None.

4. Identify and generally describe each MH mill, as that term is defined in Attachment 5.

Response: See General Objections and Responses. Subject to and without waiver of the foregoing objections and responses, see MH Questionnaire Response, # 2, 3.

5. Identify all current and prior owners of each MH mill identified in response to Request #4: For each such owner or prior owner, further identify:

a) the property owned;
b) the dates of ownership;
c) all evidence showing that the owner controls or controlled access to any portion of the property;
d) all evidence that a hazardous substance, pollutant, or contaminant was released or threatened to be released at or from the owner's property during the period of its ownership; and
e) the nature of each transaction by which ownership of the mill was transferred from one party to another (e.g. stock purchaser, merger, asset sale, etc.)

Response: See General Objections and Responses. MH specifically objects to this request as overbroad and calling for legal conclusions to the extent that it asks for "all evidence" showing that the "owner controls or controlled access to any portion of the property," and to the extent that it refers to "hazardous substance[s], pollutant[s] and contaminant[s]" other than PCBs. Subject to and without waiver of the foregoing objections and responses, see MH Questionnaire Response, #2.

6. Identify all current and prior operators, including lessors, of each MH mill identified in your response to Request #4, or any portion thereof. For each such operator, further identify:

a) the property at which it conducts or conducted operations;
b) the dates of operation;
c) the nature of the operator's operations;
d) all evidence that the operator controls or controlled access to the mill property or any portion thereof; and
e) all evidence that a hazardous substance, pollutant, or contaminant was released or threatened to be released at or from the portion of the mill property at which the operator conducts or conducted operations.

Response: See Responses to Request Nos. 4 and 5, above.

7. Identify each source or potential source of the release of hazardous substances, pollutants, or contaminants (*e.g.*, polychlorinated biphenyls or "PCBs") from the MH mills including, without limitation:

a) discharges of total suspended solids ("TSS") in wastewater;
b) erosion from waste disposal areas located at the MH mills or elsewhere (*e.g.*, landfill areas) used for the disposal of wastes generated at the MH mills;
c) exceedances of TSS loading limits established by the State of Michigan and/or U.S. EPA;
d) dewatering lagoon areas located at the MH mills;
e) storm sewer leaks and discharges;
f) sewer line leaks and discharges; and
g) machine, transformer or other equipment leaks and discharges.

Response: See General Objections and Responses. MH specifically objects to this request as overbroad to the extent that it refers to "hazardous substances, pollutants and contaminants" other than PCBs. Subject to and without waiver of the foregoing objections and responses, see MH Questionnaire Response, #14, 26, 28, 29, 30, 31, 32, 33, 35, 36.

8. Identify any data, analyses or other information regarding the nature and quantity of hazardous substances released from each source or potential source you identified in response to Request #7, above. To the greatest extent possible, identify any such data, estimates, analyses or other information on an annual basis from 1954 through 1989.

Response: See General Objections and Responses. MH specifically objects to this request as overbroad to the extent that it seeks information regarding "hazardous substances, pollutants and contaminants" other than PCBs. MH also objects to this request to the extent it seeks MH's evaluation/analysis of information, which is beyond the scope of 104(e), in the nature of confidential mediation materials and protected by the work product and attorney-client privileges. MH further objects to the extent that this request seeks estimates or extrapolations, particularly where there is insufficient factual data upon which to base such estimates or extrapolations. Subject to and without waiver of the foregoing objections and responses, see MH Questionnaire Response, #14, 26, 28, 29, 30, 31, 32, 33, 35, 36.

9. For the period 1954 to 1989, identify for each year the types and amounts of fiber furnish used at each MH mill in tons. Fiber furnish may include, but is not limited to, old

corrugated container (OCC); double-lined kraft (DLK); paperboard; mixed waste paper; fine paper, bond, ledger, envelopes; old newsprint (ONP); pulp substitutes (specify type and source), purchased secondary fiber pulp (specify source); and virgin pulp (specify type).

Response: See General Objections and Responses. Subject to and without waiver of the foregoing objections and responses, see MH Questionnaire Response, #7, 9, 11, 23.

10. For the period 1954 to 1989 and for each MH mill, identify the types and amounts of paper products, produced annually in tons.

Response: See General Objections and Responses. Subject to and without waiver of the foregoing objections and responses, see MH Questionnaire Response, #3, 25. See also, MH Questionnaire Response, Summary Table 1.

11. For each paper product identified in response to Request #10, identify calculated shrinkage (*i.e.*, yield on fiber furnish) for each paper product on an annual basis. If not available, identify typical or estimated shrinkage for each paper product.

Response: See General Objections and Responses. MH objects to this request as vague and ambiguous to the extent it requests "calculated shrinkage" and "yield on fiber furnish." MH further objects to this request to the extent it seeks estimates or extrapolations, particularly where there is insufficient factual data upon which to base such estimates or extrapolations. Subject to and without waiver of the foregoing objections and responses, MH has no direct information on calculated shrinkage (yield on fiber furnish) for each paper product on an annual basis. For information on the paper production process, stock sources in paper production and final paper production and fate, see Questionnaire Responses, #22, 23, 25.

12. Identify, for each MH mill, the annual operating days per year.

Response: See General Objections and Responses. Subject to and without waiver of the foregoing objections and responses, MH has no specific information on the annual operating days per year. In general, the MH mills, when operational, operated as close to 365 days per year as possible. See Questionnaire Response, #3, 4, 5, 6, 13, 22, 25.

13. For the period 1954 through 1971, identify the dates (month and year) and amounts in pounds of NCR paper broke that you purchased directly or otherwise obtained

from any of the sources listed in Attachment 2, or from any other NCR paper coating facility.

Response: See General Objections and Responses. Subject to and without waiver of the foregoing objections and responses, there is no evidence to suggest that the MH mills ever purchased or obtained NCR paper broke from any of the sources listed in Attachment 2 or any other NCR paper coating facility. For information regarding stock sources used by the MH mills, see Questionnaire Response, #7, 23.

14. For the period 1954 through 1971, identify the dates (month and year) and amounts in pounds of NCR paper broke and/or NCR paper converter trim that you purchased or otherwise obtained directly from or through any waste paper broker listed in Attachment 3, or from any other person. Identify, to the extent possible, the name and address of the waste paper broker or other person from whom the NCR paper broke and/or NCR paper converter trim was obtained or purchased.

Response: See General Objections and Responses. Subject to and without waiver of the foregoing objections and responses, there is no evidence to suggest that the MH mills ever purchased or obtained NCR paper broke and/or NCR paper converter trim from any of the sources listed in Attachment 3 or any other NCR paper coating facility. For information regarding stock sources used by the MH mills, see Questionnaire Response, #7, 23.

15. For the period 1954 through 1989, identify the dates (month and year) and amounts in pounds of post-consumer waste paper that you purchased or otherwise obtained directly from or through any waste paper broker listed in Attachment 3, or from any other person. To the extent possible, identify the name and address of the waste paper broker or other person from whom the post-consumer waste paper was purchased or otherwise obtained.

Response: See General Objections and Responses. Subject to and without waiver of the foregoing objections and responses, MH has no information to enable it to identify the sources of wastepaper used at each MH mill over time. For a list of potential wastepaper contacts, which was created and maintained by a former Allied employee during a portion of the relevant time period, see KA05800161– KA05800183. The following vendors identified in Attachment 3 are also listed in KA05800161–KA05800183: Buffalo Paper Stock Co., Consolidated Fibers Inc., Royal Paper Stock Co. Inc., Continental Paper Grading Co., International Cellulose Inc., Mead Pulp Sales Inc. and Pioneer Paper Stock. The only vendor in the list of potential wastepaper contacts that was identified by any former Allied employee in deposition testimony is Pioneer. See Questionnaire Response, #7, 23.

16. To the extent available and not otherwise identified in response to Requests #14-15 above, identify the current names, addresses and phone numbers for all waste paper brokers or other person from whom you purchased or otherwise obtained any type of secondary fiber during the period 1954 to 1989.

Response: See Response to No. 15.

Process Water Management; Wastewater Treatment; Wastewater Sludge Disposal

17. For the period 1954 to 1989 and for each MH mill, identify the dates (month and year) when save-alls were installed and/or upgraded on each paper machine at the mill.

Response: See General Objections and Responses. Subject to and without waiver of the foregoing objections and responses, see Questionnaire Response, #22.

18. For each save-all identified in response to Request #17, specify the type of each save-all and the estimated efficiency of fiber recovery in per cent.

Response: See General Objections and Responses. MH specifically objects to this request to the extent it seeks estimates or extrapolations, particularly where there is insufficient factual data upon which to base such estimates or extrapolations. Subject to and without waiver of the foregoing objections and responses, see Questionnaire Response, #14, 22.

19. For the period 1954 to 1989 and on an annual basis, identify the volume and disposition of each of the wastewater streams generated at each MH mill (*e.g.*, discharged directly to a receiving water with or without treatment; discharged indirectly through a municipal sewerage system; or discharged to an off-site industrial wastewater treatment system), including but not limited to:

- Pulping and/or deinking wastewaters
- Paper machine wastewaters
- Other process and non-process wastewaters (Identify.)

(Reported volumes of the process wastewaters should be specified in either gallons per minute (gpm), gallons per day (gpd), or million gallons per day (mgd).)

Response: See General Objections and Responses. Subject to and without waiver of the foregoing objections and responses, see Questionnaire Response, #14, 22.

20. For the period 1954 to 1989 and on an annual basis, for each of the process wastewater streams identified in response to Request #19, identify the type(s) of on-site wastewater treatment, if any, provided (*e.g.*, settling lagoons, primary treatment in clarifiers, secondary biological treatment, advanced wastewater treatment). Provide schematic diagrams of the wastewater treatment facilities and monthly wastewater treatment system operating data for bypassed flow (*i.e.*, untreated or partially treated wastewaters), treated effluent flow and untreated and treated wastewater total suspended solids (TSS) concentrations and mass discharges (*e.g.*, pounds per day).

Response: See General Objections and Responses. Subject to and without waiver of the foregoing objections and responses, see Questionnaire Response, #14, 22.

21. For the period 1971 to 1989 and on an annual basis, identify the amount in dry tons of wastewater treatment sludge generated at each MH mill and the disposition of the sludge (*e.g.*, disposed in on-site or off-site landfills).

Response: See General Objections and Responses. MH specifically objects to this request to the extent that it seeks estimates or extrapolations, particularly where there is insufficient factual data upon which to base such estimates or extrapolations. Subject to and without waiving the foregoing objections and responses, MH has no data on the amount in dry tons of wastewater treatment sludge generated at each MH mill. For estimates of the amount of sludge generated at the MH mills and the disposition of that sludge, see Questionnaire Response, #28, 29.

22. Identify the name and location of any facility used for the disposal of wastewater treatment sludge generated at each MH mill.

Response: See General Objections and Responses. Subject to and without waiving the foregoing objections and responses, see Questionnaire Response, #28, 29.

23. Identify any data, analyses or other information regarding potential erosion of waste materials from any lagoon, landfill or other disposal facility identified in your response to Requests # 19-22.

Response: See General Objections and Responses. MH specifically objects to this request to the extent it seeks MH's evaluation/analysis of information, which is beyond the scope of 104(e), in the nature of confidential mediation materials and protected by the work product and attorney-client privileges. Subject to and without waiving the foregoing objections and responses, see Questionnaire Response, #28, 29.

Information Regarding PCBs

24. For each MH mill, provide copies of all reports, data or other records showing PCB concentrations in the following materials:

Fiber furnishes used at the mill
Paper products produced at the mill
Untreated and treated wastewaters generated at the mill
Wastewater treatment sludges generated at the mill
Atmospheric emissions from the mill
Machine, transformer or other oils used at the mill

Response: See General Objections and Responses. Subject to and without waiving those objections and responses, what little PCB data exists can be found in the documents cited in Questionnaire Response, #28(d)(vi), 29(f), 35, 37.

25. Provide copies of all reports, data or other records in your possession, whether generated by MH or its consultants, generated by paper industry trade associations and/or research organizations, or generated by government agencies and organizations, showing PCB concentrations in the following materials: secondary fibers used as furnishes to secondary fiber pulp and paper mills; pulp substitutes; virgin pulps; any paper mill products, (*e.g.*, paper, paperboard, tissue); process wastewaters; wastewater treatment sludges; atmospheric emissions, or other materials associated with the pulp and paper industry.

Response: See General Objections and Responses. MH specifically objects to this request as overbroad and unduly burdensome. MH also objects to this request to the extent it seeks information (*i.e.*, reports, data or other records generated by third parties) in the public domain. MH further objects to this request to the extent it seeks MH's evaluation/analysis of information, which is beyond the scope of 104(e), protected by the work product and attorney-client privileges and in the nature of confidential mediation materials. Subject to and without waiving the foregoing objections and responses, see documents cited in Questionnaire Response, #28(d)(iv) and 29(f).

Our client's certification is attached. Feel free to telephone me if you have any questions about these responses. Best regards,

Sincerely yours,

Bonnie Allyn Barnett

Bonnie Allyn Barnett

BAB

MILLENNIUM HOLDINGS LLC
6/11/03 Response to EPA 104(e) Request for Information
Allied Paper/Portage Creek/Kalamazoo River Superfund Site in Kalamazoo and Allegan Counties, Michigan

PRIVILEGE LOG

Date	Document Type	Recipient	Author	Privilege
1/18/02	Brief	Mediation Parties Mediator	B. Barnett M. Garber	Joint Defense Privilege; Confidential Settlement Negotiations; Confidential Mediation Materials; Confidential Business Information
1/18/02	Expert Report	DB&R Mediation Parties Mediator	Limno-Tech, Inc.	Joint Defense Privilege; Confidential Settlement Negotiations; Confidential Mediation Materials; Confidential Business Information
1/18/02	Expert Report	DB&R Mediation Parties Mediator	Franklin Associates Ltd.	Joint Defense Privilege; Confidential Settlement Negotiations; Confidential Mediation Materials; Confidential Business Information
1/18/02	Expert Report	DB&R Mediation Parties Mediator	Gradient Corporation	Joint Defense Privilege; Confidential Settlement Negotiations; Confidential Mediation Materials; Confidential Business Information
4/15/02	Brief	Mediation Parties Mediator	B. Barnett M. Garber	Joint Defense Privilege; Confidential Settlement Negotiations; Confidential Mediation Materials; Confidential Business Information
4/15/02	Expert Report	DBR Mediation Parties Mediator	Gradient Corporation	Joint Defense Privilege; Confidential Settlement Negotiations; Confidential Mediation Materials; Confidential Business Information

Date	Document Type	Recipient	Author	Privilege
5/20/02	Brief	Mediation Parties Mediator	B. Barnett T. Flynn	Joint Defense Privilege; Confidential Settlement Negotiations; Confidential Mediation Materials; Confidential Business Information
5/20/02	Expert Report	DBR Mediation Parties Mediator	Gradient Corporation	Joint Defense Privilege; Confidential Settlement Negotiations; Confidential Mediation Materials; Confidential Business Information
5/20/02	Expert Report	DBR Mediation Parties Mediator	Limno-Tech Inc.	Joint Defense Privilege; Confidential Settlement Negotiations; Confidential Mediation Materials; Confidential Business Information

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 gathered and evaluated the information submitted.

Based upon 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.

Michael R. Brammick
Associate General Counsel
Millennium Holdings LLC

Date: 6-4-03

KALAMAZOO RIVER SUPERFUND SITE MEDIATION
GENERAL SITE INFORMATION QUESTIONNAIRE

Millennium Holdings, Inc. ~~June~~August ~~29~~9, 2001 Supplemental Responses

For purposes of this questionnaire, the term "your property" includes all properties or production facilities owned or operated, or previously owned or operated, by you, or by your predecessors in interest, that are located, in whole or in part, within 1 mile of the Kalamazoo River, Portage Creek, or their tributaries, or which have ever discharged wastewater from a production facility to the Kalamazoo River, Portage Creek, or their tributaries, or to any POTW located thereon. The terms "release," "disposal," "facility," "owner," and "operator" shall have the same meaning as under CERCLA, 42 U.S.C.A. §§ 9601 *et. seq.* For the purposes of this questionnaire, carbonless copy paper and NCR paper have the same meaning. For questions 4 through 27, the relevant time period is 1954 through 1985, unless otherwise stated. For the remaining questions, the relevant time period is 1954 to present, unless otherwise stated.

Each question shall be answered in a narrative fashion, and no answer should merely refer the reader to referenced documents. After providing an abbreviated narrative response, however, an answer may then refer the reader (by document and relevant page numbers) to attached excerpts of document(s) that provide a more expansive narrative answer.

To the extent not previously produced to the document depository in Atlanta, Georgia ("depository"), any document referred to or relied on in answering the questions below, and all other documents responsive to the questions below in Respondent's (or their agent's or affiliate's) control or possession that are not subject to a valid claim of privilege under Federal Rule of Evidence 501, shall be produced to the depository. Excepted from this production requirement are BB&L documents and other documents in the administrative record produced by other consultants on behalf of the Kalamazoo River Study Group ("KRSG") or its individual members.

As part of your response to each question (or sub-part thereof) below, identify and reference (by document and relevant page numbers) all documents that were relied on, or otherwise used, to answer the question (or sub-part), or that are otherwise materially responsive thereto. In identifying any responsive document that was not produced to the depository as part of your initial production, Respondent shall designate each such document as a document not previously produced.

As part of your response to each question asked below, please list the person(s) consulted for the answer to the question. For each question that requires calculations to be made to produce the answer, please attach a calculation brief that presents the calculations made, and explains the basis for the calculations, including any data used and assumptions made. Where available, PCB data should provide both total PCBs and aroclor specific information.

Where a question applies to more than one production facility located, past or present, on your property, please provide a separate answer for each production facility. For purposes of this

Question No. 14: Wastewater Production and Discharge

Please list the amount of all wastewater produced from the de-inking processes. For each process, please provide the following information (and reference any and all records or documents that indicate):

a) For each month in operation, the average amount of wastewater produced from the de-inking processes on a million gallons per day basis.

Wastewater production and discharge volumes specific to the de-inking process are not available. Total discharge volumes (summation of volumes from all of the various processes) from the clarifiers are available for varying months at the three Allied Mills. (See Tables 14a-1, 14a-2 and 14a-3, for the Bryant, King, and Monarch Mills, respectively). Appendices 14a-A, 14a-B and 14a-C present the daily data and source documentation that was used to create the monthly data presented in Tables 14a-1, 14a-2 and 14a-3. The first column of Tables 14a-1, 14a-2 and 14a-3 present the monthly flows from the clarifiers at each plant. Table 14a-D presents historical BOD loads from the Allied clarifiers. Annual influent and effluent numbers are set forth in Summary Table 1.

Very limited influent and effluent quality data have been found for the Rex Mill, all of it predating Allied's brief ownership of the Rex Mill. Appendix 14a-E summarizes WRC data available for the Rex Mill.

b) For each month in operation, the fate of the wastewater produced from the de-inking process (e.g., on-site wastewater treatment, discharge to Publicly Owned Treatment Works [POTW], direct discharge to river, etc.).

During the time period in question, 1954-1985, clarifiers were operating at each of the three Allied Mills to treat various process wastewaters, including de-inking wastewater.[9] Prior to 1968, treated wastewater from Bryant clarifier was discharged to Portage Creek. As of 1968/69, a portion of the Bryant Mill clarifier effluent was discharged to the City of Kalamazoo sanitary sewer system *via* Outfall [001] (Permit No. 390004). The remainder of the Bryant Mill clarifier effluent was discharged to the Monarch Mill clarifier. By 1977, the Bryant Mill clarifier effluent was sent to the Monarch Clarifier and the City of Kalamazoo WWTP. (See MDNR 003883, SA 033949, SA 030396, and SA 0250249-SA0250250). A Harding Sludge Separator was installed at the Rex Mill in September 1954 as part of a wastewater purifying system (See KB22501869). The responses to Question 28 provide additional information regarding the wastewater discharge outfalls for Allied's mills.

[9] The King Mill clarifier was not in operation until 1955. Although the Allied clarifier was installed in 1954, the earliest data for Allied's clarifier discharges are from 1955.

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c) For each month in operation, the amount, measured or estimated, of raw water used in the de-inking processes that was not discharged with process wastewater (e.g., the amount of non-contact cooling water discharged).

Information regarding volumes of raw water used in the de-inking process (*e g*, amount of non-contact cooling water discharged) is not available.

d) Describe the wastewater stream(s) from creation in the de-inking processes to final discharge point, including material changes thereto.

Figure 14d-1 presents a depiction of the wastewater flow paths and treatment systems at the Allied Mills. The flow charts in Figures 14d-2 and 14d-3 provide schematics of the water and wastewater flow for Allied's mills, as described below. These figures have been prepared on the basis of information from a variety of sources, including Figure 2-1 from the BB&L Remedial Investigation Report, deposition testimony, and figures in the document repository (*e g.*, MHI 00026, MHI 00027, SA 46144, SA 46160 and SA 47662).

BRYANT DIVISION

Water Intake and Treatment:

Fresh water was pumped from Portage Creek (just north of Cork St.) and filtered using sand filters at the filter plant located southeast of Mill A. The treated freshwater was supplied to Mills A, C, D and E. Until 1976/1977, backwash from sand filters at the filter plant was discharged to Portage Creek; thereafter it was routed to the Bryant clarifier (deposition of Donald Falvey, 9/4/92, p. 91; MDNR003954).

Mill A De-inking/Pulping Mill:

A 1963 NCASI report titled, "Report on Waste Disposal at Allied Paper Company, Kalamazoo, MI" (KA 04800443-04800479) contains a "Pulping Flow Diagram" that shows fresh water and recirculated white water usages at the Bryant Mill. (KA 04800457). Some process waters were recycled as white water, and others were diverted to a "sewer collection box," to the clarifier and then to Portage Creek. Volumes are not documented in the report or on the diagram.

Water used for the de-inking/pulping process included a mixture of freshwater, recycled water from Mill A (*e.g.*, Brown Stock Oliver), and recycled white water from Mills C and D. Wastewater from the de-inking operations was collected in sewers in the basement of Mill A. Prior to the installation of the Bryant clarifier in 1954 (see response to Question 28(a)), the wastewater from Mill A discharged directly to Portage Creek. Deposition testimony indicates that the discharge

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location was immediately downstream (north) of the Bryant Mill pond dam at Alcott Street (deposition of Per Hagard, 7/31/92, p. 64; MHI 00026). Once the Bryant clarifier started operations in 1954, wastewater from Mill A sewers was collected in the Mill A interceptor pumping station, located just east of the mill (see Figure 14d-1 and MHI 00027) and from there pumped to the clarifier. Wastewater entering the interceptor pumping station passed through bar grates that removed relatively large objects that could damage the pumps.

During those times when the Mill A interceptor pumping station could not handle the flow of wastewater, wastewater would bypass the system through a weir adjacent to the interceptor pumping station and discharge to the outfall which was located immediately downstream of the Bryant Mill dam at Alcott Street (deposition of Per Hagard, 7/31/92, p. 51-52; see also Allied Interrogatory Responses). This appears to be the same outfall used prior to routing the wastewater to the Bryant Clarifier. A warning system was installed in the interceptor pumping station to notify plant personnel when the pumping station was in danger of bypassing the pumps (deposition of Per Hagard, 7/31/92, p. 54). For a complete description of bypasses, see Question 28(d)(iii).

Water from the bleaching process at the de-inking mill, termed the "chlorine drop leg" water, is believed to have been discharged directly to Bryant Mill Pond through January 1970. As of February 1970, the chlorine drop leg was sent to the Gray Tank outside of Mill A, and pumped with excess white water from Mill C/D up to the Monarch clarifier (9000465; 9000481; SA 030935). The location of the chlorine drop leg outfall to the Bryant Mill Pond is not well established, however it is believed to be separate from the outfall location at the Bryant Mill dam mentioned above. Deposition testimony suggests the drop leg discharged into Bryant Mill Pond approximately "a couple hundred yards" south of the Alcott Street bridge (deposition of Donald Falvey, 10/21/92, p. 171). This discharge may be the location denoted "de-inking sewer" on a WRC schematic from the June 4,5,6 1968 survey (SA 029215). The discharge is shown schematically on a 1963 NCASI report (KA 04800443-04800479).

Mills C and D Paper Mills:

Mills C and D received freshwater from the filter plant and each mill also recycled white water (from save-alls) internally for paper production. All machines had save-alls in the basements of the mills for recycling fiber and water. Water from the save-alls went to white water collection tanks located in the basement of Mills C and D. Fibers, fines (mainly clay) and water were collected, and sent back to the paper machines for maximum reuse. In addition to internal recycle of white water within Mills C and D, white water from Mill C and D was pumped to a white water storage chest in the basement of Mill A for re-use (*e.g.*, SA 46160 - figure dated 9/30/53; SA 47647 - figure dated 2/5/70; KA 04800443-04800479- flow diagram 1).

Prior to the operation of the Bryant clarifier, white water that could not be reused was discharged from Mill D directly to Portage Creek. The discharges from the basement sewers were through open troughs leading to flap gates in the mill basement walls (Portage Creek was channeled in this location, with the building walls forming the borders of the creek). There was one outlet from the machine room basement, and two outlets from the beater room basement (deposition of Elbert Herbert, 4/2/92, p. 50), although other information suggests the number of outlets may have differed slightly from what this testimony suggests (SA 03093, SA 030935-030936; KA 04800443-04800479, Figure 1)). After the operation of the Bryant clarifier, wastewater from these Mill D basement sewers was routed to catch basins, then pumped to a newly constructed interceptor station immediately south of Mill D, and from there pumped to the Mill A interceptor pumping station and then on to the Bryant clarifier (deposition of Elbert Herbert, 4/2/92, p. 99). As noted below, the Mill C/D wastewater was pumped to the Gray Tank then to the Monarch clarifier as of 1969.

Mill C excess wastewater flowed by gravity in an underground line along Bryant Street. Prior to the operation of the Bryant clarifier, this water discharged directly to Portage Creek in an open outfall (deposition of Elbert Herbert, 4/2/92, p. 29). Upon operation of the Bryant clarifier, the line was tied into the interceptor pumping station at Mill D (the "Mill C/D pumping station") and pumped from there to the Mill A interceptor pumping station and then to the Bryant clarifier (deposition of Elbert Herbert, 4/2/92, p. 99; p. 109; SA 46144 - figure dated 12/19/68). According to deposition testimony, Mill C floor drains from some portion of the mill combined with storm water runoff fed into a storm sewer that discharged to Portage Creek (deposition of Elbert Herbert, 9/16/92, p. 281 - 284). Other minor streams from Mills C and D are noted as discharging into Portage Creek as of 1968, but it is unclear whether those streams were continuous or episodic and over what period over time they occurred. (SA 028930).

Mill E Paper Coating:

Mill E required relatively little water. The only water use at this Mill was for preparing the clay coating for paper (deposition of Elbert Herbert, 4/2/92, p. 55). In addition, intermittent wash water generated from cleaning of machines, tanks, *etc.* was discharged directly to a location on the west bank of Portage Creek until 1970 after which time it was directed to the Mill C/D interceptor pumping station and sent to the Monarch clarifier (9000481; deposition of Elbert Herbert, 4/2/92, p. 57, p. 109). MHI does not have information regarding the contents of wastewater from Mill E, although typical contents of wastewater from a coating mill would include clay, titanium, dioxide, starch, latex and chemical dispersants. There is no indication that wastewater from Mill E would have contained PCBs.

Significant Modifications of Wastewater System Configuration

As of 1954, the initial major modification of the Bryant wastewater treatment

system involved the installation of the clarifier, and collecting wastewater streams from Mills A, C and D and performing primary treatment (settling). Over time, Allied continually improved its recycling of water and experimented with ways to maximize efficiency of the clarifier.

As of 1969, the overall wastewater flow system was altered. Wastewater from Mills C and D was no longer combined with Mill A wastewater (at the Mill A interceptor pumping station), but instead pumped to the "Gray Tank" at Mill A. From the Gray Tank, Mill C/D wastewater was pumped to the Monarch clarifier to reduce the loading on the Bryant clarifier (SA011319; 000705).

As of September 1969, in conjunction with the modification of the Mill C/D wastewater flow (to Monarch), the Bryant clarifier discharge was re-routed to the city of Kalamazoo sewer line and no longer discharged. (Outfall 001 thus changed to the Kalamazoo sewer at this time.)

In February, 1970, the Mill A chlorine drop leg wastewater was routed to the Gray Tank, combined with the Mill C and D wastewater, and these combined streams pumped to the Monarch clarifier. An anionic coagulant was added to the Monarch clarifier to improve settling.

As of 1970, non-process water from the power plant (Mill D) was pumped to the Mill C/D interceptor station and pumped to Monarch clarifier (9000481).

As of 1970, wastewater from Mill E was sent to Mill C/D interceptor pumping station and from there to the Gray tank and Monarch clarifier (9000481)

Some time around 1971, perhaps in conjunction with the sale of Mill A and cessation of de-inking, and perhaps as late as 1976, the Mill A interceptor pumping station was no longer used. Wastewater from the Bryant mill was pumped to the clarifier *via* the Gray Tank. It also appears that as of this time an additional connection from the Gray Tank to the Bryant clarifier was added (it was already connected to the Monarch clarifier) and wastewater could be sent either to the Bryant or the Monarch clarifier (SA048307 Drawing E-1144, dated 2/76).

Decant water from the sludge lagoons was recycled back to the Bryant clarifier on a periodic basis beginning in 1971. (MDNR 003784). The decant water was permanently diverted to the Bryant clarifier some time between 1971 and the late 1970s, and continued to be permanently diverted until mill operations ceased. (MDNR 003784, SA034351, diagram from MDNR March 1-2, 1982 Wastewater Survey)

As of March, 1976, the Bryant clarifier effluent was split between discharge to the Kalamazoo city sewer line and the Monarch clarifier (see also response to 28g). In addition, a portion of the treated water from the Monarch clarifier was pumped to the freshwater pump house and recycled to the Bryant mills (MDNR 003888; deposition of Per Hagard, 7/31/92, p. 101).As of 1976/1977, probably in

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conjunction with the preceding modification, the sand filter backwash water at Bryant was sent to the Bryant clarifier (deposition of Donald Falvey, 9/4/92, p. 91; SA 027279; MDNR003963), *via* the Gray Tank (SA033485-SA033492). The filter backwash flow was approximately 0.5 MGD.

In March/April 1976, the Bryant Mill Pond was drained (SA030682-83)

~~As of 1982, and possibly earlier, decant water from sludge lagoons was sent to the Bryant clarifier (SA034351, diagram from MDNR March 1-2, 1982 Wastewater Survey)~~

MONARCH DIVISION

Water used in the Monarch mill included a mixture of freshwater from Portage Creek and recycled water from within the mill (KA 04800443-04800479). Prior to the operation of the Monarch in clarifier 1953, wastewater from the Monarch mill was discharged directly to Portage Creek, to a discharge location north of the mill and north of Cork Street. After installation of the clarifier, the wastewater in the Monarch Mill basement sewers was collected in catch basins and pumped into an interceptor pumping station adjacent to the clarifier, and from there pumped into the clarifier. Deposition testimony (deposition of Donald Falvey, 9/4/92, p. 108) indicates that the chorine drop leg water, during the time when the mill was de-inking, was discharged directly to Portage Creek.

In the event of equipment malfunctions, or other hydraulic overloading of the lift station at the clarifier, bypasses would circumvent the clarifier and discharge at the Monarch outfall (002); there was no separate outfall for bypasses.

Limited deposition testimony suggests there may have been intermittent discharges from the mill into the Portage Creek mill race that ran through the building (9000983; 9000999).

The sand filter backwash water was discharged directly to Portage Creek until 1976. By the end of 1976 the backwash water was sent to the Monarch clarifier (SA025249 – SA025254)

KING DIVISION

Water used in the King mill included a mixture of freshwater from well-water, recycled water from within the mill, and recycled clarifier water. Prior to the operation of the King clarifier 1955, wastewater from the King mill was discharged directly to the Kalamazoo River (the discharge was to the City or King Street storm sewer which then discharged to the river). After installation of the clarifier, the wastewater from the King Mill basement sewers was collected in catch basins and pumped into an interceptor pumping station adjacent to the clarifier, and from there pumped into the clarifier. Deposition testimony indicates that initially the chorine drop leg water was sent to the clarifier, but it was subsequently re-routed around the clarifier around 1960 to discharge without clarification (deposition of Donald Falvey, 9/4/92, p. 79). There are indications that clarified effluent

was recycled back to the King mill to be used in the de-inking/pulping process (MDNR 003652 – 003656, deposition of Richard Bennett, 6/25/92, p. 34-35). The discharge from the King clarifier is believed to have been directed to the Kalamazoo City Storm Sewer outfall which then discharged to the Kalamazoo River (MDNR 003652 – 003656).

In the event of equipment malfunctions, or other hydraulic overloading of the pumping station at the clarifier, bypasses would circumvent the clarifier and discharge without clarification to the King outfall; there was no separate outfall for bypasses.

REX MILL WASTEWATER SYSTEM

Information regarding the wastewater system at the Rex Mill is not very extensive. A wastewater survey conducted in 1950 indicates that the water supply used in the Rex Mill at that time was freshwater from well water (See NCASI 000540). In 1950, all wastewater from both the de-ink mill and the one paper machine was discharged through one sewer which was an open earth channel directly south of the west end of the main mill building (See NCASI 000540). Although the sewer outfall discharge point is not specified in existing documentation, it is likely that the outfall was to the Kalamazoo River given that the plant property bordered the River. White water from the paper machine was used as make-up water in the de-ink washers prior to being discharged (See NCASI 000540).

A 50 ft. diameter, 11 ft. deep tank, called a Harding Sludge Separator, was installed at the Rex Mill in September 1954 as part of a wastewater purifying system (See KB22501869). Paddles rotated in the tank, which increased settling rates and allowed the accumulated sludge to be moved from the tank *via* pump to sludge pits on the property. The system was to purify all wastewater from the plant, and could process 1,200 gallons per minute (See KB22501869). Initial tests showed that 840-960 gpm of wastewater was being handled by the purifying system (See KB22501869).

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The following schematics, included in Appendix 4d-1, contain information on the flow of wastewater in the de-inking processes at the Bryant and King Mills:

King Mill:	Bryant Mill:
SA 46145	SA 46138
SA 46133	SA 46146
SA 46142	SA 47641
SA 46134	SA 46154
SA 46137	SA 46151
SA 47652	SA 46150
SA 048478	SA 46152
SA 46140	SA 46155
SA 46135	
SA 46138	

e) **For each month in operation, any and all information on the PCB, biological oxygen demand (BOD), total suspended solids (TSS), total dissolved solids (TDS) and total volatile solids (TVS) content of the wastewater produced from the de-inking processes.**

Very little PCB, BOD, TSS, TDS and TVS information specific to the de-inking process is available. A few documents discuss and describe various de-inking waste streams at the King Mill in the late 1950s and early 1960s, but present only limited data (See SA029057-029062, SA028948-SA028957, SA028934-SA028947). During a two-week test in 1959, the average de-inking influent BOD was 2,680 ppm and the BOD range was 1,735 - 3,100 ppm. (See SA02934-SA028947).

As is the case with the King Mill, only limited data are available for the Bryant Mill. The following data are the sampling results of de-inking wastewater from Bryant Mill A that was pumped to the Bryant clarifier (SA029087, SA029089).

Date	Inf. SS (g/l)	Eff. SS (g/l)	Inf. DS (g/l)	Eff. DS (g/l)	Inf. BOD (ppm)	Eff. BOD (ppm)
7/8/68	2.52	0.28	2.00	1.90		304
7/9/68	2.32	0.24	2.60	2.30		347
7/10/68	3.00	0.28	2.70	2.30		397
7/11/68	2.82	0.26	3.10	2.80		298
7/12/68	2.72	0.14	2.80	2.60		455
7/13/68		0.34		2.10		390
7/15/68	0.46	0.12	1.90	1.80	645	438
7/16/68	1.24	0.06	1.50	1.30	570	360
7/17/68	1.80	0.08	1.70	1.40	780	490
7/18/68	3.08	0.08	1.80	1.00	735	495
7/19/68	3.38	0.12	1.90	1.80	790	420
7/20/68		0.06		1.00		450

Notes: Blanks indicate information is not available.

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The response to Question 28 provides information on the chlorine drop leg discharges from the Allied mills.

Influent and effluent monthly BOD, TSS and TDS data that are not specific to the de-inking process are presented in Tables 14a-1, 14a-2 and 14a-3 for the Bryant, King, and Monarch Mill clarifiers, respectively. Appendices 14a-A, 14a-B and 14a-C present the daily data and source documentation that was used to create the monthly data presented in Tables 14a-1, 14a-2 and 14a-3.

Very limited influent and effluent quality data have been found for the Rex Mill. Appendix 14a-e summarizes WRC data available for the Rex Mill.

Limited PCB data are available for Allied's clarifier effluent. Table 14e-1 summarizes the known PCB monitoring data for Allied's clarifier effluent.

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IV. QUESTIONS CONCERNING WASTEWATER AND SLUDGE TREATMENT AND DISPOSAL

Question No. 28: Wastewater Treatment Facilities

Please identify and describe the wastewater treatment facilities used to treat wastewater streams and discharges, permitted or otherwise, generated at each facility (this includes without limitation both on-site treatment and bypass systems, and POTWs, if used to treat wastewater generated from the facility), including the following:

a) The type, capacity, dimensions, and startup date for each unit process (include process flow diagram(s) and a description of solids removal processes). Please indicate the approximate retention time in settling ponds, and whether any flocculates or other materials were added to aid in solids settlement, etc.

Documentation of type, capacity, dimensions and start-up dates for Allied's wastewater treatment facilities mainly exists in the form of memoranda and correspondence. Following is a summary of the available information organized by plant name and date of activity.

Bryant:

Process wastewater from the Bryant Mill was either recycled in the process or piped to the clarifier. A 790,000 gallon clarifier with a 100 ft. diameter was installed in 1952 and began operation in May 1954 to treat wastewater from the Bryant Mill. (See SA029097, SA011073, SA033993, SA034145, and SA033394). Other documents state that the size of the clarifier was 850,000 gallons, which may include the freeboard distance to the top of the tank. (See SA033394). The design overflow rate of the clarifier was 764 gpd/ft^2 at a flow rate of 6.00 MGD. (See SA030392). The retention time averaged between 5.2 – 7.5 hours (See SA033394) after which the water was discharged to Portage Creek through Outfall No. 001.

In 1957 and 1958, Savealls were installed on all paper machines. (See NCASI 000942-943, and SA033977). An undated (likely post-1971 because the schematic does not list the de-inking process) schematic titled the, "[Bryant] Mill Process Flow Diagram" shows that a portion of the effluent from the Saveall was recycled back to the paper machines, and the remainder went to wastewater treatment. (See SA030395).

In September 1969, major changes were made to the destination of Bryant clarifier effluent. Recycling wastewater was routed from Bryant clarifier to Kalamazoo WWTP; Bryant papermaking wastewater was routed to Monarch clarifier. (See SA011319, and

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SA011317). A few months later, in February of 1970, the direct "Chlorine Drop-Leg" discharge to Bryant Mill Pond was discontinued. (See SA011283, and SA034612).

In 1976, a real-time total organic carbon analyzer was installed to regulate wastewater flows between the Kalamazoo WWTP and the Monarch clarifier. (See MDNR003888, and SA003844). In July 1977, Bryant Mill effluent flow destinations were altered again to comply with the new NPDES permit requirements. In the new configuration, effluent flow from the Bryant clarifier was split between the Kalamazoo WWTP (75%) and the Monarch clarifier (25%). (See SA033949 – SA033975, SA030370 – SA030398, SA0250249 – SA0250250, and SA034158). Flow maps from 1979 indicate that filter backwash water was then routed to the Bryant clarifier. (See KA04800841 – KA04800846).

Monarch:

A 90 ft. diameter, 640,000 gallon clarifier was installed in 1951 and began operation in October 1953 to treat mill waste water. (See SA033965, SA034145, and SA033394). Other documents state that the size of the clarifier was 650,000 gallons, which may include the freeboard distance to the top of the tank. (See SA033394, and SA034145). The design clarifier overflow rate was 865 gpd/ft^2 at 5.5 MGD. (See SA030424). The retention time averaged between 5.2 – 7.5 hours. (See SA033394). In 1957 and 1958, Savealls were placed in all paper machines (See NCASI 000942-943) and the de-inking operation was shut down. (See SA033950). In 1969, the Monarch clarifier began receiving papermaking wastewater from the Bryant clarifier. (See SA011319, and SA011317).

A 1976 drawing entitled "Allied's Water Treatment Flow Schematic" shows that the water used from the Monarch Pond on Portage Creek was chlorinated and then filtered. Approximately 90% of this water (1.842 MGD) went to process streams, and the remaining 10% went to waste treatment as backwash water. (See the EPA 1976 Survey Form, SA030394, and SA0250249 - SA0250250).

In July 1977, an EPA survey shows that alum and a polymer were added at the Monarch Mill prior to wastewater processing in the Monarch clarifier. This practice may have pre-dated the EPA survey. (See SA030396).

King:

A 110 ft. diameter, 850,000 gallon clarifier was installed at the King Mill in 1953 and began operation in August 1955. (See SA010998 - SA011000, SA034145, and SA033394). Other documents state that the size of the clarifier was 1,000,000 gallons, which may include the freeboard distance to the top of the tank. (See SA034145). The retention time averaged between 5.2 – 7.5 hours. (See SA033394). In 1957 and 1958, Savealls were installed on all paper machines. (See NCASI 000942-943). A flow diagram from March 3, 1959 shows that an acid and a flocculent (0.1% concentration) were added to the fresh water before being routed to the Saveall. (See SA028936). In 1965, de-inking

was discontinued at the King Mill.

Rex Mill:

A 50 ft. diameter, 11 ft. deep tank, called a Harding Sludge Separator, was installed at the Rex Mill in September 1954 as part of a wastewater purifying system (See KB22501869). Paddles rotated in the tank, which sped up settling time and allowed the accumulated sludge to be moved from the tank *via* pump to sludge pits on the property. The system was to purify all wastewater from the plant, and could process 1,200 gallons per minute (See KB22501869). Initial tests showed that 840-960 gpm of wastewater were being handled by the purifying system (See KB22501869).

b) The outfall(s) where the treated or bypassed wastewater was discharged.

The following table describes the outfalls and NPDES permit numbers at the three Allied Mills:

Mill Name	Outfall Description	Outfall Number	Applicable Dates
Bryant	Bryant clarifier to Portage Creek	390004-001	1956 - 1969
Bryant	Bryant clarifier to Kalamazoo WWTP	390004-001	1969 - 1988
King	King clarifier to Kalamazoo City Storm Sewer Outfall which discharged to the River		Through 1971
Monarch	Monarch clarifier to Portage Creek	390006-002	Through 1988[1]

[1]Although the Monarch Mill shut down in 1980, the clarifier remained in operation until 1988 to treat waste streams from Bryant.

Both outfalls 390004-001 (Bryant Clarifier) and 390006-002 (Monarch Clarifier) discharged to Bryant Mill Pond until September 1969. After discharge to Bryant Mill Pond from the Bryant Clarifier was terminated, the waste stream that flowed to the Kalamazoo sewer line and WWTP continued to be referred to as outfall 001. In addition, both the Bryant and Monarch chlorine drop leg waste streams discharged directly to Bryant Mill Pond. The King Mill clarifier and chlorine drop leg both discharged into the Kalamazoo River (see Figure 14d).

There were intermittent bypasses from Allied's mills that discharged to Portage Creek and Bryant Mill Pond (Bryant and Monarch) or the Kalamazoo River (King) in times of high flow and equipment malfunction (see Figure 14d). The bypass discharge locations are shown schematically on Figure 14d-1 and are summarized below:

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Discharge Location	Water Stream(s)
Outfall 001 (re-routed to city WWTP in 1969)	Bryant clarifier bypasses.
Bryant Mill Pond (south of dam)	Mill A chlorine drop leg (until 2/70).
Bryant Mill Pond	Water Treatment Plant sand filter backwash (until 1977).
North of Bryant Mill Dam at Alcott Street	Overflow from Mill A interceptor pump station.
Adjacent to Mill C/D interceptor pump station	Mill C and/or Mill D waste water bypasses when interceptor station could not handle flow.
Mill D East Side Basement of Beater Room and Machine Room had several "gates" that lead to Portage Creek (Herbert, p. 287 – 288; Herbert Exhibit #35, SA 030935- 030936)	Intermittent bypass *via* flap gate openings in beater room and machine room basements when sump pumps in Mill D could not handle water flow.
Adjacent to Mill D (east side of creek)	Non-contact cooling water from Mill D power plant.
Mill D west side of Portage Creek	Mill D beater room on west side of creek -- mainly wash up water, pump cooling water (Herbert, p. 290).
Mill E west side of Portage Creek (until 1970)	Intermittent wash water (Herbert p. 55)
Outfall 002 – Monarch	Clarifier bypasses and direct discharge of chlorine drop leg
King Outfall (King Street storm sewer)	Clarifier bypasses and direct discharge of chlorine drop leg

Rex Mill: As of 1950, all wastewater from both the de-ink mill and the one paper machine was discharged through the one sewer at the plant (Sewer No. 1) (See NCASI 000540). Sewer No. 1 was an open earth channel, located directly south of the west end of the main mill building (See NCASI 000540). Although the sewer outfall discharge point is not specified in existing documentation, it is likely that the outfall was to the Kalamazoo River given that the plant property bordered the River.

c) The NPDES permit number(s) for the outfalls listed in b), above.

The Monarch clarifier discharge to Portage Creek is the only discharge that was regulated by a NPDES permit. The permit number for this outfall was MI0000779 (See SA 038073) and was originally issued on December 20, 1974. (See NCASI 000845, and SA 008916).

d) Summary of all operating data for the period of 1954 through the present, including:

i) Flow rate data.

Flow rate data from the clarifiers are available for varying months at the three Allied Mills. (See Tables 14a-1, 14a-2 and 14a-3 for the Bryant, King and Monarch Mills, respectively). Appendices 14a-A, 14a- B, and 14a-C present the daily data and source documentation that was used to create the monthly data presented in Tables 14a-1, 14a-2 and14a-3. The first column of Tables 14a-1, 14a-2 and 14a-3 present the monthly flows from the clarifiers at each plant.

ii) Influent and effluent quality data for TSS , TDS, TVS, BOD, and PCBs (if available).

Influent and effluent monthly BOD, TSS and TDS concentration data from the wastewater treatment facilities is presented in Tables 14a-1, 14a-2 and 14a-3, for the Bryant, King and Monarch Mill clarifiers, respectively.[10] Appendices 14a-A, 14a-B and 14a-C present the daily data and source documentation that was used to create the monthly data presented in Tables 14a-1, 14a-2 and 14a-3. During the time when the papermaking mills were in operation, Allied did not routinely test its influent and effluent from its wastewater treatment facilities for PCBs. On occasion, MDNR tested Allied's influent and effluent from the wastewater treatment facility for PCBs. See MDNR003940-003944, SA022279-022280, SA025246-025254, 0005160, SA002697-002713, MDNR003940-003944, SA031349-031350, SA030157 and SA021077.

Very limited influent and effluent quality data have been found for the Rex Mill. Table 14a-D summarizes WRC data available for the Rex Mill.

iii) Summary of all known or documented bypasses or spills into the Kalamazoo River or its tributaries.

[10] See footnote 3.

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Like all of the paper mills along the Kalamazoo River, the Allied mills experienced bypasses of their waste treatment systems, normally due to high flow rates, equipment failure or clarifier capacity issues. As a general proposition, bypasses were more frequent in the mid-to-late 1950s, and decreased over time as Allied improved its wastewater treatment system in response to Michigan Water Resource Commission's concerns about water quality.

Bypasses at the Bryant and Monarch Plants flowed directly to Bryant Mill Pond and Portage Creek. Bypasses at the King Plant flowed to the Kalamazoo River. Much of the information on bypasses is anecdotal and non-quantitative – there is little hard data about duration and flow. Table 28d-1 summarizes effluent loads for bypasses with sufficient data to calculate the bypass loadings. Appendix 28d-2 provides a list of documented bypasses at all of the Allied mills.

Witness testimony about bypasses in general is also available. (See Deposition of Per Hagard, 7/31/92, pp. 51-52 (bypasses would occur if a pump ceased operating or if too much water was introduced to the pump), 108-110 (some overflows occurred into the creek from the pump house that handled the wastewater from Mills C and D when there were surges of water caused by discharges of some of the water holding tanks or the shutting down of the machines); Deposition of Elbert Herbert, 9/16/92, pp. 324-325 (bypasses occurred during an unknown time frame, on the average, about once or one-and-a-half times per week), 4/2/92, 107-108 (during an unknown time frame some bypasses occurred from the wastewater tank at Mill A, through a 30-inch-diameter pipe into Portage Creek, generally as the result of too large a volume of water, or the failure of a pump).

It appears that the most common reason for bypasses at the Bryant Mill was due to heavy flow rates. Bryant de-inking mill waste bypassed directly to Portage Creek just downstream of the Bryant Mill pond dam when the influent flow rate to the wet well exceeded the pumping rate to the clarifier (SA029206 – SA029215). During such episodes, wastewater spilled over the top of a baffle in the interceptor pumping station and flowed into an overflow line to Portage Creek (SA011346 - SA011354). In 1968, representatives from the Water Resources Commission and representatives from Allied met in an effort to further improve water quality in Portage Creek. At this time the Water Resources Commission requested that the bypasses of untreated wastes be terminated (SA032010 – SA032030). This request, in part, led to the flow configuration changes, in which the effluent flows from the Bryant Mill clarifier were split and routed to the Monarch clarifier and to the City of Kalamazoo POTW in September 1969 (see response to Question 14).

There were other non-routine bypasses at the Bryant Mill as well. From, July 8 to July 20, 1968, only the Mill A wastewater (de-inking) was pumped to the Bryant Clarifier, allowing Mill C and D wastewater to overflow at the Mill D pump wet well (SA029087 – SA029088). This was a change requested by the city of Kalamazoo to get actual data on effluent quality when only Mill A wastewater was treated in the Bryant Clarifier. Additionally, there were equipment problems

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on occasions that caused waste streams to be bypassed directly into Portage Creek. A letter dated June 6, 1961 discussed the bypassing of de-inking waste directly to Portage Creek due to the plugging of a hand-cleaned bar-grate at the main pump station (SA010966 – SA010970). There is also information that suggests the mills may have bypassed wastewater from specific paper machines during times when colored paper was being produced.

During times when the Mill C/D interceptor pumping station could not handle the flow of water, bypasses to Portage Creek occurred at the location of the Mill C/D interceptor pumping station through a "T" in the pipe connecting the wastewater streams from the two mills (deposition of Elbert Herbert, 4/2/92, p. 128; SA 47647; MHI 00028). Documents also suggest that, from time to time, Allied considered re-routing a portion of lower BOD-containing water from Mills C and D directly to Portage Creek in an effort to maximize the BOD removal efficiency of the clarifier. (*See, e.g.*, SA 00010988, KA 04500135, KA 04600400). It is unclear whether these plans were implemented and if they were, over what period of time. *See also*, KA 04800443-04800479 (1963 NCASI report suggesting that a portion of wastewater from Mills C and D was being discharged directly to Portage Creek). *But see*, deposition of Ernest Gilman, 2/9/93, pp. 596-605 (wastewater streams identified in NCASI report were wastewater sampling points, not discharges); deposition of Elbert Herbert, 4/2/92, p. 99-101 (all of the Mill C/D wastewater was conveyed to the Bryant clarifier); NCASI 001145 (April 1963 letter reporting that total flow from Bryant Division was going to the clarifier); SA 028987 (wastewater from Mills C and D was pumped to the clarifier); KA 04600400 (April 1960 Inter-Office Memo noting sewer pumps from Mills C and D to the interceptor station); SA 028970 (May 1963 Inter-Office Memo noting all waste streams from Mills C and D as going to the clarifier); MDNR 004502 (March 1967Allied document outlining wastewater flows from Mills C and D); KA 04800197 (March 1970 Inter-Office memo outlining Bryant wastewater system).

In 1961, for a period of time, there was a direct discharge of white-water at the Bryant Mill (SA010966 – SA010970). The 1961 direct discharge was caused by mechanical troubles to both pumps at the pump house. An internal Allied memorandum in 1971 (Oct. 27th) states that there are numerous white-water overflows, mostly during weekend shutdowns (SA034813).

Non-routine bypasses were also noted at the King Mill. An April 29, 1964 letter indicates that during a Water Resources Commission site visit sizable flows were bypassing treatment through a leak in the "flap gate." At times, it was noted that clarifier effluent flowed back through the gate from the reverse side combining with the raw waste in the wet well. At least once, the gate was stuck in the open position (SA011418; MDNR003624). An undetermined amount of King Mill wastewater bypassed treatment due to the improperly operating gate. In 1961, a similar problem of wastewater leaking through the "back-water gate" was noted and confirmed with a dye tracer test (SA010966 – SA010970). The Water

Resources Commission notes that, on most occasions, there was no need for bypassing (SA011418).

iv) **Quantity of sludge generated and removed from the treatment system (specify if the quantity is on a dry or wet weight basis and the percent moisture if available).**

Information regarding the quantity of sludge generated and removed from the Allied wastewater treatment systems is provided in response to Question 28(d)(v) and Question 29(e).

v) **For each month in operation, the amount and fate of the sludge produced from the wastewater treatment process, including without limitation sludge generated on your property and produced to a POTW, and sludge generated at a POTW as a result of the treatment of wastewater discharged to the POTW from (at least in part) your property.**

MHI has no documents showing the amount of sludge generated on a monthly basis from each of the mills during the relevant time. On Summary Table 1, MHI estimated the amount of sludge generation on an annual basis based upon clarifier influent and effluent solids data. The mass of solids being discharged from the clarifier was subtracted from the mass of solids entering the clarifier, for time periods when influent and effluent data were available. A 1977 schematic shows that 1,444 gallons/day of underflow from the Bryant clarifier and 2,281 gallons/day of underflow from the Monarch clarifier is going to the sludge lagoons. (See SA 00030396). A December 10, 1963 NCASI survey shows an underflow from the Bryant clarifier of 41,000 GPD with a solids content of seven to ten percent. (SA 033416). A December 6, 1963 NCASI survey shows an underflow from the Monarch clarifier of 8,000 – 10,000 GPD with a solids content of five percent. (SA 033412). A December 6, 1963 NCASI survey shows an underflow from the King clarifier of 288,000 GPD with a solids content of seven to ten percent. (NCASI 000124),

A one year inventory of residuals production at the Allied facility for 1985 was presented in the Program for Effective Residuals Management Report prepared by Wilkins & Wheaton, Inc., February 1986. The results are included in Appendix 28d-1.

All of the solids generated as a result of the wastewater treatment operation at the Allied site have been disposed on site. The sludge from the King Mill was disposed at the A-Site. The sludge from the Bryant Mill was disposed at the Bryant HRDL/FRDL, the Western Disposal Area and the former Type III Landfill. The sludge from the Monarch Mill was disposed at the Monarch HRDL and the Bryant HRDL. MHI has no information available regarding the amount of sludge generated by the POTW.

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As explained in Question 29(a), after clarification, settled residuals from the Bryant clarifier were pumped to the Bryant HRDLs and FRDLs for de-watering. The dewatered residuals either remained in the HRDLs/FRDLs or were placed in the Type III landfill and the Western Disposal Area. As shown on the site map included in Appendix 29-B, the clarifiers, HRDLs, FRDLs, Type III landfill and the Western Disposal Area are all in close proximity. The residuals removed from the HRDLs were transported to other areas of the site in dump trucks. There are no shipping documents available because the material was only transported within the boundaries of the site.

The Bryant HRDL has not been an active residuals disposal area since the late 1970s. Since that time, the residuals generated by the wastewater treatment operation were dewatered in the FRDLs and then stabilized with sand and disposed at the Type III landfill. The Monarch HRDL has not been an active residuals disposal area since approximately 1960.

~~Decant~~Until 1971, water from the dewatered residuals in the HRDLs was sent directly to Portage Creek ~~until sometime in the late 1970s~~. The discharge had a very low flow and low solids concentration (SA ~~029367~~029367, MDNR 003771). ~~Since that time~~Beginning in 1971, the ~~decanted~~decant water ~~has been routed~~was recycled back to the Bryant clarifier on a periodic basis. (MDNR 003784). The decant water was permanently diverted to the Bryant clarifier some time between 1971 and the late 1970s, and continued to be permanently diverted until mill operations ceased. (MDNR 003784, SA034351, diagram from MDNR March 1-2, 1982 Wastewater Survey).

vi) PCB analytical results for any sludge samples.

There is no PCB data available for sludge samples collected from the wastewater treatment system. There are PCB data from residuals disposal (see response to Question 40).

e) Describe all types of monitoring reports, monitoring data, and documentation sent to or received from regulatory authorities. Provide all such information and documentation to the depository.

Allied sent and received routine monitoring reports and data, most of it in the form of correspondence between Allied and the WRC. In addition to correspondence, other types of documents include progress reports, studies, surveys, permit applications and permits, and monthly operator reports. All of these documents are located in the document depository, and are described in Table 28e-1.

f) Describe all types of design reports and/or basis of design documentation for the treatment system. Provide all such information and documentation to the depository.

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Descriptions of Allied's wastewater treatment systems and modifications to these systems exist primarily in the form of correspondence between Allied and the WRC, minutes of WRC hearings, and deposition testimony, all of which have been produced to the document depository. A number of design drawings, also produced to the depository, provide design information for elements of Allied's wastewater treatment system.

Bryant:

Bates#:	Date	Description
000573 (DWG. E-690)	9/30/53	Wastewater treatment system showing collection sumps, clarifiers, and connections between mills.
SA43151	1/18/64	Stock and water flow diagram, Mill A.
SA43154	5/4/64	Stock and water flow diagram, Mill A.
SA46150	3/7/66	Stock and water flow diagram, Mill A.
SA46158	3/28/66	Stock and water flow diagram, Mill A.
SA46155	12/23/69	Schematic flow diagram of stock and water, Mill A.
000090	8/15/72	No. 5 machine stock and white water flow diagram, Mill C showing hydra pulper, sewer and overflow sewer.
000089	8/15/72	No. 6 machine stock and white water flow diagram, Mill C showing sewer.
SA048308	8/15/72	No. 7 machine stock and white water flow diagram, Mill D showing sewer and overflow sewer.
SA048309	8/15/72	No. 8 machine stock and white water flow diagram, Mill D showing white water storage, sewer and overflow sewer.
SA048310	8/15/72	No. 9 machine stock and white water flow diagram, Mill D showing sewer.
SA048311	7/10/73	White water flow, Mill D showing pipe to gray water tank, white water collection and flow to sewer.
DWG. C-1739	5/6/76	Details for overflow into 16" effluent – Bryant clarifier.
SA048307	2/27/76	Waste treatment at Bryant and Monarch clarifiers showing connections, and lines to city sewer.
DWG. E-1160	5/17/78	Filter plant backwash water control schematic.
DWG. E-1159	5/15/78	Filter plant backwash water disposal system.

King:

Bates#:	Date	Description
SA47643	4/24/59	Diagram of white water system for No. 1 paper machine
SA47644	4/24/59	Diagram of white water system for No. 2 paper machine
SA47645	4/27/59	Diagram of white water system for No. 3 paper machine
SA46139	4/24/59	Diagram of white water system for No. 4 paper machine

Monarch:

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Bates#:	Date	Description
SA048298	7/20/72	Stock and white water flow diagram for No. 10 Paper Machine
SA048318	8/7/72	Stock and white water flow diagram for No. 11 Paper Machine
SA048297	1/23/75	Stock and white water flow diagram for No. 10 Paper Machine
SA048296	2/17/75	Stock and white water flow diagram for No. 11 Paper Machine
SA048300	6/27/75	Waste stream flow diagram – basement showing the sand filter for the backwash waters.
MHI 00029	7/21/76	Layout of Creek water system to filters showing elevations and distances.
SA048299	2/2/79	Saveall collection and white water system for No. 10 paper machine showing overflow to sewer and white water storage chest.
SA048302	2/5/79	Saveall collection and white water system for No. 11 paper machine showing line to sewer and white water storage chest.
SA47657	Undated	Schematic of layout of feed water pump to clarifier for mill waste water system.

g) For any facility that discharged wastewater to the local POTW or had direct discharge of untreated wastewater, identify what percentages and quantities of the total flow were sent to the various discharge points.

MHI has a limited amount of information on quantities of wastewater discharged to the POTW. The available information is summarized in Appendix 28-G. The available information on clarifier flow appears in Appendices 14a-1, 14a-2, 14a-3, 14a-A, 14a-B and 14a-C and Summary Table 1. As early as 1969, the Bryant Mill clarifier effluent was discharged to the City of Kalamazoo sanitary sewer system *via* Outfall [001] (Permit No. 390004). (See SA038058 – SA038073, SA011319, and SA011317)). As of 1977, the Bryant clarifier discharged a portion of its flow to the Monarch clarifier and the remainder to the Kalamazoo sanitary sewer. Approximately 25% of the flow from the Bryant Clarifier was routed to the Monarch Clarifier and eventually discharged to Portage Creek through outfall 390006-002. The remaining 75% of the flow from the Bryant Clarifier was routed to the Kalamazoo WWTP through outfall 390004-001. (See SA033949, and SA034341 - SA034352). A June 14, 1982 letter to DNR notes the average flow to the Kalamazoo WWTP from June 1981 through May 1982 as 69.4%. (MHI 00001).

Prior to February 1970, the chlorine drop leg from the bleach process at the Bryant Mill was discharged directly into Bryant Mill Pond (SA029087; SA011346 - SA011354; SA034938; SA010966 – SA010970). The chlorine drop leg direct discharge was sampled on various occasions and the results are summarized in Table 28g-1. Information on bypasses and other direct discharges is summarized on Table 28d-2 and Table 28g-3 and the responses to Question 28(b) and (d)(iii).

The Monarch and King Mills also directly discharged chlorine waste streams. At the Monarch Mill, on occasion, a portion of the bleach waste was discharged directly to Portage Creek until de-inking was discontinued at the mill in 1957 (SA039024 – SA039028). The limited quantitative data for the King Mill chlorine drop leg are summarized in Table 28g-2.

h) For any POTW referred to in (g), above, provide any and all information, including but not limited to monitoring data, on the amount of wastewater discharged to the POTW, the location of the discharge point, and the concentration of PCBs in the wastewater discharge to the POTW and in the effluent from the POTW.

See answer to (g) above. In 1976, the distribution of wastewater became controlled by a real-time TOC analyzer. When a certain BOD loading had been discharged into Portage Creek from the Monarch Clarifier, the TOC analyzer directed the remaining wastewater from the Bryant Mill to the POTW for secondary treatment. Information on PCBs in the wastewater, to the extent that it exists, is contained in response to Question 28(d)(ii).

i) Describe any decommissioning activities conducted when individual unit processes were taken off line.

There is no information available related to decommissioning activities for individual unit processes.

j) Identify all permits and notices of wastewater-related violations issued for your facility (including those related to discharges to or from a POTW).

For permit information, see response to Question 28(b). For a detailed summary of all wastewater-related violations, see Appendix ~~36-2.~~28J.

Question No. 29: Information on Lagoons, Landfills and Impoundments

Identify and describe each lagoon, landfill, or impoundment on your property, past or present. Please identify and describe each off-site lagoon, landfill, or impoundment used for disposal of wastewater treatment sludges, pulp or paper production sludges, or any other materials potentially containing PCBs, past or present. For each such on or off-site lagoon, landfill, or impoundment, please include:

a) The nature of its uses, past and present (including a description of its sources, contents, treatment processes, and the destinations of its content if any removal actions were conducted).

'A'-Site

The A-Site was originally a paper residual dewatering lagoon used by the Allied Paper

Company's King Mill Division. An earthen dike surrounded most of the A-Site. The paper residuals were piped from the King Mill, located at 1608 Lake Street. Allied ceased using A-Site in 1971. (See Technical Memorandum No. 9, Willow Boulevard/A-Site Operable Unit, BBL, April 1995.)

Area East of Davis Creek

It appears that additional paper making residuals were placed in the Area East of Davis Creek. An earthen berm was located along the perimeter of this area. (See Technical Memorandum No. 9, Willow Boulevard/A-Site Operable Unit, BBL, April 1995.)

Area South of 'A'-Site Berm

It appears that additional paper making residuals from the A-Site were placed in the Area South of the A-Site Berm. (See Remedial Investigation/Focused Feasibility Study, Willow Boulevard/A Site Operable Unit, BBL, June 1999.)

Monarch HRDL

The Monarch HRDL is an earthen-bermed de-watering lagoon that was constructed by Allied as part of a primary treatment facility for the former Monarch Mill. Wastewater from the mill was sent to the Monarch clarifier. After clarification, settled residuals from the Monarch clarifier were pumped to the Monarch HRDL for de-watering. De-watered residuals were placed in the Type III Landfill and the Western Disposal Area on the Allied property. (See Draft Remedial Investigation Report, Allied Paper, Inc. Operable Unit, BBL, March 1999.)

Bryant HRDL

The Bryant HRDL is an earthen-bermed de-watering lagoon that was constructed by St. Regis Paper Company as part of a primary treatment facility for the former Bryant Mill. Wastewater from the mill was sent to the Bryant clarifier. After clarification, settled residuals from the Bryant clarifier were pumped to the Bryant HRDL and FRDLs for de-watering. De-watered residuals were placed in the Type III Landfill and the Western Disposal Area. (See Draft Remedial Investigation Report, Allied Paper, Inc. Operable Unit, BBL, March 1999.)

Bryant FRDL

The Bryant FRDL is a series of four earthen-bermed de-watering lagoons that were constructed by St. Regis Paper Company as an addition to the primary treatment facility for the former Bryant Mill. Wastewater from the mill was sent to the Bryant clarifier. After clarification, settled residuals from the Bryant clarifier were pumped to the Bryant HRDL and FRDLs for de-watering. The FRDLs also were used for de-watering underflow from the Bryant clarifier. De-watered residuals were placed in the Type III Landfill and the Western Disposal Area. (See Draft Remedial Investigation Report,

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Allied Paper, Inc. Operable Unit. BBL. March 1999.)

Former Type III Landfill

The Former Type III Landfill was operated by Allied for the disposal of non-process industrial wastes (such as cardboard, packing strips, waste paper and demolition materials) and to receive de-watered residuals from the HRDLs and FRDLs. (See Engineering Design Report, Allied Paper, Inc. Operable Unit, BBL, August 1999.)

Western Disposal Area

The Western Area is believed to have received residuals from the de-watering lagoons. (See Technical Memorandum No. 7, Allied Paper, Inc. Operable Unit, BBL, March 1994.)

b) Location. Please provide a location map if possible.

'A'-Site

The A-Site is located in the City of Kalamazoo, and is bounded on the north by the Kalamazoo River, on the east by Davis Creek, on the south by a berm that merges with former Olmstead Creek and on the west by the Willow Boulevard Site. See Appendix 29-B for a site location map.

Area East of Davis Creek

The Area East of Davis Creek is located in the City of Kalamazoo, and is bounded on the north by the Kalamazoo River, on the west by Davis Creek, and on the south and east by an earthen berm. See Appendix 29-B for a site location map.

Area South of 'A'-Site Berm

The Area South of A-Site Berm is located in the City of Kalamazoo, and is bounded on the north by the A-Site, on the east by Davis Creek, and on the south and west by former Olmstead Creek. See Appendix 29-B for a site location map..

Monarch HRDL

The Monarch HRDL is located in the City of Kalamazoo, and is bounded on the north by Portage Creek, on the west by the Monarch clarifier and on the south by Cork Street. See Appendix 29-B for a site location map.

Bryant HRDL

The Bryant HRDL is located in the City of Kalamazoo, and is bounded on the north by the Bryant FRDL and Bryant Clarifier, on the south and east by Portage Creek and on the

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west by the Western Area. See Appendix 29-B for a site location map.

Bryant FRDL

The Bryant FRDL is located in the City of Kalamazoo, and is bounded on the north by the former Type III Landfill, on the west by the Bryant Clarifier, on the south by the Bryant HRDL and on the east by Portage Creek. See Appendix 29-B for site location maps.

Former Type III Landfill

The Former Type III Landfill is located in the City of Kalamazoo, and is bounded on the north by Portage Creek/former Bryant Mill Pond, on the south and east by the Bryant FRDLs and Bryant Clarifier Creek and on the west by the Western Area. See Appendix 29-B for a site location map.

Western Disposal Area

The Western Disposal Area is located in the City of Kalamazoo on the west side of the Allied OU, and is bounded on the north by the Panelyte property, on the west by the railroad tracks, on the south by Cork Street and on the east by the Bryant FRDLs and Former Type III Landfill. See Appendix 29-B for a site location map.

c) The dates of use or operation.

'A'-Site

Historical aerial photographs indicate that the A-Site lagoons began operation in the late 1950s. The King Mill clarifier was installed in 1953. Aerial photographs also indicate that the lagoons were active in 1960 and 1967. The operations of the King Mill ceased in 1971. The lagoons were inactivated, as shown in a 1974 aerial photograph. Georgia-Pacific purchased the Site in 1975 to replace the Willow Boulevard Site, and it was used by Georgia-Pacific until it was closed in 1987. (Remedial Investigation/Focused Feasibility Study, Willow Boulevard/A-Site Operable Unit, BBL, June 1999).

Area East of Davis Creek

MHI has no information on the precise dates of operation of this area. Based upon aerial photographs and history, it probably operated for a portion of the time the A-Site operated.

Area South of 'A'-Site Berm

MHI has no information on the precise dates of operation of this area. Based upon aerial photographs and history, it probably operated for a portion of the time the A-Site operated.

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Monarch HRDL

The Monarch HRDL was constructed in the early 1950s. It has not been an active residuals disposal area since the 1960s. (See Description of Current Situation Report, BBL, May 1992.)

Bryant HRDL

The Bryant HRDL was constructed in 1954 and has not been an active residuals disposal area since the late 1970s. Between October 1998 and April 1999, approximately 150,000 yd^3 of sediments were excavated from former Bryant Mill Pond. The excavated sediments were placed in the Bryant HRDL and Bryant FRDLs 3 and 4. (See Description of Current Situation Report, BBL, May 1992 and Draft Remedial Investigation Report, Allied Paper, Inc. Operable Unit, BBL, March 1999.)

Bryant FRDL

The Bryant FRDLs were constructed by 1960 and have not been active residuals disposal areas since 1989, but have collected stormwater since that time. Between October 1998 and April 1999, approximately 150,000 yd^3 of sediments were excavated from former Bryant Mill Pond. The excavated sediments were placed in the Bryant HRDL and Bryant FRDLs 3 and 4. FRDLs 1 and 2 continue to act as a stormwater basin. (See Description of Current Situation Report, BBL, May 1992 and Draft Remedial Investigation Report, Allied Paper, Inc. Operable Unit, BBL, March 1999.)

Former Type III Landfill

Allied began operating the Former Type III Landfill in 1966 to receive non-process wastes, and in 1985 it was classified as a Type III landfill to receive paper residuals and some demolition materials. Disposal to the landfill ceased in the late 1980's and the landfill license is no longer active. (See Bryant HRDL/FRDLs Closure, Allied Paper, Inc. Operable Unit, BBL, August 1999.)

Western Disposal Area

The dates of operation for this area are unknown.

d) **Any and all activities or efforts to close or otherwise take a lagoon, landfill, or impoundment out of service, or any remediation or removal activities or efforts with respect to any lagoon, landfill, or impoundment, or their contents, including without limitation any capping, solidification, stabilization, containment, on or off-site disposal, treatment, or decommissioning thereof. Please provide the dates for each activity or effort.**

'A'-Site

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Subsequent to Remedial Investigation activities, as an interim measure, Georgia-Pacific and MHI installed a sheetpile wall along the length of the Kalamazoo River, extending approximately 150 feet up Davis Creek. Construction was completed in early 1999. This wall was installed to an elevation of 2 feet above the 100-year flood elevation (267 ft) to reduce the potential for residuals to be transported to the river in the possible event of failure of the existing dikes, and is intended to be left in place. Capping of the A-Site has been proposed, but has not yet been approved or implemented. A fence was installed on the south side of the A-Site in 2000. (See Remedial Investigation/Focused Feasibility Study, Willow Boulevard/A-Site Operable Unit, BBL, June 1999).

Area East of Davis Creek

Remedial actions are proposed to excavate the residuals located in the Area East of Davis Creek and move them to the A-Site, prior to capping of the A-Site. (See Remedial Investigation/Focused Feasibility Study, Willow Boulevard/A-Site Operable Unit, BBL, June 1999).

Area South of 'A'-Site Berm

Remedial actions are proposed to excavate the residuals located in the Area South of A-Berm and move them to the A-Site, prior to capping of the A-Site. (See Remedial Investigation/Focused Feasibility Study, Willow Boulevard/A-Site Operable Unit, BBL, June 1999).

Monarch HRDL

The Monarch HRDL is presently covered with soil; any additional efforts will occur after a ROD for the Allied OU has been issued.

Bryant HRDL and Bryant FRDL

To close the Bryant HRDL and Bryant FRDL, a final cover system has been largely constructed (a small portion remains to be completed). The final cover system includes: 12-inch thick sand gas venting layer; 30-mil. PVC flexible membrane liner; geosynthetic drainage composite layer; 24-inch thick soil protection layer; and 6-inch vegetated topsoil layer. The final cover system also includes a permanent stormwater retention and sedimentation basin. A sheetpile wall has also been installed along Portage Creek to provide the necessary structural support and groundwater management. MHI took these actions voluntarily and at risk, in an effort to secure the site in advance of a completed RI/FS and ROD. Although the State approved the activities, which MHI anticipates will be consistent with the final remedy, MHI has no guarantee that either DEQ or EPA will not require further work at the site. (See Bryant HRDL/FRDLs Closure, Allied Paper, Inc. Operable Unit, BBL, August 1999.)

Former Type III Landfill

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An erosion control plan was implemented in 1991. The area was seeded with erosion control vegetation (crown vetch) and site runoff was routed to two retention basins. Any additional remedial efforts will be the subject of a ROD for the Allied OU.

Western Disposal Area

The Western Area is presently covered with soil; any additional remedial efforts will be the subject of a ROD for the Allied OU.

e) **The dimensions and volume by source of materials disposed of within the lagoon, landfill, or impoundment (include calculations of volumes, if available).**

In its work at the site, BBL has estimated residual volume in the various disposal areas based on the classification of soils/residuals in soil borings in each area, as well as the results of PCB samples that were collected. Because of the limited amount of data collected per unit area, these estimates are subject to uncertainty. BBL has estimated the residuals volume based on the classification of soils/residuals in soil borings in each disposal area. These estimates assume a uniform interval of residuals across the entire disposal area. BBL's calculations follow:

'A'-Site

BBL estimated that the A-Site contains a total approximate residuals volume of 475,400 yd^3 (See Remedial Investigation/Focused Feasibility Study, Willow Boulevard/A-Site Operable Unit, BBL, June 1999; Technical Memorandum No. 9, Willow Boulevard/A-Site Operable Unit, BBL, April 1995.). These residual volumes are the same as those provided by Georgia Pacific. These volumes include the entire volume of residuals at the A-Site, covering periods of use by Allied and Georgia Pacific.

Area East of Davis Creek

The Area East of Davis Creek contains a total approximate residuals volume of 3,800 yd^3 (See Remedial Investigation/Focused Feasibility Study, Willow Boulevard/A-Site Operable Unit, BBL, June 1999.)

Area South of 'A'-Site Berm

BBL estimated that the Area South of A-Site Berm contains a total approximate residuals volume of 2,900 yd^3. (See Remedial Investigation/Focused Feasibility Study, Willow Boulevard/A-Site Operable Unit, BBL, June 1999.)

Monarch HRDL

BBL estimated that the Monarch HRDL contains a total approximate residuals volume of 170,000 yd^3. (See Draft Remedial Investigation, Allied Paper, Inc. Operable Unit, BBL,

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November 2000; Technical Memorandum No. 7, Allied Paper, Inc. Operable Unit, BBL, March 1994.)

Bryant HRDL

Prior to 1998, BBL estimated that the Bryant HRDL contained a total approximate residuals volume of 390,000 yd^3. During the period from October 1998 to April 1999, BBL estimated that approximately 100,000 yd^3 of sediment were distributed over the Bryant HRDLs as a result of the Bryant Mill Pond Sediment Removal Action. (See Draft Remedial Investigation, Allied Paper, Inc. Operable Unit, BBL, November 2000, Technical Memorandum No. 7, Allied Paper, Inc. Operable Unit, BBL, March 1994.)

Bryant FRDL

Prior to 1998, BBL estimated that the Bryant FRDL contained a total approximate residuals volume of 54,000 yd^3. During the period from October 1998 to April 1999, approximately 46,000 yd^3 of sediment were distributed over FRDLs 3 and 4 as a result of the Bryant Mill Pond Sediment Removal Action. (See Draft Remedial Investigation, Allied Paper, Inc. Operable Unit, BBL, November 2000, Technical Memorandum No. 7, Allied Paper, Inc. Operable Unit, BBL, March 1994.)

Former Type III Landfill

BBL estimated that the Former Type III Landfill contains a total approximate residuals volume of 140,000 yd^3 (including the area between the landfill southeastern edge and the FRDLs) (See Draft Remedial Investigation, Allied Paper, Inc. Operable Unit, BBL, November 2000, Technical Memorandum No. 7, Allied Paper, Inc. Operable Unit, BBL, March 1994.)

Western Disposal Area

BBL estimated that the Western Disposal Area contains a total approximate residuals volume of 380,000 yd^3. (See Draft Remedial Investigation, Allied Paper, Inc. Operable Unit, BBL, November 2000, Technical Memorandum No. 7, Allied Paper, Inc. Operable Unit, BBL, March 1994.)

The residual volume has also been estimated using a more refined approach. The Thiessen polygon method was used to weight data from each boring in proportion to their representative areas. The polygon areas were determined by connecting the adjacent boring locations and constructing perpendicular bisectors to each connecting line. Instead of using an average residuals thickness across the entire disposal area, the specific residuals interval from each individual boring was applied to the polygon area associated with that boring. Although there are still data limitations, this approach mitigates at least some of the uncertainty. A comparison of the results of both approaches appears in Table 29e-1; the calculations are contained in Appendix 29-E.

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Table 29e-1. Residual Volumes

Site Area	BBL Residual Volume (yd^3)	Thiessen Polygon Residual Volume (yd^3)
Monarch HRDL	170,000	158,929
Bryant HRDL*	390,000	214,059
Bryant FRDL*	54,000	74,505
Former Type III Landfill	122,000	142,334
Landfill Perimeter Strip	18,000	19,035
Western Area	380,000	246,898
Bryant Mill Pond	146,000 (a)	88,049 (b)
A-Site (e)	475,400 (d)	543,538 (c) (d)
Area East of Davis Creek (e)	3,800	2,020
Area South of A-Site Berm (e)	2,900	1,647

* These estimates represent the volume of residuals present prior to the Bryant Mill Pond Sediment Removal Action.

(a) Volume estimated by BBL to have been removed from the Bryant Mill Pond and placed in the Bryant HRDL and FRDL.

(b) Volume of sediment (in-place) calculated using Thiessen polygon method.

(c) Georgia-Pacific (BBL) calculation of residuals volume using Thiessen polygon method (Mediation Questionnaire Response, January 2001).

(d) The residual volumes provided by Allied for the A-Site are the same as those provided by Georgia Pacific. These volumes include the entire volume of residuals at the A-Site, covering periods of use by Allied and Georgia Pacific.

(e) Allied believes it is responsible for in the range of 50% of the A-Site and all of the Area East of Davis Creek and the Area South of the A-Site Berm.

f) A summary of all environmental investigation data collected for each lagoon, landfill, or impoundment, to the extent available, including:

i) Soil boring logs.
ii) Test pit logs.
iii) PCB analytical data for sludge, soil and groundwater samples (include table(s) and/or figure(s) itemizing sample location, sample depth, sample interval, and both total PCBs and Aroclor-specific analytical results).
iv) Density and moisture content data for sludge samples.

Numerous investigations have been performed at the A-Site and the Allied property. Those investigations are summarized in technical memoranda and reports related to the remedial investigations at these sites. (See, e.g., Description of the Current Situation, BBL, May 1991; Description of the Current Situation, BBL, May 1992; Addendum to the

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Draft Description of the Current Situation, BBL, April 1993; Draft Technical Memorandum 7, Allied Paper, Inc. Operable Unit, BBL, March 1994; Technical Memorandum 7, Allied Paper, Inc. Operable Unit, BBL, March 1994; Draft Technical Memorandum 16, Surface Water Investigation, BBL, March 1995; Technical Memorandum 9, Willow Boulevard/A-Site Operable Unit, BBL, April 1995; Technical Memorandum 15, Mill Investigation, BBL, August 1996; Addendum to Technical Memorandum No. 7, BBL, March 1999; Remedial Investigation/Focused Feasibility Study, Willow Boulevard/A-Site OU, BBL, June 1999; Draft Technical Memorandum 7, Allied Paper, Inc. Operable Unit, BBL, July 1997; Removal Action Summary, King Street Storm Sewer, BBL, February 2000; Response Activities Summary, Former Allied Paper, Inc. King Mill Lagoons, BBL, March 2000; Draft Remedial Investigation, Allied Paper, Inc. Operable Unit, BBL, November 2000; BBL electronic database (1999).

These reports and available information are summarized below.

ALLIED PAPER SITE

The Description of Current Situation Report (BBL, 1991-1993) provides data collected during investigations conducted prior to 1990. PCB related investigations at the Allied HRDLs were initiated in 1985. During the 1985 investigation of PCB concentrations in Portage Creek, two rivulets were identified by MDNR between the Bryant HRDL perimeter dikes and Portage Creek. PCBs were detected in the initial samples collected from the two rivulets. Investigations were conducted between 1985 and 1989 to identify the source of the "seeps" and to determine the source and concentrations of PCB in the "seep" water. These investigations included: the installation and sampling of monitoring wells near "Seep 1" and in the perimeter dike of the lagoons; sampling and analysis of residuals in the HRDLs; sampling and analysis of "seep" water; and sampling of soils in the vicinity of the seeps. The results of the investigations indicated that the residuals are approximately 12 feet thick and overlie native topsoil and peat. The PCB concentration of the soil/residual samples collected between 1985 and 1986 ranged from below detection to 20 mg/kg. PCB concentrations ranged from 0.005 mg/kg to 1,200 mg/kg in the soil/residual samples collected in the HRDLS during the 1989 HRDL investigation. The PCB concentration in water samples collected from the "seeps" ranged from 0.015 ug/L to 4.4 ug/L.

In 1989 Allied conducted several investigations to: further evaluate the extent and distribution of PCB in the HRDLs; further evaluate possible groundwater quality impacts resulting from the HRDLs; further evaluate possible PCB migration from the HRDLs; and further evaluate "Seep 2" to determine its source, the water quality and to confirm that it is not a leachate seep resulting from the HRDLs. The investigations included: sampling of the residuals at nine locations in the HRDLs ; installation of four additional perimeter monitoring wells; sampling and analysis of water in the existing and new perimeter wells; installation, sampling and analysis of a monitoring well at "Seep 2"; sampling of soils at two locations near "Seep 2"; and sampling of soil downgradient of the pump house drain located in the northeast corner of the Bryant HRDL.

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In October 1988, the Type III landfill was investigated and nine soil borings were installed and sampled. PCBs were only detected in one sample (0.012 mg/kg). Twenty-six soil borings were collected from an area east of the landfill around monitoring well MW-5, in 1989. Fourteen samples were collected from 10 borings and analyzed for PCB. The resulting PCB concentrations in the soil samples ranged from 0.06 to 37 mg/kg. Quarterly groundwater sampling of the landfill perimeter wells began in 1985. Groundwater samples collected and analyzed during the monitoring program had PCB concentrations ranging from non-detectable to 2.1 ug/L.

Numerous investigations of Bryant Mill Pond sediments have been conducted. A hydrogeological investigation was performed in the Bryant Mill Pond area in 1990 to obtain groundwater information related to possible remedial alternatives. Fifteen groundwater monitoring wells (MW-101 to MW-114) and two test wells (TW-1 and TW-2) were installed as part of a Phase I investigation. Phase II included installation of two additional monitoring wells (MW-115 and 116). Groundwater sampling was conducted at 17 wells in 1989. Soil borings were also installed on the western perimeter of the Bryant Mill Pond as part of a stream diversion plan in July and August 1989. Out of the 23 borings that were installed, 14 samples were collected from 10 borings and analyzed for PCB.

After the AOC was signed, field work started on the Allied OU Remedial Investigation. The investigation included the installation and sampling of 34 borings to characterize the residuals and soil. Geotechnical sampling and laboratory testing were conducted to provide data for assessing the stability of the dikes and the strength and deformation characteristics of the residuals. The hydrogeological investigation included an inventory of the existing monitoring wells, installation, construction, rehabilitation and decommissioning of monitoring wells and piezometers. Twelve shallow monitoring wells were installed, as well as ten deep wells, one residuals monitoring well, two replacement wells and six piezometers. One round of groundwater samples was collected from each of the 25 new wells and from 27 selected existing wells. The sediment investigation activities involved collection of sediment samples from the former Bryant Mill Pond and along Portage Creek. The activities conducted included the installation and sampling of 12 soil borings, collection of five stream bed samples from Portage Creek, and probing and collection of sediment cores in the stream bed. Residential property sampling was also conducted to assess the potential presence of PCB in the former floodplain sediments or surficial soils.

In general terms, the BBL investigation results indicate that the average PCB concentration is 144.5 mg/kg (13 samples) in the Bryant HRDL, 5.53 (20 samples) in the Bryant FRDL, 31.2 mg/kg (36 samples) in the Monarch HRDL, 515.01 mg/kg (5 samples) in the Landfill Strip, 179.8 mg/kg (47 samples) in the Western Area, and 49.42 mg/kg (32 samples) in Bryant Mill Pond.

Additional monitoring wells were installed and sampled between 1994 and 1999. The results of this sampling is included in the Addendum to Tech Memo No. 7 (BBL, 1999). An RI, summarizing the work at the Allied Site, was submitted to MDEQ last fall.

FORMER ALLIED PAPER KING MILL LAGOONS

Investigation activities were conducted in 1994 at the former King Mill to determine the presence of PCB associated with the mill's former lagoons and clarifiers. Six soil borings were installed and sampled in the area of the former lagoons and two soil borings were installed and sampled in the area of the former clarifiers (Tech Memo 15). The maximum depth of residuals was found at 9 feet below ground surface. The PCB concentrations in the soil samples ranged from not detected to 79 mg/kg.

KING STREET STORM SEWER

Investigation activities were conducted in 1994 at the King Street Storm Sewer to assess the potential impacts of stormwater runoff or drainage from the 48-inch diameter pipe that drained King Mill wastewater to the Kalamazoo River (Tech Memo 15). Grey clayey soils with fibers were observed in eight of the eleven borings. These soils had a thickness of 1.0 to 2.5 feet and a maximum depth of 3.0 feet below ground surface. The PCB concentrations in the soil samples ranged from 0.63 mg/kg to 32 mg/kg.

A-SITE

A remedial investigation was performed at the Willow Blvd/A-Site, including residuals characterization by drilling and sampling of eight borings (3 at A-Site) and ten sediment cores (5 near A-Site). Five groundwater monitoring wells existed at the A-Site at the time of the RI (1993/94). To supplement the existing groundwater monitoring wells, 19 additional monitoring wells were installed (15 at A-Site). One round of groundwater sampling was conducted in October 1993.

The soil and sediment investigation included the collection and analysis of background soil samples, reconnaissance soil samples, residential soil samples, and area east of Davis Creek soil samples, and a geotechnical sampling and analysis program. Background soil sampling was conducted at one location upgradient of the A-Site (AMW-3A). The PCB concentration in the soil/residual samples collected ranged from not detected to 290 mg/kg. The PCB concentration in the groundwater samples collected ranged from not detected to 1.5 ug/L.

Previous investigations indicated that residuals extend to the southern portion of the A-Site. To assess the possible lateral and vertical extent of the residuals, a soil reconnaissance survey was conducted outward from the southern perimeter of the A-Site. The area was probed with a shovel to determine if residuals were present. A core was

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collected at each location (3) at the edge of the residuals. Two samples were collected from each boring. The PCB concentration in the soil/residual samples ranged from not detected to .77 mg/kg.

Previous investigations indicated that residuals were present in a floodplain area east of Davis Creek. To assess the possible lateral and vertical extent of residuals in the area east of Davis Creek, eight borings were installed, two samples collected from each location. The PCB concentration in the soil/residual samples ranged from not detected to 36 mg/kg.

Geotechnical sampling was conducted to provide data for assessing the stability of the dikes at the A-Site and the strength and deformation characteristics of the residuals. The geotechnical investigation includes an evaluation of piezometer information and the collection of disturbed and undisturbed samples of soil and residuals.

Additional data was collected at the A-Site between 1995 and 1999. (RIFS Willow/A-Site June 1999) The 1995 activities included re-sampling of all existing monitoring wells. Additional sampling was conducted at AMW-3A. Two borings were installed and 21 samples were collected. Seven additional borings were installed in 1998. Also, an additional 46 samples were collected from 13 borings on and near residential properties.

In response to concerns of a local property owner over the possible breach of a potential former lagoon area south of the A-Site berm, 46 samples were collected from nine soil borings. They also collected 20 samples from 27 additional borings in the area South of the A-Site berm. The PCB concentration in the soil/residual samples ranged from not detected to 61 mg/kg.

g) **Estimated mass of PCBs within lagoon, landfill, or impoundment (prior to initiating any remedial activities that were conducted). Please include all calculations and assumptions that lead to this estimate.**

In connection with its work at the site, BBL has estimated the PCB mass based on the classification of soils/residuals in soil borings in each disposal area, as well as the results of PCB samples that were collected from those borings. These estimates assume a uniform interval of residuals across the area and use an average PCB concentration from all of the samples collected within that area. The bulk density used was calculated from the geotechnical data collected from residuals in the Monarch HRDL and the Bryant FRDL, as well as the A-Site and King Highway Landfill. BBL's estimates are noted below. MHI performed a more refined analysis of PCB mass, which follows thereafter.

'A'-Site, Area East of Davis Creek and Area South of 'A'-Site Berm

BBL has estimated the mass of PCBs within the A-Site, the Area East of Davis Creek and the Area South of A-Site Berm as 4,700 kg. Georgia Pacific has estimated the PCB mass in A-Site only, for the time period it was used by both Allied and Georgia Pacific, at 5,779 kg.

It is MHI's position that Allied was responsible for approximately 50% of the PCB mass in the A-Site and all of the mass in the Area East of Davis Creek and the Area South of the A-Site Berm.

Monarch HRDL

BBL has estimated the mass of PCBs within the Monarch HRDL as 1,304 kg.

Bryant HRDL

BBL has estimated the mass of PCBs within the Bryant HRDL as 12,804 kg prior to 1999.

Bryant FRDL

BBL has estimated the mass of PCBs within the Bryant FRDL as 98 kg prior to 1999.

Former Type III Landfill

BBL has estimated the mass of PCBs within the Former Type III Landfill as 2,858 kg.

Western Disposal Area

BBL has estimated the mass of PCBs within the Western Disposal Area as 25,774 kg.

The PCB mass has also been estimated using the Thiessen polygon method to weight data from each boring in proportion to their representative areas. The polygon areas were determined by connecting the adjacent boring locations and constructing perpendicular bisectors to each connecting line. Instead of using an average residuals thickness across the entire disposal area, the specific residuals interval from each individual boring was applied to the polygon area associated with that boring. In addition, the length weighted PCB concentration from each individual boring was applied to the polygon area, instead of averaging all of the PCB data. Two different bulk density estimates were used for this method. The first bulk density was calculated by BBL using the geotechnical data collected from the Monarch HRDL and the Bryant FRDL. The average bulk density for these two areas was used for the other disposal areas at the site. The solids mass was also calculated using the percent solids data collected during the remedial investigation and assuming a porosity of 40%.

A sensitivity analysis was also conducted to determine the error associated with the estimates. This involved removing a sample point, re-drawing the polygons and calculating a PCB mass. This was continued until each sample point had been removed. The sensitivity analysis provides a range of PCB mass estimates for each disposal area. The root mean square error can then be calculated for each range of estimates.

A table comparing the BBL and Thiessen methods, as well as the backup calculations and polygon map, are contained Appendix 29G. Please note that the mass estimates for the Bryant HRDLs and FRDLs contained in Table 29g-1 represent the PCB mass present prior to the Bryant Mill Pond Sediment Removal Action. During the period from October 1998 to April 1999, approximately 2,247 kg of additional PCB was placed in the Bryant HRDL and 1,236 kg was placed in Bryant FRDLs 3 and 4 as a result of the Bryant Mill Pond Sediment Removal Action.

The PCB mass estimate provided by Allied for the A-Site is the same as those provided by Georgia Pacific. This mass estimate includes the entire volume of residuals at the A-Site, covering periods of use by Allied and Georgia Pacific. The PCB mass in the Area East of Davis Creek and the Area South of the A-Site Berm have been calculated separately.

h) Construction drawings or as-built drawings illustrating the size, dimensions, and configuration of the lagoon, landfill, or impoundment, and the deposition of waste materials within the lagoon, landfill, or impoundment.

Construction drawings or as-built drawings are not available for the lagoons and landfills at the Allied site.

As stated in the response to Question 29 (c), Allied began dewatering sludge from the primary wastewater treatment systems in the mid-1950s. Solids were settled out in primary clarifiers (Bryant and Monarch) and subsequently dewatered in lagoons before being landfilled. Prior to being used as a disposal area, the area containing the Bryant HRDL, Bryant FRDL and Monarch HRDL was a low-lying marsh and celery field. The average surface elevation of the Bryant HRDL was approximately 795 feet above mean sea level while the elevation in 1991 was 810 feet.

The lagoon dikes were not engineered, but rather built up over time to meet the need to contain the accumulating sludges. The location of the dikes are shown in Appendix 29-H. The source of the material used to build the dikes is unknown, but it was probably obtained from an on-site sand borrow pit in the early years. In later years, stabilized gravel was brought on-site. The residuals in the HRDL are approximately 12 feet deep and the dikes are approximately 15 feet high. The average slope for most locations in 1991 was approximately 1:1. At that time the exterior slopes of the dikes were vegetated with mature trees and underbrush in most locations.

Sloughing occurred in certain limited areas and erosion control work was conducted in 1993 on a 290 feet long area on the south side of the Bryant HRDLs to correct the

problem. Rock-filled wire mesh baskets were installed on the portion of the dike that was below the 100-year flood elevation of Portage Creek. The portion of the dike that was above the 100-year flood elevation was re-vegetated.

The results of the geotechnical investigation conducted by BBL as part of the remedial investigation indicate that the soils in the berms are generally loose to medium dense granular material that can be classified as silty sands. Gravel is also present in varying percentages. Some upper portions of the berms appear to have been built out onto paper residuals as indicated by the soil boring logs. These logs also indicate that up to 10 feet of berm material is found above a layer of paper residuals. In most cases, more berm material was found below the paper residuals in the borings indicating that the berms may have been raised several times.

Work on the final cover system for the HRDLs began in 2000 and is largely completed. This work included berm stabilization with sheetpile installation to reduce the potential for PCB migration into Portage Creek via berm erosion or failure. The sheetpile location and final berm elevations are shown in the figures included in Appendix 29-H and described in the Allied Paper, Inc. Operable Unit Bryant HRDL/FRDLs Closure, Engineering Design Report (BBL, 1999)

See Allied Paper, Inc. Operable Unit, Bryant HRDL/FRDLs Closure, Engineering Design Report, BBL 1999; Technical Memorandum No. 7; Allied Paper, Inc. Operable Unit, BBL, March 1994; Description of Current Situation Report, BBL 1991/1992

i) Any information regarding known or suspected releases or spills of materials from any lagoon, landfill, or impoundment into the Kalamazoo River or its tributaries.

'A'-Site

Releases from the A-Site: a letter from BBL to Scott Cornelius, dated February 17, 1999, states that a local resident told of a breach in the A-Site's southern berm (caused by a burrowing animal) occurring adjacent to his property. This event had occurred approximately 30 years earlier. According to the resident, paper-making residuals were released to his property.

Area East of Davis Creek

No information is available on releases from the Area East of Davis Creek.

Area South of 'A'-Site Berm

No information is available on releases from the Area South of the A-Site Berm.

Monarch HRDL

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No information is available on releases from the Monarch HRDL.

Bryant HRDL/FRDL

The Allied Paper, Inc. – Bryant HRDL/FRDLs Engineering Design Report (BBL, 1999) states that slump and erosion features are visible in a number of locations on the outside face of the berm. Examination of these features indicated that they generally appear to be slow moving surface slumps approximately 1 to 2 feet deep and several feet long. Most of the slump features are small, but occasionally connect laterally to each other to create an unstable face, where there is little woody vegetation. The scarps are usually located on the slope itself and typically have not encroached significantly on the crest. Work on the final cover system for the HRDLs began in 2000. This work included berm stabilization with sheetpile installation to reduce the potential for PCB migration into Portage Creek via berm erosion or failure. The sheetpile location and final berm elevations are shown in the figures included in Appendix 29-H and described in the Allied Paper, Inc. Operable Unit Bryant HRDL/FRDLs Closure, Engineering Design Report (BBL, 1999). A slump on the Monarch HRDL berm was repaired in 1994.

In addition, residuals removal activities outside of the Bryant HRDL dike/sheetpile wall were conducted in 2000. These activities consisted of: probing activities to determine the possible presence of residuals; focused investigation (test pits) of areas along the sheetpile; collection of samples for PCB analysis during the probing/test pit excavations; residuals excavation activities at locations selected based on the results of the probing/test pits; and post-excavation sampling at certain excavation locations. The excavation of residuals was conducted in four areas. The excavated material was placed onto the Bryant FRDLs prior to capping.

A May 1, 1958 Inter-Office memo indicates that leaks and overflows from the sludge beds resulting from freezing conditions caused sludge to enter Portage Creek. (SA 033525; deposition of Wayne Kendrick, 4/24/97, p. 82-83). An April 11, 1969 letter from WRC to Allied notes a March 12, 1969 loss from the King Division sludge ponds. The letter notes that approximately 100 gallons per minute of waste was flowing into the Kalamazoo River. A sample of this flow detected a 5 day B.O.D. of 430 mg/l and Suspended Solids of 5050 mg/l. (KA 04800182, KA 04900200). In an August 1976 MDNR Industrial Wastewater Survey, "leachate" from the company's sludge lagoons was reported to be entering a ditch and flowing into Portage Creek. (SA 029820-029828) The "leachate" was sampled by MDNR after it was combined with the ditch flow. PCB Aroclor 1242 was detected at a concentration of 0.40 ug/L. It is uncertain whether the "leachate" sampled by MDNR was in fact leachate emanating from the lagoons. There were groundwater springs that surfaced outside the perimeter of the lagoons and then entrained floodplain sediment. It is likely that these springs were mislabeled by MDNR as "leachate." A July 1977 MDNR Industrial Wastewater Survey also noted that the underdrainage from the sludge disposal area. PCBs were not detected in the sample collected. (SA 033499- 033507). See also response to Question 29-F.

A Water Resources Commission river sampling survey conducted on May 21, 1968

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found that there was one area of the Bryant HRDL/FRDL where sludge was present outside of the dikes. (MDNR 002488).

Former Type III Landfill

No information is available on releases from the Former Type III Landfill.

Western Disposal Area

No information is available on releases from the Western Area.

j) An indication whether the lagoon, landfill, or impoundment is, or ever was, lined and, if so, the type of liner and an estimate of its hydraulic conductivity.

There is no indication that any of the lagoons, landfills or impoundments were ever lined.

k) To the extent not answered in Question 28, for any discharges to a POTW, provide any and all information on the amount of sludge produced to the POTW, the amount of sludge produced at the POTW as a result of the treatment of discharges to the POTW from (at least in part) your property, the location of the disposal site(s) for the POTW-sludge, and the concentration of PCBs in the POTW sludge.

'A'-Site

There were no discharges to the POTW from the 'A'-Site.

Area East of Davis Creek

There were no discharges to the POTW from the Area East of Davis Creek.

Area South of 'A'-Site Berm

There were no discharges to the POTW from the Area South of the A-Site Berm.

Monarch HRDL

There were no discharges to the POTW from the Monarch HRDL.

Bryant HRDL

Decant water from the Bryant HRDLs ~~began being~~was recycled back to the Bryant ~~Clarifier~~clarifier on a periodic basis beginning in 1971. (MDNR 003784). The decant water was permanently diverted to the Bryant clarifier some time between 1971 and the late 1970s, and ~~this was~~ continued to be permanently diverted until mill operations ceased. (MDNR 003784, SA034351, diagram from MDNR March 1-2, 1982 Wastewater

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Survey). Surface water runoff from the Bryant HRDLs has been discharged to the POTW from 1990 to the present. The amount of sludge produced at the POTW is unknown.

Bryant FRDL

Decant water from the Bryant FRDLs ~~began being~~was recycled back to the Bryant ~~Clarifier~~clarifier on a periodic basis beginning in 1971. (MDNR 003784). The decant water was permanently diverted to the Bryant clarifier some time between 1971 and the late 1970s, and ~~this was~~ continued to be permanently diverted until mill operations ceased. Surface water runoff from the Bryant FRDLs has been discharged to the POTW from 1990 to the present. The amount of sludge produced at the POTW is unknown.

Former Type III Landfill

There were no discharges to the POTW from the Former Type III Landfill.

Western Disposal Area

There were no discharges to the POTW from the Western Disposal Area.

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Question No. 37: PCB Sampling Data

To the extent not covered elsewhere in this questionnaire, please provide all PCB analytical data for sediments, soil, groundwater, and surface water at your property, or at any off-site facility described in Question 29. Please provide the concentration levels of PCBs for all sampling events collected on your property and during sampling events under your control. Please segregate data by media sampled, and list by sampling location and date. Please describe, reference (by document and relevant page numbers), and produce to the depository any documents with data relevant to answering this question that were not produced to the depository as part of your initial production. Please reference (by document and relevant page numbers) all documents in the depository that were relied on to answer this question.

In 1982, Allied took two samples from an area where a leaking transformer used to be located. One had less than 10 ppm PCBs and the other had 65 ppm PCBs. These results are attached. (See SA 228078-22808).

The results of the sediment sampling of Bryant Mill Pond conducted as part of the EPA Sediment Removal Action are summarized in Appendix 37-A. The sample location map is also included in Appendix 37-A. Appendix 37-A also includes the results of: Portage Creek surface water sampling conducted during the EPA Sediment Removal Action at Bryant Mill Pond; additional groundwater sampling at the former Landfill; and Bryant Mill Pond seep sampling conducted by CDM in May 2000.

For additional sediment and surface water PCB data, see the following reports: Description of Current Situation, BBL, May 1991; Draft Technical Memorandum 7, Allied Paper, Inc. Operable Unit, BBL, March 1994; Draft Technical Memorandum 16, Surface Water Investigation, BBL, March 1995; Draft Remedial Investigation, Allied Paper, Inc. Operable Unit, BBL, November 2000; BBL Electronic Database (1999). See also discussion in response to Question 28(f).

For other miscellaneous PCB data, see SA 040666, SA 029858; SA 030680; SA 003905, SA 031994, SA 044177, SA 038861, SA 039275, SA 039276, SA ~~039277.~~039277, SA 010430 (source unknown).

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KALAMAZOO RIVER SUPERFUND SITE MEDIATION
GENERAL SITE INFORMATION QUESTIONNAIRE

Millennium Holdings, Inc. June 29, 2001 Supplemental Responses

For purposes of this questionnaire, the term "your property" includes all properties or production facilities owned or operated, or previously owned or operated, by you, or by your predecessors in interest, that are located, in whole or in part, within 1 mile of the Kalamazoo River, Portage Creek, or their tributaries, or which have ever discharged wastewater from a production facility to the Kalamazoo River, Portage Creek, or their tributaries, or to any POTW located thereon. The terms "release," "disposal," "facility," "owner," and "operator" shall have the same meaning as under CERCLA, 42 U.S.C.A. §§ 9601 *et. seq.* For the purposes of this questionnaire, carbonless copy paper and NCR paper have the same meaning. For questions 4 through 27, the relevant time period is 1954 through 1985, unless otherwise stated. For the remaining questions, the relevant time period is 1954 to present, unless otherwise stated.

Each question shall be answered in a narrative fashion, and no answer should merely refer the reader to referenced documents. After providing an abbreviated narrative response, however, an answer may then refer the reader (by document and relevant page numbers) to attached excerpts of document(s) that provide a more expansive narrative answer.

To the extent not previously produced to the document depository in Atlanta, Georgia ("depository"), any document referred to or relied on in answering the questions below and all other documents responsive to the questions below in Respondent's (or their agent's or affiliate's) control or possession that are not subject to a valid claim of privilege under Federal Rule of Evidence 501, shall be produced to the depository. Excepted from this production requirement are BB&L documents and other documents in the administrative record produced by other consultants on behalf of the Kalamazoo River Study Group ("KRSG") or its individual members.

As part of your response to each question (or sub-part thereof) below, identify and reference (by document and relevant page numbers) all documents that were relied on, or otherwise used, to answer the question (or sub-part), or that are otherwise materially responsive thereto. In identifying any responsive document that was not produced to the depository as part of your initial production, Respondent shall designate each such document as a document not previously produced.

As part of your response to each question asked below, please list the person(s) consulted for the answer to the question. For each question that requires calculations to be made to produce the answer, please attach a calculation brief that presents the calculations made, and explains the basis for the calculations, including any data used and assumptions made. Where available, PCB data should provide both total PCBs and aroclor specific information.

Where a question applies to more than one production facility located, past or present, on your property, please provide a separate answer for each production facility. For purposes of this

questionnaire, "production facility" is defined as a collection of processes at one location (e.g. a de-inking process, recycling process, and/or paper production process) that produces a well-defined end-product for sale or use off-site. Please be consistent with the identification of production facilities throughout your responses to the questionnaire.

In answering the questions below, Respondents are free to withhold the name (including redacting the name on any documents provided) of any off-site landfill that is more than one mile from the Kalamazoo River, its tributaries, and the properties of the mediation participants.

I. GENERAL INFORMATION

Question No. 1: Mediation Participant Information

a) Company Name;

Millennium Holdings LLC, successor to Millennium Holdings, Inc., (collectively referred to as "MHI"), formerly known as HM Holdings, Inc., on behalf of Allied Paper Corporation ("Allied").

b) Address(es) of your property;

The following four former Allied properties are relevant to this Questionnaire: (1) Bryant Mill, located along Portage Creek between Reed Street and Cork Street, Kalamazoo, Michigan; (2) King Mill, located at 1608 Lake Street, Kalamazoo, Michigan; (3) Monarch Mill, located between Cork Street and First Street, Kalamazoo, Michigan; and (4) Rex Mill, located on Kings Highway, Comstock Township, Michigan. (See response to Question 2(b) for more detailed descriptions of the properties).

c) EPA ID #s; RCRA #s; NPDES #s;

Bryant Mill's NPDES # was MI 0000779

d) Type of business entity;

Former papermaking operations.

e) Name, title and affiliation of the person(s) completing questionnaire.

This Questionnaire was completed by Drinker Biddle & Reath LLP, specifically Bonnie Allyn Barnett, Maryanne Starr Garber and Tara L. Flynn, based upon available documents and the deposition testimony of former Allied employees. Drinker was assisted in responding by LTI and Gradient Corporation; specifically, Greg Peterson (LTI), Cathy Whiting (LTI), David Merrill (Gradient), Alison Barlow (Gradient) and Andrew Bittner (Gradient). Information was also provided by BB&L.

Question No. 2: Past and Present Operators, Owners and Activities

a) Identify all prior and subsequent owners and operators of your property, and their dates of ownership and/or operation.

Allied Paper Corporation – Corporate History:

In 1922, three Kalamazoo area paper companies, the King Paper Company, the Monarch Paper Company and the Bardeen Paper Company of Otsego,[1] merged to form a company called the Allied Paper Mills. In 1955, Allied Paper Mills was acquired by Thor Corporation and began operating under the name Allied Paper Corporation ("Allied"). On October 10, 1967, Allied was acquired by SCM Corporation. In 1986, SCM Corporation was acquired by Hanson PLC. Allied's assets and liabilities were transferred to a subsidiary of Hanson, PLC known as HM Holdings, Inc. In 1996, Hanson underwent a "demerger" in which HM Holdings, Inc. was transferred to a newly formed company, Millennium Chemicals. Millennium Holdings, Inc. was the successor by name change to HM Holdings, Inc. and Millennium Holdings LLC is the successor to Millennium Holdings, Inc. (See SA 045879, SA022642, SA 022649-022650, SA 021038-021039)[2]

Allied "Property"

Allied owned and/or operated the following properties/production facilities located within 1 mile of the Kalamazoo River, Portage Creek or their tributaries during the period of interest:

1. Bryant Mill
2. King Mill
3. Monarch Mill
4. Rex Mill

Bryant Mill History:

The Bryant Mill was constructed in 1895 and was owned and operated by Bryant Paper Company, which was acquired by Time Inc. in 1945. At that time, there were four divisions of Bryant Paper Company: 1) Superior Division, 2) Bryant Division, 3) Milham

[1] The Bardeen Paper Company had a total of four mills -- three paper making mills (Bardeen Mills #1, #2 and #3) and a coating mill (Bardeen coating mill). When Allied Paper Mills formed, it took over Bardeen Mills #1 and #2 and the Bardeen coating mill. Bardeen Mill #2 was shut down in 1931 and torn down in 1934. The Otsego Falls Paper Company purchased Bardeen Mill #1 from Allied sometime between 1934 and 1939. Allied closed the Bardeen coating mill in 1956 and moved the coating operations to Bryant Mill. (See SA 045881). Thus, the Bardeen operation has no independent significance for this questionnaire response.

[2] Source references for responses often appear at the end of the response and are collectively preceded by the signal "see."

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Division, and 4) Imperial Division (hereinafter collectively referred to as the "Bryant Mill"). These divisions coincide with the areas now known as Mill A/B, Mill C, Mill D and Mill E, respectively. (SA 048319). During Time Inc.'s ownership, two additional divisions were built – a new coating mill (which eventually housed the Panelyte Company) and a graphic arts laboratory (which eventually housed the Stryker Company). In 1946, St. Regis purchased the Bryant Mill from Time Inc.[3] St. Regis operated the Bryant Mill until 1956, when it entered into a ten year lease with an option to buy with Allied. Allied leased the Bryant Mill until July 1966, at which time it purchased the property from St. Regis. In 1989, Allied sold the Bryant Mill to Performance Papers. Performance Papers ceased operations in Fall 1989 and filed for bankruptcy in February 1990. Bryant Mill was leased to Portage Paper in 1992. Portage Paper operated Bryant Mill until February 1997, when it too filed for bankruptcy. (See SA 046078, SA 046079, SA 046117, SA 022641, SA 045880, KA 03900055).

King Mill History:

The King Mill was constructed in 1901 and was owned and operated by King Paper. When the Allied Paper Mills formed in 1922, it purchased the King Mill from King Paper. Allied operations at the King Mill ceased in 1971. The mill was sold to the Dore Wrecking Company in 1971 and was demolished by the Dore Wrecking Company in 1978. (See MDNR 005297-005298, SA 046021).

Monarch Mill History:

The Monarch Mill was built in 1875 and was owned and operated by the Kalamazoo Paper Company. Around the turn of the century, the Kalamazoo Paper Company moved its operations, and the Monarch Mill became the Samuel A. Gibson Paper Company. In 1906, the mill became the Monarch Paper Company. When Allied Paper Mills formed in 1922, it purchased the Monarch Mill from the Samuel A. Gibson Paper Company. Allied operated the Monarch Mill from 1922 to 1980. There were two periods during which the mill was temporarily shut down: 1) a portion of the mill (the book mill) was shutdown from February to November 1957 – the coating operation remained open; 2) the entire mill was shut down from January 1958 through September 1959. The Monarch Mill was dismantled in December 1980. Allied retained the Monarch Historic Residual Dewatering Lagoon. (See SA 045898, SA 011255, SA 045900, SA 045808, SA 045823)

Rex Paper Company History:

Rex Paper Company was founded in 1915. Butler Company (a Chicago company) purchased the mill in 1958. In March 1967, Allied purchased the Rex Paper Company from Butler Company. According to three newspaper articles, this was a stock purchase. (SA 045909; MHI 00002-00003); however, MHI has no information to confirm this third

[3] St. Regis did not purchase the new coating mill (Panelyte) or the laboratory (Stryker). Panelyte acquired the Time coating mill in 1949.

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party account, given that newspapers are not always precise on such details. MHI reviewed SEC databases, Michigan Corporate Records, Illinois Corporate Records, Pennsylvania Corporate Records, Moody's Industrial Manuals, and The Capital Changes Reporter (published by CCH), but could not find any information confirming the nature of this transaction. In September 1967, after only six months of operation, Allied sold the land, buildings and paper machines of Rex Paper Company to Eaton-Dikeman Company. (SA 045931). Allied retained machinery and equipment for the conversion of construction paper, tablet paper and drawing paper. (SA 045931). It appears that Eaton-Dikeman Company only operated the Rex Mill until the mid-to-late 1960's (a 1979 Kalamazoo Gazette newspaper article indicates that the mill closed down in the mid-1960s) (MHI 00004-00005); another document indicates that the Rex Mill ceased all production in 1968 (MDNR 005297-005298)). The last entry in The Lockwood Post for this mill is 1970; to date, we have been unable to track down the successor to the Rex Mill. Dore Enterprises bought the mill property in 1978 with plans to level the improvements and sell the property as an industrial site. (MHI 00004-00005).

b) Briefly identify and describe your property.

Bryant Mill:

The Bryant Mill property consisted of approximately seventy acres, and was located along Portage Creek between Reed Street and Cork Street, 3 miles upstream from Portage Creek's confluence with the Kalamazoo River. For a more specific description of the layout of the Bryant Mill property, see SA 47648, SA 048349, and BBL Figure 2-1 (Appendix 2a-1).

King Mill:

The King Mill property was located at 1608 Lake Street, in Kalamazoo, Michigan. The property consisted of approximately twenty-eight acres bordered by East Vine Street to the north, Clarence Street to the west, Lake Street to the south, and railroad tracks to the east. For a more specific description of the layout of the King Mill property, see SA 46130, SA 46131 and Dwg. No. E-1246-2 (Appendix 2a-2).

Monarch Mill:

The Monarch Mill was located southeast of the intersection of Cork Street and the railroad tracks, between Cork Street and First Street, in Kalamazoo, Michigan. For a more specific description of the layout of the Monarch Mill property, see SA 47654, SA 048317 and BBL Figure 1.4.2(e) (Appendix 2a-3).

Rex Mill:

The Rex Mill property was located on King Highway at the western boundary of Comstock Township.

c) List past operations at your property, providing the name of the business, nature of the business, SIC codes (if available), and dates of operation.

Bryant Mill:

Paper manufacturing operations from the time the mill was constructed in 1895 until Portage Paper ceased operations in February 1997, with the exceptions noted in response to Question 2(a). The SIC number for the Bryant Mill was 2621.

King Mill:

Paper manufacturing operations from the time the mill was constructed in 1901 until the mill was sold to the Dore Wrecking Company in 1971. No information on SIC codes is available.

Monarch Mill:

Paper manufacturing operations from the time the mill was constructed in 1875 until the mill was dismantled in 1980, with the exceptions noted in response to Question 2(a). The SIC number for the Monarch Mill was 2614.

Rex Mill:

Paper manufacturing operations prior to, during and after Allied's ownership. According to one newspaper article, Eaton-Dikeman planned to use the Rex facility to manufacture "filter paper and industrial specialties." (SA 045931). MHI has no other information regarding the nature of the operations at the Rex Mill after it was sold to Eaton-Dikeman in 1967. No information on SIC codes is available.

d) Briefly describe current operations at your property.

There are no current operations at the above-described properties still owned by Allied.

Question No. 3: Production Facility Information

Identify and describe each production facility, past or present, including:

a) The dates of use or operation.

Bryant Mill:

The Bryant Mill was made up of the following five production facilities:

1. Mill A (de-inking mill) – Allied operated Mill A from 1956 to December 1971 (SA 031997, SA 030611), although there is evidence that the mill de-inked only on an "as needed" basis and was shut down for at least six

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months between 1960 and 1966, probably in 1963. (NCASI 000132-000135; NCASI 000186; SA 028951, KA 04800443-04800479; NCASI 000124-000127; MHI 00024; SA 033416-033418; Deposition of William Akright, 6/3/92, pp. 25-26). Mill A was sold to the American Pulp Corporation in 1972. (SA 036955; MDNR 004842). American Pulp sold Mill A to Upgrade Company in the mid-1970s and Mill A was demolished in approximately 1978. (SA 045780).

2. Mill B (papermaking mill) – Mill B was no longer active when Allied began operations at the Bryant Mill in 1956. (Deposition of Ernest Gilman, 1/18/93, p. 52).

3. Mill C (papermaking mill) – Allied operated Mill C from 1956 to 1988. (Description of Current Situation ("DCS"), p. 3-8).

4. Mill D (papermaking mill and coating mill) – Allied conducted papermaking operations at Mill D from 1956 to 1988. (DCS p. 3-8). Allied operated at least one coating machine at Mill D from 1967 to 1986. (See 1977 through 1985 Monthly Production Reports for Bryant Mill, SA 53424-54193, SA 55388-56075, SA 65112-65772, SA 66333-66454, SA 67111-67481 and SA 67483-67670).

5. Mill E (coating mill) – Allied operated Mill E from 1956 to the early 1980s. (Deposition of Stan Stetz, 6/29/92, pp. 13-14).

King Mill:

The King Mill was a single building that housed de-inking, papermaking and coating operations. The starting date for all three operations is unknown, although it is known that the King Mill was de-inking as of 1950. (NCASI 00514-00520). The de-inking operation was shut down in 1965. (SA 011408). The King Mill was shut down in its entirety in 1971. (SA 029361).

Monarch Mill:

The Monarch Mill was a single building that housed de-inking, papermaking and coating operations. The starting date for all three operations is unknown, although it is known that the Monarch Mill was de-inking as of 1950. (NCASI 000508-000513). The de-inking operation was shut down in 1957. (SA 033950). The Monarch Mill was dismantled in December 1980. (DCS, pp. 3-7 through 3-8).

Rex Mill:

To the best of MHI's knowledge and information, the Rex Mill was a single building that housed de-inking and coating operations, and one paper machine. (MHI 00006-00023). The starting date for all three operations is unknown, although according to

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WRC documents, the Rex Mill was de-inking as of 1950. (NCASI 000540-000546). Since Allied owned this mill for only six months, there is no first-hand operating information available. The only information MHI has about Rex Mill operations is from third party sources,[4] and pre-dates Allied's ownership. Throughout this Questionnaire, answers will be provided for Rex only where the information is available.

b) Its location, providing a location map if possible.

Bryant Mill:

A location map of Bryant Mill is provided in Appendix 2a-1.

King Mill:

A location map of King Mill is provided in Appendix 2a-2.

Monarch Mill:

A location map of Monarch Mill is provided in Appendix 2a-3.

Rex Mill:

A location map of Rex Mill is provided in Appendix 2a-4.

[4] As part of its due diligence regarding the Rex Mill, MHI consulted the following sources: 1) BBL; 2) Moody's Industrial Manuals; 3) the Capital Changes Reporter; 4) Michigan corporate records; 5) Illinois corporate records; 6) Pennsylvania corporate records; 7) SEC databases; 8) Comstock Township; 9) Comstock Library; 10) Western Michigan University archives; 11) NCASI; and 12) Lockwood- Post's Directory of the Pulp, Paper and Allied Trades (hereinafter "Lockwood Post").

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c) A description of the nature of its operations and processes, past and present.

Bryant Mill:

See response to Question 3(a).

King Mill:

See response to Question 3(a).

Monarch Mill:

See response to Question 3(a).

Rex Mill:

See response to Question 3(a).

d) Each product produced, in whole or in part, at the production facility. Please include dates of production for each product.

Paper (coated and uncoated) and, for a time, de-inked pulp, were produced at the Bryant Mill, Monarch and King Mills. According to Lockwood- Post Directory of the Pulp, Paper and Allied Trades (hereinafter "Lockwood Post") entries from 1954 through 1985, over the years the following types of paper were produced at the Bryant, Monarch and King Mills: Machine Finish, English Finish, Duplicator, Eggshell, Antique and Wove Finish, Book Publishing Papers, End Leaf, Adding Machine, Black, Bristol, Direct Process, Foil Mounting, Folder, Gift Wrapping, Greeting Card, Gumming, Ledger, Antitarnish, Bank Note, Blotting, Chart, Patter, Watermark, Manifold, Manila, Onionskin, Opaque, Papeterie, Place-Mat, Register, Sensitizing, Shelf, Text, Vellum, Xerographic, Electrostatic Base Stock, Master Paper, C2S Matte Finish Book Publishing Papers, Construction, Litho Coating Rawstock, Bond (air-mail, cotton fibre, sulphite), Register Bond, Carbonizing Tissue, Envelope, Index, Roto, Coated and Super-Calendered Book, Litho, Label, Music, Offset, Map, Catalog, Catalog Bible, Bible, French Folio, Mimeograph, Poster, Lithograph, Drawing, Box Cover, Linings, Dull Finish, Folding Enamel, Insert, Cover Featherweight, Varnish Label, Blanks, Post Card and Gloss Ink Papers, Writing Tablet, Dictionary and Encyclopedia and Specialties. (MHI 00030-00326). Not all types of paper were produced in all years of operation. Specific grades of paper produced from 1980 through 1985 are noted in monthly production reports. (See SA 053424, SA 055388-056075, SA 065112-065772 and SA 067111-067481). See also MHI's response to Question 25.

Rex Mill:

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Paper and, for a time, de-inked pulp, were produced at the Rex Mill. According to Lockwood Post entries from 1954 through 1970, the following types of paper were produced at the Rex Mill: Bond, Mimeo, Duplicator, Envelope, Drawing and Rule Papers, Colored School Construction Papers, Coated Book Papers, Offset, Coated and Enameled Offset, Litho, English Finish Book and Cover Papers. Not all types of paper were produced in all years of operation.

e) **Any and all activities or efforts to take production facilities out of operation, including without limitation the cessation, decommissioning, containment, demolition, or deconstruction of any production facility, and the dates thereof.**

Bryant Mill:

See response to Question 3(a). MHI does not have more specific information on actual decommissioning or demolition of the facilities.

King Mill:

See response to Question 3(a). MHI does not have more specific information on actual decommissioning or demolition of the facilities.

Monarch Mill:

See response to Question 3(a). MHI does not have more specific information on actual decommissioning or demolition of the facilities.

Rex Mill:

See response to Question 3(a). MHI does not have more specific information on actual decommissioning or demolition of the facilities.

f) **Any remediation or removal activities potentially involving PCBs or PCB-containing materials that are not addressed in Questions 29 and 40, below, including without limitation any clean-up, containment, or disposal activities or efforts, and the dates thereof.**

According to 1993 correspondence between MDNR and Portage Paper Co., in early 1993, Portage Paper demolished several buildings adjacent to Alcott Street. While MDNR approved completion of demolition for most of the structures, it required Portage Paper to perform PCB sampling before work on a tile vault in one of the buildings could proceed. (See MDNR Letter, February 16, 1993). After MDNR was satisfied with the results of the sampling, it approved demolition of the tile vault. (See MDNR letter, December 9, 1993). Except as addressed in response to Questions 29 and 40, MHI is not aware of any other remediation or removal activities potentially involving PCBs or PCB-containing materials conducted at any of the former Allied properties. (See also, response to

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Question 3(a)).

g) **Describe all types of analytical testing performed at each stage in the paper production, recycling (including de-inking), and waste handling processes, including test methods, media tested, and time periods thereof.**

MHI does not have complete information regarding the types of analytical testing routinely performed at the Allied Mills for the entire period of interest. Based upon available information, it appears that the following types of tests were performed from time to time during the period of interest:

- Allied measured BOD and solids for water entering and exiting clarifiers for the King, Bryant and Monarch mills on a daily basis for certain periods in certain years. All available data from these measurements have been summarized in Appendix 14a-1, 14a-2, 14a-3, 14a-A, 14a-B, 14a-C, 14a-D, 14a-E and Table 14e-1.

- Allied tested incoming wastepaper for ground wood using phloroglucinol solutions, and for "wet strength" resin by running sample batches of wastepaper, water and caustic through a hand blender. (Deposition of Richard Bennett, 6/25/92, p. 78; Deposition of William Haney, 6/23/92, p. 22, 26; Deposition of Fred Harrison, 7/1/92, p. 51).

- Allied tested its de-inked pulp for consistency, brightness and general quality. No chemical analyses of the pulp were conducted. (Deposition of Wayne Kendrick, 4/24/97, p. 13, 6/22/92, p. 25).

- Allied performed a variety of quality control tests on paper produced, such as strength, moisture, pH, porosity, opacity, ink penetration, fold, tensile, tear and ash color. (Deposition of Robert Thiessen, 12/3/92, p. 28).

- On some occasions in the 1970s, Allied tested its final product and the products purchased for PCBs. See SA 042620-621; SA 043766; SA 044783, SA 035943, SA 035944, SA 035938, SA 031952, SA 044173, SA 044174, SA 044175, SA 022311, SA 042696, SA 040666, SA 006771, SA 029858, SA 030680, SA 003905, SA 031994, SA 044177, SA 038861, SA 034338, SA 034339, SA 039275, SA 039276, SA 039277, KA 05800582, and KA 05800584. A table with the results of these tests is found in Appendix 25C-1.

II. Questions Concerning Pulp Production Processes

Processes Descriptions

Question No. 4: De-inking Processes Description

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Please identify and describe any and all de-inking operations that occurred on your property, including:

a) The nature of the processes.

Bryant Mill:

De-inking allowed reuse of post-consumer waste paper by removing the fiber from the paper and removing ink or other material from the fiber. A mixture of sorted wastepaper, water (a combination of fresh water, recycled white water from Mills C & D, and heat recovery water from the Brown Stock Oliver), chemicals (caustic) and high pressure steam were combined in Slushmakers (also referred to as Dynapulpers, or Hydrapulpers), in which the fibrous material was broken down both mechanically and chemically. From the Slushmakers, the pulp was sent through a Brown Stock Oliver and a Riffler Head Box, which were used to separate fiber from water.

From the Riffler Head Box, the pulp went through a series of cleaning and thickening processes: 1) Jonsson Screens; 2) Brown Slides; 3) Vibrotor Screens; 4) Flat Screens; and 5) Primary, Secondary and Tertiary Cleaners (also referred to as Bauer Cleaners or Dirtex system).

The pulp was then sent through another series of slides and washers, where the pulp was again cleaned and thickened. From there, the pulp went to the Chlorine Tanks (or Chlorine Retention Tower), where chlorine gas and fresh water were added to the pulp, and then was sent through a Chlorine Oliver. From the Chlorine Oliver, the pulp was sent to Bleach Towers, where bleach (sodium hypochlorite) was added. The pulp then traveled through another set of screens, and finally to a Bleach Oliver. The pulp was then put through a Regulator to bring it to a consistency of approximately 5-6%, which was the ideal consistency for use in Mills C and D. The pulp was either stored in a storage chest, or was sent directly to Mills C or D. A 1966 schematic shows that Mill A had a Wet Lap Machine, which further thickened de-inked pulp to a 68-70% consistency. (SA 46138).

See the following schematics: SA 46146, SA 47641, SA 46154, SA 46151, SA 46150, SA 46152, SA 46155, and SA 46138. See also the following depositions: (Deposition of William Akright, 4/29/92, pp. 14-29, 72-75, 6/3/92, pp. 7-25; Deposition of Richard Bennett, 6/25/92, pp. 39-54; Deposition of William Haney, 6/23/92, pp. 33-38; Deposition of Ronald McCarty, 7/28/92, pp. 17-22; Deposition of Marion Sheen, 5/7/92, pp. 19-39).

King Mill:

Generally, the King Mill de-inking operation was similar to the above-described Bryant Mill de-inking operation. (Deposition of William Akright, 6/3/92, pp. 28-30; see the following schematics: SA 048478, SA 46134, and SA 46135. See also the following depositions: Per Hagard, 7/31/92, pp. 17-30; Richard Bennett, 6/25/92, pp. 39-54; Bernard Cavey, 3/31/92, pp. 43-56, 160-161; Richard Mendham, 5/7/92, pp. 60-80;

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Francis Sellon, 7/23/92, pp. 20-60). The King Mill de-inking operation did, however, differ from the Bryant de-inking operation in several ways:

- It is unclear from the schematics available whether the King Mill de-inking operation involved a separate "cooker" or whether steam was added to the Hydrapulper. (Compare 6/9/61 schematic which shows a No. 3 cooker (SA 46140) with 1/11/61 flow diagram that does not show a No. 3 cooker (SA 048478).

- A 1961 flow diagram indicates that the King Mill de-inking operation included an additional stage involving a Caustic Extraction Tower and Oliver. (SA 0484780).

- Also unique to the King Mill de-inking operation was the Denver Cell Flotation System, which was used as a means to disperse and remove ink particles from dilute repulped wastepaper stock. (See SA46133, SA46136). This specific process borrows technology developed by the mining industry for the separation of metals of different density from pulverized ores. Flotation can be used to separate materials low in density which are difficult to settle. Under appropriate conditions, hydrophobic and low density materials (ink particles in this case) can be encouraged to adhere to air bubbles dispersed within a slurry and rise to the surface. The process is carried out in ink flotation cells (several cells may be used in a series) using chemicals such as sodium hydroxide, sodium silicate and hydrogen peroxide, with a collector system consisting of a surfactant. Once the ink particles are floated to the surface of the slurry in the cells, they can be skimmed off into an ink collection system.[5] The Denver Flotation System was set up at the King Mill on a trial basis some time around 1958. The Denver Cell Flotation System appears to have been removed from the mill by 1960 (See SA 048478). See also deposition of Per Hagard, 7/31/92, pp. 9-14.

A 1962 Schematic indicates that the King Mill de-inking operation also had a Wet-Lap Machine. (SA 46135).

Monarch Mill:

Limited information (in the form of witness testimony) and no schematics are available regarding the Monarch Mill de-inking operation. (See the following depositions: Frederick Burch, 3/4/92, pp. 34-50; Donald Falvey, 9/4/92, pp. 20-30; Ernest Gilman, 1/18/93, pp. 49-50, 66, 69, 70, 80-86). MHI has no reason to believe the operation at Monarch Mill differed significantly from that at Bryant Mill.

[5] See CHRISTOPHER J. BIERMAN, HANDBOOK OF PULPING AND PAPERMAKING (Academic Press 1996); *De-inking of Wastepaper,* TECHNICAL ASSOCIATION OF THE PULP AND PAPER INDUSTRY, 1967.

Rex Mill:

MHI has been unable to find any information regarding the nature of the de-inking operation at the Rex Mill.

b) The physical operations that constituted those processes.

Bryant Mill:

See response to Question 4(a).

King Mill:

See response to Question 4(a).

Monarch Mill:

See response to Question 4(a).

c) The dates of such operations.

See response to Question 3(a).

d) The nature and dates of significant changes to those operations.

The Denver Flotation System was installed at the King Mill some time around 1958. See answer to Question 4(a) above. In the 1960's, chlorine mixers were added to both the King Mill and Bryant Mill de-inking operations. The chlorine mixers were a more efficient means of mixing chlorine into the stock. With the addition of the chlorine mixers, liquid chlorine was put through a vaporizer and was injected into the stock in a gas state. Prior to the mixers, liquid chlorine was injected into the chlorine retention tower through the wall of the base of the tower. (Deposition of Donald Falvey, 10/21/92, pp. 142-189; KA 04600492-KA 04600503).

The following date sequenced schematics show that no further significant changes were made to the de-inking equipment systems, as described in response to Question 4(a):

King Mill: SA 46133 (undated schematic of King De-inking Process); SA 46136 (1958 King Denver Process); SA 46142 (1958 King Denver Process); SA 46145 (1958 Conversion System Diagram – King Mill); SA 46134 (1958 De-inking Process); SA 46137 (1958 Flow Diagram for K.I. Stock – King Mill); SA 47652 (1960 Schematic Flow Diagram of Heat Recovery System – King Mill); SA 048478 (1961 King D.I. Stock and Consistency Flow); SA 46140 (1961 Proposed Flow Diagram for New Stock Preparation System); SA 46135 (1962 Piping Diagram for Wet-Lap Machine).

Bryant Mill: SA 46146 (pre-1956 Stock Flow Diagram for St. Regis Mill "A"); SA 47641 (1961 Bryant Mill "A" Flow Diagram); SA 46154 (1964 Stock and Water Flow Diagram – Bryant Mill "A"); SA 46138 (1966 Flow Diagram of Wet Lap Machine at Bryant "A"); SA 46151 (1966 Stock and Water Flow Diagram – Bryant Mill "A"); SA 46150 (1966 Stock and Water Flow Diagram – Bryant Mill "A"); SA 46152 (1966 Stock and Water Flow Diagram – Bryant Mill "A"); SA 46155 (1969 Stock and Water Flow Diagram – Bryant Mill "A").

These schematics are included in Appendix 4d-1.

Question No. 5: Recycling Processes Description

Please identify and describe any and all recycling operations (other than de-inking) that occurred on your property, including:

a) The nature of the processes.

Allied recycled "broke," which was pre-consumer wastepaper. Broke was produced during the papermaking process and consisted of scraps, trimmings, or other unused materials. Broke also consisted of Allied's finished product that had been rejected because of imperfections. Allied may also have recycled pre-consumer wastepaper purchased from sources outside of Allied, in which case this wastepaper was referred to as "salvage." (See the following depositions: Rudy Wolchina, 3/2/92, pg. 14; Marion Sheen, 5/7/92, pg. 97-100; Francis Sellon, 7/23/92, pg. 19-20; Robert Rohrer, 3/4/92, pg. 14-15; William Haney, 6/23/92, pg. 54-55, 81-82; Anthony Palladino, 3/3/93, pg. 477; Malcolm Rendell, 11/16/92, pg. 19-22; Cecil Crook, 5/28/92, pg. 174-177).

b) The physical operations that constituted those processes.

Broke from Allied's paper production process was collected in broke boxes, while salvage purchased from third parties arrived in bales. Broke from either source was mixed with water, most likely white water, and repulped into slurry form in beaters or pulpers. This slurry was then used to make furnish in the papermaking process. (See response to Question 22(b) for more detail on how this slurry was used in the papermaking process).

On occasion, broke contained "wet strength" resin, which was a chemical that enabled paper to maintain its strength in water. Because wet strength could cause malfunctions in the beaters or pulpers, paper that contained wet strength had to undergo an additional "cooking" step to remove the chemical.

See the deposition transcripts of: Cecil Crook, 5/28/92, pp. 132, and 174-177; Malcolm Rendell, 11/16/92, pp. 19-23; Francis Sellon, 7/23/92, pp. 66-67; Marion Sheen, 5/07/92, pp. 97-100; and Rudy Wolchina, 3/02/92, pp. 13-14.

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c) The dates of such operations.

MHI has no specific information concerning the period of time during which broke and salvage were recycled.

d) The nature and dates of significant changes to those operations.

MHI has no specific information concerning the nature and dates of significant changes to the above-described recycling operations.

Question No. 6: Other Pulp Production Processes Description

Please identify and describe any and all pulp production operations, other than those provided under Questions 4 and 5, that occurred on your property, including:

a) The nature of the processes.

Allied did not produce its own pulp on-site (other than de-inking wastepaper or recycling broke and/or salvage). Allied obtained virgin pulp from manufacturers outside the Kalamazoo area, including its own Jackson, Alabama pulp mill, which began operations in the mid-1960s.

b) The physical operations that constituted those processes.

Not applicable.

c) The dates of such operations.

Not applicable.

d) The nature and dates of significant changes to those operations.

Not applicable.

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Pulp Production Inputs: De-inking Processes

Question No. 7: Stock Sources

Please describe with specificity the type and amount of all stock (e.g., wastepaper, mixed office waste, NCR paper broke, newsprint, OCC, DLK, chips, NCR converter trim, etc.) used in the de-inking processes. For each of the types listed, please provide the following information (and reference any and all records, contracts, or other documents that indicate):

a) For each month in operation, the source(s) (internal and external) of the stock used in the de-inking processes.

De-ink stock at the Bryant Mill consisted of ledger, magazine stock[6] and tabulating cards from IBM. (SA 028919; Deposition of William Haney, 6/23/92, pp. 98-99). De-ink stock at the King Mill consisted of ledger and magazine stock. (SA 021055-021056; NCASI 000156). De-ink stock at the Monarch Mill consisted mostly of magazines. (Deposition of Frederick Burch, 3/4/92, pp. 47-48). MHI has no information to enable it to identify the source of wastepaper recycled at each mill over time. Vendors of wastepaper that may have supplied Allied over time are identified in KA 05800161.

b) Whether stock was sorted before use in the de-inking processes and if so, by what method.

Wastepaper was sorted before being used in any of the Allied de-inking operations. The methods used for sorting wastepaper varied over the years. (See the following deposition transcripts for descriptions of methods used for sorting wastepaper over the years: Ernest Gilman, 1/18/93, p. 41-43, 1/20/93, pp. 429-430 ; William Haney, 6/23/92, p. 22, William Akright, 6/30/92, pp. 28, 91-92; Stan Stetz, Jr., 6/29/92, p. 27; Rudy Wolchina, 3/2/92, p. 46; Ronald McCarty, 7/27/92, p. 15-16; Ulysses Stoeffler, 3/10/92, p. 95; William Haney, 6/23/92, p. 25-30; Francis Sellon, 7/23/92, p. 35-38; Carl Schuster, 8/11/92, p. 19). Sorting was conducted by an inspector and a team of sorters (or feedermen) consisting of anywhere from 1 to 12 people, depending on the mill and the time period. Bales of wastepaper were opened on a conveyor belt and the inspector and sorters would visually inspect the paper for suspicious or undesirable materials. Undesirable materials included ground wood, anything suspected of having pressurized sensitized adhesive (i.e. address labels, envelopes), wet strength paper, fluorescent paper, latex, certain coated papers, carbon paper and carbonless copy paper. Carbonless copy paper was especially problematic because it caused quality problems. (See deposition transcript of Ulysses Stoeffler, 3/10/92, pp. 93-97). MHI has no information about the fate of the paper removed during the sorting process. At some point during the late

[6] "Magazine stock" and "book stock" are used herein interchangeably – both terms include magazine and book. They are distinguished from ledger or "mixed office waste," which are the wastepaper streams that might have contained some percentage of post-consumer NCR paper.

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1950s. Allied apparently devised separate specifications for each type of wastepaper that could be used in their process. (MHI 00025). No further information on these specifications is available.

c) **For each month in operation, the average amount of the material used in the de-inking process on a tons per day basis. Please report amount on a moisture basis (e.g., air-dry tons, bone-dry tons, or actual percent moisture).**

MHI does not have information available on the average amount of material used in the de-inking process on a tons per day basis at any of the de-inking operations. However, MHI has gathered whatever information is available, including third party sources, and summarized that material on Summary Table 1.

A 1958 Inter-Office memo documenting the results of a six day survey at Bryant Mill A notes the high, low and average daily use of furnish as 145.6 tons, 94.1 tons and 126.7 tons, respectively. That document also identifies the high, low and average percentage of that furnish that was made up of "book," as opposed to ledger or mixed office waste (83%, 63% and 67%, respectively). (NCASI 000224-000226). A 1959 Inter-Office memo notes that "the bale weight tonnage at King has increased from about 170 T average in September, 1958 to the present 200-220T. (SA 028994). A 1964 Research and Development Progress Report indicates that the ratio of book to ledger waste paper at the King Mill was 3:1. That document also indicates an average of 61% book wastepaper was used at the King Mill on three days of sampling in January 1964. (SA 028948-028957).

Allied Waste Tank Tests (which are daily log sheets) from September 1958 through December 1960 document the total amount of wastepaper used in the Bryant and King de-inking operations on a daily basis, and the percentage of that wastepaper which consisted of book/magazine (versus ledger or mixed office waste). (See SA 035108-035194).[7] For a summary of average daily volumes of total wastepaper and "book" (*i.e.*, magazine) wastepaper used in the Bryant and King de-inking operations from September 1958 through December 1960, see Appendix 7C-1.[8] For the time period reported, the total average daily volume of wastepaper used in the King Mill de-inking process was 207 tons. Out of the total wastepaper used at the King Mill, an average of 68.19 % was book. For the time period reported, the total average daily volume of wastepaper used at the Bryant Mill was 167.92 tons. Out of the total wastepaper used at the Bryant Mill, an average of 64.84% was book a feedstock unlikely to contain PCBs.

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[7] NCASI 000436, a handwritten document, appears to contain information on the tons of paper de-inked at the King Mill on various days in March, April and January. That document, however, is not identified by year.

[8] Although Waste Tank Tests exist for 1961-1963, they report only clarifier influent/effluent and have no information about the amount or type of wastepaper deinked.

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There is evidence that the book to ledger ratio may have changed in the mid-1960s, around the same time that Allied opened its Alabama pulp mill and began using a higher percentage of virgin, versus de-inked, stock. (SA 011408; KA 5500257). However, there is no numerical data available to quantify the change in ratio.

A 1967 Michigan Water Resource Commission Waste Water Survey notes the total de-inking mill wastepaper input at Bryant to be 114 tons per day and 109 tons per day during two separate survey periods. (See SA 026434). A 1968 Michigan Water Resource Commission Waste Water Survey notes the total de-inking mill input at Bryant to be 137 tons per day and 118 tons per day during two separate survey periods. (See SA 003700).

d) **The capacity for de-inking, estimated on a tons per day basis. In addition, please report actual production figures, where available. Please report capacity and other amounts on a moisture basis (e.g., air-dry tons, bone-dry tons, or actual percent moisture). Please include information on the capacity for inputs to the processes. "Capacity" is defined as the amount of wastepaper inputs that the process can handle.**

MHI has little documentation demonstrating the capacity of the de-inking operations. A 12/6/63 NCASI Survey of Settleable Solids Removal Equipment and Wet Solids Handling Practices – King Division, notes de-inked pulp production capacity to be 210 tons/day) (NCASI 000124). To the extent that deinked pulp production numbers published in The Lockwood Post are evidence of capacity, those numbers are summarized in Appendix 13C-2. For information regarding deinked pulp production numbers, see response to Question 13(a).

e) **For each month in operation, any and all information on the PCB content of the materials used in the de-inking processes.**

MHI has no information available on the PCB content, if any, of the materials used in any of the de-inking processes. Since the Allied mills recycled a high proportion of book and magazine stock relative to ledger or mixed office waste, the PCB content of its wastepaper would have been far lower than a deink or recycling mill that used a higher proportion of mixed office waste or ledger or a mill that de-inked NCR broke. Allied also made a concerted effort to remove any carbonless copy paper from its wastepaper feedstock, given the significant quality problems it caused in the process. Notwithstanding these efforts, there likely was at least some PCB present in most forms of wastepaper, as a result of recycling as well as de-inking.

f) **For each month in operation, any and all information on the type and amount of chemicals (e.g., bleaching agents, caustic, solvents, detergents, etc.) used in the de-inking process.**

MHI does not have specific documentation regarding the type and amount of chemicals used in the de-inking process. Caustic was added at the Hydrapulper stage of the de-

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inking process to chemically break down the wastepaper. Available documents suggest that both chlorine and bleach were added at separate stages of the de-inking process, although specific information regarding the type and amounts is not known. (See KA 05700182 - 05700185, Deposition of Richard Mendham, 6/30/92, p. 319; Deposition of Wayne Kendrick, 6/22/92, pp. 116-117, Deposition of Richard Bennett, 9/12/92, pp. 242-243). Typical chemicals used in the de-inking process were silicants, surfactants and wetting agents.

g) **For each month in operation, the relative percentage for each type of stock used in the de-inking process.**

See response to Question 7(c).

Question No. 8: Water Sources

Please list the type and amount (on a million gallons per day basis) of all water sources used in the de-inking processes. For each of the sources listed, please provide the following information (and reference any and all records, water bills, or other documents that indicate):

a) **For each month in operation, the average amount of water used in the de-inking processes on a million gallons per day basis.**

Information on water sources is limited and relates to water sources for the operation of entire mill; not specific operations like de-inking or paper production. Moreover, water was recycled throughout the mills, with one operation often providing water for another. Separate information is not available for de-inking and paper production water sources. The available information is summarized below:

King Mill:

Process water at the King Mill was obtained from a private well field located near the Kalamazoo River, northeast of the mill. A 1956 schematic shows ten wells with a total capacity of 5,000 gpm. (See SA 47661). The process water was pumped to the clear water basin. Cooling water was obtained from the Kalamazoo River, as well as the well field. A 1950 WRC Report states that white water from the paper machine was used as freshwater in the de-ink mill washers. (See NCASI 000514, SA 029177, and SA 026433).

Monarch Mill:

Process water at the Monarch Mill was obtained from Portage Creek, upstream of Monarch Dam, and treated using three sand filters. (See Drawing No. E-1233, and Drawing No. E-000058 – no Bates numbers, drawings already provided to document depository and the parties). In addition, a 1950 WRC Report states that white water from the paper machine was re-used in the de-ink mill pulp washer, except when a machine

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was running colored paper. (See NCASI 000508). WRC Reports from 1953 and 1956 note that mill supply water was also obtained from well water and from Portage Creek. (See SA 039024, and SA 029170).

A 1977 EPA survey form reported that 1.842 mgd of process water was used from Portage Creek with an additional 0.2 mgd for filter backwash. (See SA 030407). Portage Creek was also the source for cooling water and mill boiler feed water, at rates of 0.286 mgd and 0.03 mgd, respectively. (See SA 030407). A 1979 Monarch Mill NPDES Permit Application form states that the mill had an average water intake from the City of Kalamazoo of 0.018 mgd and a surface water intake from Portage Creek of 1.98 mgd. (See document included in Appendix 8a-1 – no Bates number). A 1980 WRC Report states that the mill supply water was chlorinated prior to use. (See document included in Appendix 8a-1 – no Bates number).

Bryant Mill

Portage Creek was the principal source of process water for Bryant Mill. At times this was augmented with city water and well water. The water from the creek entered the system at the Cork Street pump house and was pumped through 24" pipe for 3500 feet to the filter plant. (See SA 005639). Three Hungerford and Terry gravity down flow sand filters were used to provide the quality of water required to produce quality light weight papers.

A 1959 schematic of the Bryant Mill water system shows a pumping capacity of 9 mgd from Portage Creek. After treatment in the filter plant 2,400 gpm were directed to Mill A, 4,000 gpm were directed to Mills C and D, and 700 gpm were directed to the power plant. The adjacent well had a capacity of 350 gpm. (See SA 46141). This schematic also shows the presence of emergency wells near Mill D which may have been used for the fire system. The Allied Paper Corporation Progress Report No. 5, dated September 8, 1961, states that the total freshwater flow to the mills was 6.6 mgd at that time. (See KA04800922). The well water entered the filter plant and dropped into the clear well. The well was used only when filter capacity was not great enough to retain a good clear well level. This report also mentions the presence of two wells located on Reed St.

A 1967 WRC Report states that the water supply was from Portage Creek and a private well (6:1 ratio). (See SA 026433).

By 1977, an EPA survey form reported that 2.57 mgd of process water was used from Portage Creek with an additional 0.5 mgd for filter backwash. (See SA 00030378). Portage Creek was also the source for cooling water and mill boiler feed water, at rates of 1.083 mgd and 0.1 mgd, respectively. (See SA 00030378). A 1981 City of Kalamazoo Non-Domestic User Survey form reported that 150 cubic feet/minute of water was used from Portage Creek (See SA 34118). A 1982 MDNR Wastewater Survey reported that the mill boiler feed water was softened by a hot lime soda process. (See SA 027589- SA 027598).

Sometime between 1981 and 1983, the old Hungerford and Terry gravity down flow sand filters were replaced with three Parkson Dynasand filters. With the new filters and the addition of other modifications in the system, the mill was able to produce water of acceptable quality with 100% influent from Portage Creek. In 1983, the mill produced the same water quality with a 10% substitution of recycled clarifier effluent. (See SA 034151-SA 034153).

A 1982 Non-Domestic User Survey Form for the Bryant Mill reported that water supply from Portage Creek was 150 ft^3/min. (See SA 036447). In 1983, it was reported that the average freshwater influent to the mill was 2.539 mgd. (See SA 034158). During the period April to June 1984, the average freshwater use was reported to be 2.676 mgd. (See SA 030075). An undated schematic of the Bryant Mill water flow indicates that water from Portage Creek was used at a rate of 2.662 mgd. (See SA 005639). An undated Allied Paper Inc. Process Water Flow Report reports an average fresh water intake of 2.75 mgd. (See KA04500067).

See also, SA 028766, SA 039003, SA 039032, SA 029945, 000858.

b) Identify what type of treatment, if any, was used to treat the raw process water.

King Mill:

A 1956 schematic of the King Mill water system shows that the water pumped from the well field passes through a "chlor-feed."

Monarch Mill:

Process water was treated with sand filters and chlorine, as described above.

Bryant Mill:

Process water was treated with sand filters in the filter plant, as described above.

c) For each month in operation, any and all information on the PCB content of the water used in the de-inking processes.

MHI has no information on PCB content of the incoming process water at any of the mills.

Pulp Production Inputs: Recycling Processes

Question 9: Stock Sources

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Please describe with specificity the type and amount of all stock (e.g., waste paper, mixed office waste, NCR paper, broke, newsprint, OCC, DLK, chips, NCR converter trim, etc.) used in the recycling processes (other than de-inking). For each of the types listed, please provide the following information (and reference any and all records, contracts, or other documents that indicate):

a) **For each month in operation, the source(s) (internal and external) of the stock used in the recycling processes.**

See responses to Questions 5(a) and 5(b). MHI has virtually no information about the identity of salvage suppliers, although it may have purchased salvage from Redmond Brothers. (See the deposition transcript of Cecil Crook, 5/28/92, p. 174).

b) **Whether stock was sorted before use in the recycling processes and if so, by what method.**

If broke contained wet strength, it required additional processing, as described in response to Question 5(b). Also, broke that came from colored paper was segregated from the rest of the broke before being used as furnish. There may have been visual inspection of salvage bales before they were placed into pulpers or beaters.

c) **For each month in operation, the average amount of the material used in the recycling process on a tons per day basis. Please report amount on a moisture basis (e.g., air-dry tons, bone-dry tons, or actual percent moisture).**

MHI has no documentation regarding the average amount of broke and/or salvage recycled each month. MHI does have monthly paper production reports for 1980-1985 that describe the production of "off-q" and "trim." (See SA 53424-54193, SA 55388-55740, SA 55744-56075, SA 65112-65772, and SA 67111-67481). MHI has no information demonstrating whether or to what extent such "off-q" and "trim" were recycled. Not all pre-consumer wastepaper was reused at the Allied mills; much of it was sold to other customers. MHI has no information about the quantity of broke sold instead of recycled in any given month.

d) **The capacity for recycling, estimated on a tons per day basis. In addition, please report actual production figures, where available. Please report capacity and other amounts on a moisture basis (e.g., air-dry tons, bone-dry tons, or actual percent moisture). Please include information on the capacity for inputs to the processes.**

MHI has no information on its capacity for recycling broke and/or salvage.

e) **For each month in operation, any and all information on the PCB content of the materials used in the recycling processes.**

MHI has no information to suggest that PCBs were contained in any of its broke and/or salvage. MHI has no information to suggest that it purchased any NCR broke.

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f) **For each month in operation, any and all information on the type and amount of chemicals (e.g., bleaching agents, caustic, solvents, detergents, etc.) used in the recycling process, if any.**

In most cases, no chemicals were used in the recycling of broke. When wet strength had to be removed from pre-consumer wastepaper, chemicals may have aided in the process. Deposition of Francis Sellon, 7/23/92, pp. 66-67; Deposition of Cecil Crook, 5/28/92, p. 128). There is no information available on the type or amount of chemicals, if any, that were used in the process.

g) **For each month in operation, please provide the relative percentage for each type of stock used in the recycling process.**

Not applicable.

Question No. 10: Water Sources

Please list the type and amount of all water sources used in the recycling processes (other than de-inking). For each of the sources listed, please provide the following information (and reference any and all records, water bills, or other documents that indicate):

a) **For each month in operation, the average amount of water used in the recycling processes on a million gallons per day basis.**

See responses to Questions 5 and 8.

b) **Identify what type of treatment, if any, was used to treat the raw process water.**

See responses to Questions 5 and 8.

c) **For each month in operation, any and all information on the PCB content of the water used in the recycling processes.**

See response to Question 8.

Pulp Production Inputs: Other Pulp Production Processes

Question No. 11: Stock Sources

Please describe with specificity the type and amount of all stock (e.g., virgin fiber, waste paper, mixed office waste, NCR paper broke, newsprint, OCC, DLK, chips, NCR converter trim, etc.,) used in any pulp production processes (other than de-inking or recycling). For each of the types of stock listed, please provide the following information (and reference any and all records or documents that indicate):

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No other pulp production processes were conducted at any of the Allied Mills.

a) **For month in operation, the source(s) (internal and external) of the stock used in the pulp production processes.**

Not applicable.

b) **Whether stock was sorted before use in the pulp production processes and if so, by what method.**

Not applicable.

c) **For each month in operation, the average amount of the material used in the pulp production process on a tons per day basis. Please report amount on a moisture basis (e.g., air-dry tons, bone-dry tons, or actual percent moisture).**

Not applicable.

d) **The capacity for pulp production, estimated on a tons per day basis. In addition, please report actual production figures, where available. Please report capacity and other amounts on a moisture basis (e.g., air-dry tons, bone-dry tons, or actual percent moisture). Please include information on the capacity for inputs to the processes.**

Not applicable.

e) **For each month in operation, any and all information on the PCB content of the materials used in pulp production processes.**

Not applicable.

f) **For each month in operation, any and all information on the type and amount of chemicals (e.g., bleaching agents, caustic, solvents, detergents, etc.) used in the pulp production process, if any.**

Not applicable.

g) **For each month in operation, please provide the relative percentage for each type of stock used in the pulp production process.**

Not applicable.

Question No. 12: Water Sources

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Please list the type and amount of all water sources used in the pulp production processes (other than recycling or de-inking). For each of the sources listed, please provide the following information (and reference any and all records, water bills, or other documents that indicate):

No other pulp production processes were conducted at any of the Allied Mills.

a) **For each month in operation, the average amount of water used in the pulp production processes on a million gallons per day basis.**

Not applicable.

b) **Identify what type of treatment, if any, was used to treat the raw process water.**

Not applicable.

c) **For each month in operation, any and all information on the PCB content of the water used in pulp production processes.**

Not applicable.

Pulp Production Outputs: De-inking Processes

Question No. 13: Pulp Production and Fate

Please list the amount of all pulp produced in the de-inking processes. For each process, please provide the following information (and reference any and all records or information that indicate):

a) **For each month in operation, the average amount of the pulp produced from the de-inking process on a tons per day basis. Please report amount on a moisture basis (e.g., air-dry tons, bone-dry tons, or actual percent moisture).**

MHI does not have consistent documentation available showing the average amount of de-inked pulp produced at each of the mills on a tons per day basis. Pulp production is often calculated as a certain percentage of total wastepaper used, also known as "retention rate" (to reflect the amount of fiber retained) or "yield." One of the factors that can effect the retention rate is the type of furnish being used (i.e. book wastepaper versus ledger or mixed office waste). (SA 028948-028957). Documents and testimony indicate that the retention rate at the Allied Mills varied depending on the type of wastepaper being used. (See SA 00088154-164); SA 026433-435; MDNR 003697-3700; SA 027717-718; SA 028948-028957; Deposition of Ernest Gilman, 1/18/93, p. 35; 1/19/93, p. 305; 2/9/93, pp. 628-630. A summary of the average amount of waste paper used between September 1958 and December 1960 is contained in Appendix 7C-1. Applying both a 70 and 80 percent retention to the total wastepaper numbers, an estimate of the deinked pulp produced at the King and Bryant Mills during that time period was

calculated. Appendix 7C-1 outlines the results of these calculations. Applying 70% and 80% retention rates to these numbers for 1958 to 1960 results in a range of pulp production from 33.3 tons/day at the low end to 201.9 tons/day at the high end during that period.

Applying 70% and 80% retention rates to the total wastepaper numbers contained in 1967 and 1968 Michigan Water Resource Commission Waste Water Surveys, pulp production at the Bryant de-inking mill was anywhere from 76.3 tons/day to 109.6 tons/day. (See response to Question 7(c)).

Sporadic production numbers are available in the following Allied documents: SA 033543 (undated Allied Engineering Report notes production of 140/150 tons of de-inked stock per day at Bryant), SA 029059 (1959 Allied Progress Report notes an average production of 150 tons of de-inked stock per day at King), SA 029322-SA 029330 (1969 Questionnaire response submitted by Allied to MDNR notes production of de-inked stock at Bryant at 110 tons per day), and SA 088154 (1971 Allied De-inked Pulp Replacement Analysis notes production of 20,740 tons of de-inked stock per year, or an average of 56.8 tons/day, at Bryant).

Sporadic production numbers are also available in the following third party documents: KA 04800462-04800479 (1963 Report on Waste Disposal at Allied Paper Company – King Division notes "furnish for the [King de-inking] operation consist of 170-180 tons of pulp prepared at the mill by an alkaline cook of waste papers consisting of magazines, books, and ledger."); SA 026434 (1967 Michigan Water Resources Commission Wastewater Survey notes Bryant Mill production of 91.6 tons of de-inked stock per day during one survey period and 87 tons of de-inked stock per day during a second survey period); and SA 029209 (1968 Michigan Water Resources Commission Wastewater Survey notes Bryant Mill production of 109.9 tons of de-inked stock per day during one survey period and 94.5 tons of de-inked stock per day during a second survey period). A complete summary of third party deinked pulp production data (as well as paper production data) is provided in Table 13c-1.

The Lockwood Post also purports to report information on deinked pulp production. A summary of deinked pulp production numbers (as well as paper production numbers) published in The Lockwood Post is provided in Table 13C-2.

b) For each month in operation, the fate of the pulp produced from the de-inking process (i.e., amount used in paper production, amount re-sold, to whom re-sold, etc.).

All de-inked stock produced at the Bryant, King and Monarch mills was used in the Bryant, King and Monarch papermaking operations. No Allied de-inked stock was sold to outside sources.

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c) **For each month in operation, any and all information on the PCB content of the pulp produced from the de-inking processes, including any information on the proportion of PCBs partitioning to pulp versus wastewater.**

MHI has no information concerning the PCB content, if any, of pulp produced from any of the de-inking processes. But see response to Question 7(e).

Question No. 14: Wastewater Production and Discharge

Please list the amount of all wastewater produced from the de-inking processes. For each process, please provide the following information (and reference any and all records or documents that indicate):

a) **For each month in operation, the average amount of wastewater produced from the de-inking processes on a million gallons per day basis.**

Wastewater production and discharge volumes specific to the de-inking process are not available. Total discharge volumes (summation of volumes from all of the various processes) from the clarifiers are available for varying months at the three Allied Mills. (See Tables 14a-1, 14a-2 and 14a-3, for the Bryant, King, and Monarch Mills, respectively). Appendices 14a-A, 14a-B and 14a-C present the daily data and source documentation that was used to create the monthly data presented in Tables 14a-1, 14a-2 and 14a-3. The first column of Tables 14a-1, 14a-2 and 14a-3 present the monthly flows from the clarifiers at each plant. Table 14a-D presents historical BOD loads from the Allied clarifiers. Annual influent and effluent numbers are set forth in Summary Table 1.

Very limited influent and effluent quality data have been found for the Rex Mill, all of it predating Allied's brief ownership of the Rex Mill. Appendix 14a-E summarizes WRC data available for the Rex Mill.

b) **For each month in operation, the fate of the wastewater produced from the de-inking process (e.g., on-site wastewater treatment, discharge to Publicly Owned Treatment Works [POTW], direct discharge to river, etc.).**

During the time period in question, 1954-1985, clarifiers were operating at each of the three Allied Mills to treat various process wastewaters, including de-inking wastewater.[9] Prior to 1968, treated wastewater from Bryant clarifier was discharged to Portage Creek. As of 1968/69, a portion of the Bryant Mill clarifier effluent was discharged to the City of Kalamazoo sanitary sewer system *via* Outfall [001] (Permit No. 390004). The remainder of the Bryant Mill clarifier effluent was discharged to the Monarch Mill clarifier. By 1977, the Bryant Mill clarifier effluent was sent to the Monarch Clarifier and the City of

[9] The King Mill clarifier was not in operation until 1955. Although the Allied clarifier was installed in 1954, the earliest data for Allied's clarifier discharges are from 1955.

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Kalamazoo WWTP. (See MDNR 003883, SA 033949, SA 030396, and SA 0250249-SA0250250). A Harding Sludge Separator was installed at the Rex Mill in September 1954 as part of a wastewater purifying system (See KB22501869). The responses to Question 28 provide additional information regarding the wastewater discharge outfalls for Allied's mills.

c) **For each month in operation, the amount, measured or estimated, of raw water used in the de-inking processes that was not discharged with process wastewater (e.g., the amount of non-contact cooling water discharged).**

Information regarding volumes of raw water used in the de-inking process (*e.g.*, amount of non-contact cooling water discharged) is not available.

d) **Describe the wastewater stream(s) from creation in the de-inking processes to final discharge point, including material changes thereto.**

Figure 14d-1 presents a depiction of the wastewater flow paths and treatment systems at the Allied Mills. The flow charts in Figures 14d-2 and 14d-3 provide schematics of the water and wastewater flow for Allied's mills, as described below. These figures have been prepared on the basis of information from a variety of sources, including Figure 2-1 from the BB&L Remedial Investigation Report, deposition testimony, and figures in the document repository (*e.g.*, MHI 00026, MHI 00027, SA 46144, SA 46160 and SA 47662).

BRYANT DIVISION

Water Intake and Treatment:

Fresh water was pumped from Portage Creek (just north of Cork St.) and filtered using sand filters at the filter plant located southeast of Mill A. The treated freshwater was supplied to Mills A, C, D and E. Until 1976/1977, backwash from sand filters at the filter plant was discharged to Portage Creek; thereafter it was routed to the Bryant clarifier (deposition of Donald Falvey, 9/4/92, p. 91; MDNR003954).

Mill A De-inking/Pulping Mill:

A 1963 NCASI report titled, "Report on Waste Disposal at Allied Paper Company, Kalamazoo, MI" (KA 04800443-04800479) contains a "Pulping Flow Diagram" that shows fresh water and recirculated white water usages at the Bryant Mill. (KA 04800457). Some process waters were recycled as white water, and others were diverted to a "sewer collection box," to the clarifier and then to Portage Creek. Volumes are not documented in the report or on the diagram.

Water used for the de-inking/pulping process included a mixture of freshwater,

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recycled water from Mill A (*e.g.*, Brown Stock Oliver), and recycled white water from Mills C and D. Wastewater from the de-inking operations was collected in sewers in the basement of Mill A. Prior to the installation of the Bryant clarifier in 1954 (see response to Question 28(a)), the wastewater from Mill A discharged directly to Portage Creek. Deposition testimony indicates that the discharge location was immediately downstream (north) of the Bryant Mill pond dam at Alcott Street (deposition of Per Hagard, 7/31/92, p. 64; MHI 00026). Once the Bryant clarifier started operations in 1954, wastewater from Mill A sewers was collected in the Mill A interceptor pumping station, located just east of the mill (see Figure 14d-1 and MHI 00027) and from there pumped to the clarifier. Wastewater entering the interceptor pumping station passed through bar grates that removed relatively large objects that could damage the pumps.

During those times when the Mill A interceptor pumping station could not handle the flow of wastewater, wastewater would bypass the system through a weir adjacent to the interceptor pumping station and discharge to the outfall which was located immediately downstream of the Bryant Mill dam at Alcott Street (deposition of Per Hagard, 7/31/92, p. 51-52; see also Allied Interrogatory Responses). This appears to be the same outfall used prior to routing the wastewater to the Bryant Clarifier. A warning system was installed in the interceptor pumping station to notify plant personnel when the pumping station was in danger of bypassing the pumps (deposition of Per Hagard, 7/31/92, p. 54). For a complete description of bypasses, see Question 28(d)(iii).

Water from the bleaching process at the de-inking mill, termed the "chlorine drop leg" water, is believed to have been discharged directly to Bryant Mill Pond through January 1970. As of February 1970, the chlorine drop leg was sent to the Gray Tank outside of Mill A, and pumped with excess white water from Mill C/D up to the Monarch clarifier (9000465; 9000481; SA 030935). The location of the chlorine drop leg outfall to the Bryant Mill Pond is not well established, however it is believed to be separate from the outfall location at the Bryant Mill dam mentioned above. Deposition testimony suggests the drop leg discharged into Bryant Mill Pond approximately "a couple hundred yards" south of the Alcott Street bridge (deposition of Donald Falvey, 10/21/92, p. 171). This discharge may be the location denoted "de-inking sewer" on a WRC schematic from the June 4,5,6 1968 survey (SA 029215). The discharge is shown schematically on a 1963 NCASI report (KA 04800443-04800479).

Mills C and D Paper Mills:

Mills C and D received freshwater from the filter plant and each mill also recycled white water (from save-alls) internally for paper production. All machines had save-alls in the basements of the mills for recycling fiber and water. Water from the save-alls went to white water collection tanks located in the basement of Mills C and D. Fibers, fines (mainly clay) and water were collected, and sent back to the paper machines for maximum reuse. In addition to internal recycle of white

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water within Mills C and D, white water from Mill C and D was pumped to a white water storage chest in the basement of Mill A for re-use (*e.g.*, SA 46160 - figure dated 9/30/53; SA 47647 - figure dated 2/5/70; KA 04800443-04800479- flow diagram 1).

Prior to the operation of the Bryant clarifier, white water that could not be reused was discharged from Mill D directly to Portage Creek. The discharges from the basement sewers were through open troughs leading to flap gates in the mill basement walls (Portage Creek was channeled in this location, with the building walls forming the borders of the creek). There was one outlet from the machine room basement, and two outlets from the beater room basement (deposition of Elbert Herbert, 4/2/92, p. 50), although other information suggests the number of outlets may have differed slightly from what this testimony suggests (SA 03093, SA 030935-030936; KA 04800443-04800479, Figure 1)). After the operation of the Bryant clarifier, wastewater from these Mill D basement sewers was routed to catch basins, then pumped to a newly constructed interceptor station immediately south of Mill D, and from there pumped to the Mill A interceptor pumping station and then on to the Bryant clarifier (deposition of Elbert Herbert, 4/2/92, p. 99). As noted below, the Mill C/D wastewater was pumped to the Gray Tank then to the Monarch clarifier as of 1969.

Mill C excess wastewater flowed by gravity in an underground line along Bryant Street. Prior to the operation of the Bryant clarifier, this water discharged directly to Portage Creek in an open outfall (deposition of Elbert Herbert, 4/2/92, p. 29). Upon operation of the Bryant clarifier, the line was tied into the interceptor pumping station at Mill D (the "Mill C/D pumping station") and pumped from there to the Mill A interceptor pumping station and then to the Bryant clarifier (deposition of Elbert Herbert, 4/2/92, p. 99; p. 109; SA 46144 - figure dated 12/19/68). According to deposition testimony, Mill C floor drains from some portion of the mill combined with storm water runoff fed into a storm sewer that discharged to Portage Creek (deposition of Elbert Herbert, 9/16/92, p. 281 - 284). Other minor streams from Mills C and D are noted as discharging into Portage Creek as of 1968, but it is unclear whether those streams were continuous or episodic and over what period over time they occurred. (SA 028930).

Mill E Paper Coating:

Mill E required relatively little water. The only water use at this Mill was for preparing the clay coating for paper (deposition of Elbert Herbert, 4/2/92, p. 55). In addition, intermittent wash water generated from cleaning of machines, tanks, *etc.* was discharged directly to a location on the west bank of Portage Creek until 1970 after which time it was directed to the Mill C/D interceptor pumping station and sent to the Monarch clarifier (9000481; deposition of Elbert Herbert, 4/2/92, p. 57, p. 109). MHI does not have information regarding the contents of wastewater from Mill E, although typical contents of wastewater from a coating mill would include clay, titanium, dioxide, starch, latex and chemical dispersants.

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There is no indication that wastewater from Mill E would have contained PCBs.

Significant Modifications of Wastewater System Configuration

As of 1954, the initial major modification of the Bryant wastewater treatment system involved the installation of the clarifier, and collecting wastewater streams from Mills A, C and D and performing primary treatment (settling). Over time, Allied continually improved its recycling of water and experimented with ways to maximize efficiency of the clarifier.

As of 1969, the overall wastewater flow system was altered. Wastewater from Mills C and D was no longer combined with Mill A wastewater (at the Mill A interceptor pumping station), but instead pumped to the "Gray Tank" at Mill A. From the Gray Tank, Mill C/D wastewater was pumped to the Monarch clarifier to reduce the loading on the Bryant clarifier (SA011319; 000705).

As of September 1969, in conjunction with the modification of the Mill C/D wastewater flow (to Monarch), the Bryant clarifier discharge was re-routed to the city of Kalamazoo sewer line and no longer discharged. (Outfall 001 thus changed to the Kalamazoo sewer at this time.)

In February, 1970, the Mill A chlorine drop leg wastewater was routed to the Gray Tank, combined with the Mill C and D wastewater, and these combined streams pumped to the Monarch clarifier. An anionic coagulant was added to the Monarch clarifier to improve settling.

As of 1970, non-process water from the power plant (Mill D) was pumped to the Mill C/D interceptor station and pumped to Monarch clarifier (9000481).

As of 1970, wastewater from Mill E was sent to Mill C/D interceptor pumping station and from there to the Gray tank and Monarch clarifier (9000481)

Some time around 1971, perhaps in conjunction with the sale of Mill A and cessation of de-inking, and perhaps as late as 1976, the Mill A interceptor pumping station was no longer used. Wastewater from the Bryant mill was pumped to the clarifier *via* the Gray Tank. It also appears that as of this time an additional connection from the Gray Tank to the Bryant clarifier was added (it was already connected to the Monarch clarifier) and wastewater could be sent either to the Bryant or the Monarch clarifier (SA048307 Drawing E-1144, dated 2/76).

As of March, 1976, the Bryant clarifier effluent was split between discharge to the Kalamazoo city sewer line and the Monarch clarifier (see also response to 28g). In addition, a portion of the treated water from the Monarch clarifier was pumped to the freshwater pump house and recycled to the Bryant mills (MDNR 003888; deposition of Per Hagard, 7/31/92, p. 101).As of 1976/1977, probably in conjunction with the preceding modification, the sand filter backwash water at Bryant was sent to the Bryant clarifier (deposition of Donald Falvey, 9/4/92, p. 91;

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SA 027279; MDNR003963), *via* the Gray Tank (SA033485-SA033492). The filter backwash flow was approximately 0.5 MGD.

In March/April 1976, the Bryant Mill Pond was drained (SA030682-83).

As of 1982, and possibly earlier, decant water from sludge lagoons was sent to the Bryant clarifier (SA034351, diagram from MDNR March 1-2, 1982 Wastewater Survey)

MONARCH DIVISION

Water used in the Monarch mill included a mixture of freshwater from Portage Creek and recycled water from within the mill (KA 04800443-04800479). Prior to the operation of the Monarch in clarifier 1953, wastewater from the Monarch mill was discharged directly to Portage Creek, to a discharge location north of the mill and north of Cork Street. After installation of the clarifier, the wastewater in the Monarch Mill basement sewers was collected in catch basins and pumped into an interceptor pumping station adjacent to the clarifier, and from there pumped into the clarifier. Deposition testimony (deposition of Donald Falvey, 9/4/92, p. 108) indicates that the chorine drop leg water, during the time when the mill was de-inking, was discharged directly to Portage Creek.

In the event of equipment malfunctions, or other hydraulic overloading of the lift station at the clarifier, bypasses would circumvent the clarifier and discharge at the Monarch outfall (002); there was no separate outfall for bypasses.

Limited deposition testimony suggests there may have been intermittent discharges from the mill into the Portage Creek mill race that ran through the building (9000983; 9000999).

The sand filter backwash water was discharged directly to Portage Creek until 1976. By the end of 1976 the backwash water was sent to the Monarch clarifier (SA025249 – SA025254)

KING DIVISION

Water used in the King mill included a mixture of freshwater from well-water, recycled water from within the mill, and recycled clarifier water. Prior to the operation of the King clarifier 1955, wastewater from the King mill was discharged directly to the Kalamazoo River (the discharge was to the City or King Street storm sewer which then discharged to the river). After installation of the clarifier, the wastewater from the King Mill basement sewers was collected in catch basins and pumped into an interceptor pumping station adjacent to the clarifier, and from there pumped into the clarifier. Deposition testimony indicates that initially the chorine drop leg water was sent to the clarifier, but it was subsequently re-routed around the clarifier around 1960 to discharge without clarification (deposition of Donald Falvey, 9/4/92, p. 79). There are indications that clarified effluent was recycled back to the King mill to be used in the de-inking/pulping process (MDNR 003652 – 003656, deposition of Richard Bennett, 6/25/92, p. 34-35). The discharge

from the King clarifier is believed to have been directed to the Kalamazoo City Storm Sewer outfall which then discharged to the Kalamazoo River (MDNR 003652 – 003656).

In the event of equipment malfunctions, or other hydraulic overloading of the pumping station at the clarifier, bypasses would circumvent the clarifier and discharge without clarification to the King outfall; there was no separate outfall for bypasses.

REX MILL WASTEWATER SYSTEM

Information regarding the wastewater system at the Rex Mill is not very extensive. A wastewater survey conducted in 1950 indicates that the water supply used in the Rex Mill at that time was freshwater from well water (See NCASI 000540). In 1950, all wastewater from both the de-ink mill and the one paper machine was discharged through one sewer which was an open earth channel directly south of the west end of the main mill building (See NCASI 000540). Although the sewer outfall discharge point is not specified in existing documentation, it is likely that the outfall was to the Kalamazoo River given that the plant property bordered the River. White water from the paper machine was used as make-up water in the de-ink washers prior to being discharged (See NCASI 000540).

A 50 ft. diameter, 11 ft. deep tank, called a Harding Sludge Separator, was installed at the Rex Mill in September 1954 as part of a wastewater purifying system (See KB22501869). Paddles rotated in the tank, which increased settling rates and allowed the accumulated sludge to be moved from the tank *via* pump to sludge pits on the property. The system was to purify all wastewater from the plant, and could process 1,200 gallons per minute (See KB22501869). Initial tests showed that 840-960 gpm of wastewater was being handled by the purifying system (See KB22501869).

The following schematics, included in Appendix 4d-1, contain information on the flow of wastewater in the de-inking processes at the Bryant and King Mills:

King Mill:	**Bryant Mill:**
SA 46145	SA 46138
SA 46133	SA 46146
SA 46142	SA 47641
SA 46134	SA 46154
SA 46137	SA 46151
SA 47652	SA 46150
SA 048478	SA 46152
SA 46140	SA 46155
SA 46135	
SA 46138	

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e) **For each month in operation, any and all information on the PCB, biological oxygen demand (BOD), total suspended solids (TSS), total dissolved solids (TDS) and total volatile solids (TVS) content of the wastewater produced from the de-inking processes.**

Very little PCB, BOD, TSS, TDS and TVS information specific to the de-inking process is available. A few documents discuss and describe various de-inking waste streams at the King Mill in the late 1950s and early 1960s, but present only limited data (See SA029057-029062, SA028948-SA028957, SA028934-SA028947). During a two-week test in 1959, the average de-inking influent BOD was 2,680 ppm and the BOD range was 1,735 - 3,100 ppm. (See SA02934-SA028947).

As is the case with the King Mill, only limited data are available for the Bryant Mill. The following data are the sampling results of de-inking wastewater from Bryant Mill A that was pumped to the Bryant clarifier (SA029087, SA029089).

Date	Inf. SS (g/l)	Eff. SS (g/l)	Inf. DS (g/l)	Eff. DS (g/l)	Inf. BOD (ppm)	Eff. BOD (ppm)
7/8/68	2.52	0.28	2.00	1.90		304
7/9/68	2.32	0.24	2.60	2.30		347
7/10/68	3.00	0.28	2.70	2.30		397
7/11/68	2.82	0.26	3.10	2.80		298
7/12/68	2.72	0.14	2.80	2.60		455
7/13/68		0.34		2.10		390
7/15/68	0.46	0.12	1.90	1.80	645	438
7/16/68	1.24	0.06	1.50	1.30	570	360
7/17/68	1.80	0.08	1.70	1.40	780	490
7/18/68	3.08	0.08	1.80	1.00	735	495
7/19/68	3.38	0.12	1.90	1.80	790	420
7/20/68		0.06		1.00		450

Notes. Blanks indicate information is not available.

The response to Question 28 provides information on the chlorine drop leg discharges from the Allied mills.

Influent and effluent monthly BOD, TSS and TDS data that are not specific to the de-inking process are presented in Tables 14a-1, 14a-2 and 14a-3 for the Bryant, King, and Monarch Mill clarifiers, respectively. Appendices 14a-A, 14a-B and 14a-C present the daily data and source documentation that was used to create the monthly data presented in Tables 14a-1, 14a-2 and 14a-3.

Very limited influent and effluent quality data have been found for the Rex Mill. Appendix 14a-e summarizes WRC data available for the Rex Mill.

Limited PCB data are available for Allied's clarifier effluent. Table 14e-1 summarizes the known PCB monitoring data for Allied's clarifier effluent.

Question No. 15: Sludge Production and Disposal

Please list the amount of all sludge produced in the de-inking processes (separate from any sludge produced during other production/wastewater treatment operations). For each process, please provide the following information (and reference any and all records or documents that indicate):

There is no information available to indicate that any sludge was generated from the de-inking mill separate from the plant-wide wastewater treatment system.

a) **For each month in operation, the average amount of sludge produced from the de-inking processes and the percent moisture of the material as disposed.**

Not applicable.

b) **For each month in operation, the fate of the sludge produced from the de-inking process (e.g., discharge to lagoon or impoundment, etc.).**

Not applicable.

c) **Any and all information on the PCB content and moisture content of the sludge produced from the de-inking processes.**

Not applicable.

d) **Describe the lifecycle of the sludge stream from creation in the de-inking processes to final disposal sites.**

Not applicable.

e) **If sludge was disposed at an off-site location, please identify the sites of disposal, the volumes disposed, the dates of disposal, the manner of transportation, etc.**

Not applicable.

Pulp Production Outputs: Recycling Processes

Question No. 16: Pulp Production and Fate

Please list the amount of all pulp produced in the recycling processes (other than de-inking), past and present. For each process, please provide the following information (and reference any and all records or documents that indicate):

a) **For each month in operation, the average amount of the pulp produced from the recycling process on a tons per day basis. Please report amount on a moisture basis (e.g., air-dry tons, bone-dry tons, or actual percent moisture).**

MHI has no information concerning the amount of pulp produced from recycling or repulping broke and/or salvage. (See responses to Questions 6(a) and 23(c)).

b) **For each month in operation, the fate of the pulp produced from the recycling process (i.e., amount used in paper production, amount re-sold, to whom re-sold, etc.).**

Broke and/or salvage that was recycled was used to make furnish for the papermaking process. (See response to Question 5(b) for more details).

c) **For each month in operation, any and all information on the PCB content of the pulp produced from the recycling process, including any information on the proportion of PCBs partitioning to pulp versus wastewater.**

MHI has no information as to whether any of the pulp produced from recycling broke and/or salvage contained PCBs.

Question No. 17: Wastewater Production and Discharge

Please list the amount of all wastewater produced from the recycling processes (other than de-inking), past and present. For each process, please provide the following information (and reference any and all records or documents that indicate):

a) **For each month in operation, the average amount of wastewater produced from the recycling processes on a million gallons per day basis.**

Wastewater production and discharge volumes specific to the recycling process are not available. For total discharge volumes from the Bryant, King, and Monarch Mills, respectively, see response to Question 14(a).

b) **For each month in operation, the fate of the wastewater produced from the recycling process (e.g., on-site wastewater treatment, discharge to POTW, direct discharge to river, etc.).**

Information regarding the fate of wastewater produced specifically from the recycling process is not available. For general discussion of fate of plant-wide wastewaters, see response to Question 14(b).

c) **For each month in operation, the amount, measured or estimated, of raw water used in the recycling processes that was not discharged with process wastewater (e.g., the amount of non-contact cooling water discharged).**

Information regarding volumes of raw water used in the recycling process (*e.g.*, amount of non-contact cooling water discharged) is not available.

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d) **Describe the wastewater stream(s) from creation in the recycling process to final discharge, including material changes thereto.**

See response to Question 14(d).

e) **For each month in operation, any and all information on the PCB, BOD, TSS, TDS and TVS content of the wastewater produced from the recycling processes.**

PCB, BOD, TSS, TDS and TVS information specific to the recycling process is not available. For plant-wide PCB, BOD, TSS and TDS concentration data, see response to Question 14(e).

Question No. 18: Sludge Production and Disposal

Please list the amount of all sludge produced in the recycling processes (other than de-inking, and separate from any sludge produced during other production/wastewater treatment operations). For each process, please provide the following information (and reference any and all records or documents that indicate):

There was no sludge generated from the recycling process separate from the wastewater treatment system.

a) **For each month in operation, the average amount of sludge produced from the recycling processes and the percent moisture of the material as disposed.**

Not applicable.

b) **For each month in operation, the fate of the sludge produced from the recycling process (e.g., discharge to lagoon or impoundment, etc.).**

Not applicable.

c) **Any and all information on the PCB content and moisture content of the sludge produced from the recycling processes.**

Not applicable.

d) **Describe the lifecycle of the sludge stream from creation in the recycling processes to final disposal sites.**

Not applicable.

e) **If sludge was disposed at an off-site location, please identify the sites of disposal, the volumes disposed, the dates of disposal, the manner of transportation, etc.**

Not applicable.

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Pulp Production Outputs: Other Pulp Production Processes

Question No. 19: Pulp Production and Fate

Please list the amount of all pulp produced in the pulp production processes (other than recycling or de-inking), past and present. For each process, please provide the following information (and reference any and all records or documents that indicate):

No other pulp production processes were conducted at any of the Allied Mills.

a) **For each month in operation, the average amount of the pulp produced from the pulp production process on a tons per day basis. Please report amount on a moisture basis (e.g., air-dry tons, bone-dry tons, or actual percent moisture).**

Not applicable.

b) **For each month in operation, the fate of the pulp produced from the pulp production process (i.e., amount used in paper production, amount re-sold, to whom re-sold, etc.).**

Not applicable.

c) **For each month in operation, any and all information on the PCB content of the pulp produced from the pulp production process, including any information on the proportion of PCBs partitioning to pulp versus wastewater.**

Not applicable.

Question No. 20: Wastewater Production and Discharge

Please list the amount of all wastewater produced from the pulp production processes (other than de-inking and recycling), past and present. For each process, please provide the following information (and reference any and all records or documents that indicate):

Allied did not have any other pulp production processes. Virgin pulp was purchased from other sources.

a) **For each month in operation, the average amount of wastewater produced from the pulp production processes on a million gallons per day basis.**

Not applicable.

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b) **For each month in operation, the fate of the wastewater produced from the pulp production process (e.g., on-site wastewater treatment, discharge to POTW, direct discharge to river, etc.).**

Not applicable.

c) **For each month in operation, the amount, measured or estimated, of raw water used in the pulp production processes that was not discharged with process wastewater (e.g., the amount of non-contact cooling water discharged).**

Not applicable.

d) **Describe the wastewater stream(s) from creation in the pulp production process to final discharge, including material changes thereto.**

Not applicable.

e) **For each month in operation, any and all information on the PCB, BOD, TSS, TDS and TVS content of the wastewater produced from the pulp production processes.**

Not applicable.

Question No. 21: Sludge Production and Disposal

Please list the amount of all sludge produced in the pulp production processes (other than de-inking or recycling, and separate from any sludge produced during other production/wastewater treatment operations). For each process, please provide the following information (and reference any and all records or documents that indicate):

No other pulp production processes were conducted at any of the Allied mills.

a) **For each month in operation, the average amount of sludge produced from the pulp production processes and the percent moisture of the material as disposed.**

Not applicable.

b) **For each month in operation, the fate of the sludge produced from the pulp production process (e.g., discharge to lagoon or impoundment, etc.).**

Not applicable.

c) **Any and all information on the PCB content and moisture content of the sludge produced from the pulp production processes.**

Not applicable.

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d) Describe the lifecycle of the sludge stream from creation in the pulp production processes to final disposal sites.

Not applicable.

e) If sludge was disposed at an off-site location, please identify the sites of disposal, the volumes disposed, the dates of disposal, the manner of transportation, etc.

Not applicable.

III. QUESTIONS CONCERNING PAPER PRODUCTION

Processes Description

Question No. 22: Paper Production Processes Description

Please identify and describe any and all paper production operations that occurred on your property, including:

a) The nature of the processes.

Allied's paper production involved papermaking and coating. (See response to Question 3(a)).

b) The physical operations that constituted those processes (including without limitation specific types of paper production machines, e.g. cylinder, fourdrinier, etc.).

King Mill had four paper machines (#1 through #4); Bryant Mill C had two paper machines (#5 and #6); Bryant Mill D had three paper machines (#7 through #9); and Monarch Mill had two paper machines (#10 and #11). All of these paper machines were Fourdriniers, except for paper machine #1, which was converted from a Fourdrinier to a Verti-Forma. (See the response to Question 22(d)). The following schematics (copies of which are included in Appendix 5b-1) depict the stock flows at each of the paper machines: SA 47649, SA 47651, SA 46148, SA048308, SA 048309, SA 048310, SA 048297, SA048306, SA 048296, Dwg. No. EK-1120, 000090, 000089, 000050, Drawing dated 8/7/72. The Rex Mill had one paper machine – a Fourdrinier. (MHI 00006-00023). MHI does not have any schematics depicting the stock flow at the Rex Mill paper machine or any other information on the nature of the papermaking process at the Rex Mill. The stock flows at the Bryant, King and Monarch mills are described in the following narrative:

BRYANT MILL:

- The first step in paper production was to create furnish by combining pulp, water and various chemicals or additives (including color dyes if required by the "recipe") in

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either a beater or a blender. Pulp was either virgin pulp, recycled broke, de-inked pulp (during those years that Allied de-inked), or a combination thereof. Prior to being beaten together, each of the three types of pulp was stored in its own stock chest. Virgin pulp was wood fiber made in an off-site pulping mill. It arrived in dry bales and was placed in a hydrapulper, which separated the fibers and mixed the pulp with water to make a wet slurry. The final product desired determined the type and amount of pulp and additives used.

- Furnish underwent further processing before it was ready to enter a paper machine. Refiners, such as double disc units and Jordans, were machines that roughed up the pulp fibers and developed bonding sites for increased paper strength. A consistency regulator controlled the amount of water that was in the furnish. Finally, the furnish was cleaned through a series of devices, including Primary, Secondary and Tertiary cleaners and a Centriscreen (or "Bird Screen").

- After cleaning, furnish entered the paper machine through a head box, which regulated the flow rate of the material. The furnish was formed into a sheet on top of a moving bronze mesh wire belt, which allowed excess water to drain through. If the machine was a Fourdrinier, one horizontally-moving belt was used. If the machine was a Verti-Forma, two vertically-moving belts were used. Additional water was removed as the paper sheet proceeded over a suction-containing Couch roll and through a series of Presses and Dryers. Excess water was collected for reuse by a collection pit, a Couch pit, and sometimes a Broughton box.

- At the end of the paper machine dryer section, a calender imparted a finishing sheen to the paper and regulated its thickness. Then, a winder wound the paper into a roll. Paper was sold to customers either in roll form or as reams of individual sheets, which were cut and trimmed in a finishing process. Paper was then checked for imperfections. Rejected paper was recycled as broke or sold to third parties.

- For customers who desired coated paper, coatings were either applied on the paper machine at a coating unit inserted into the dryer section or "off-machine" on a separate coater located in another part of the mill or in Mill E. Bryant's coating operations produced an array of finished products (e.g., offset paper, letterpress paper, photocopy or electrostatic paper and labels).

See the following deposition transcripts: Bernard Cavey, 3/31/92, pp. 14-24, and 74-85; Larry Crawford, 4/07/92, pp. 33-45, and 109; Cecil Crook, 5/28/92, pp. 33-43, 97-103, 129-132, and 169; Wilbur Falcone, 5/05/92, pp. 40-54; Malcolm Rendell, 11/16/92, pp. 27-29, 49, and 67-71; Carl Shuster, 8/11/92, pp. 28-42; Ulysses Stoeffler, 3/12/92, pp. 307-313; Robert Thiessen, 12/03/92, pp. 31-43, 93, 136, and 151-171; and Rudy Wolchina, 3/02/92, pp. 15-18.

MONARCH MILL:

The papermaking process at Monarch Mill differed slightly from that of Bryant Mill in

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the order and types of machines used. Additionally, Monarch Mill had a carbon-coating operation, which it used to make one-time carbon paper. (See the deposition transcripts of: Bruce Locker, 3/30/92, pp. 14-19; Carl Shuster, 8/11/92, pp. 28-33, and 39-42; and Ulysses Stoeffler, 3/11/92, pp. 175-179). Unlike carbonless paper, one-time carbon paper did not have PCBs added. While it was in operation, Monarch Mill also may have had other types of coating operations. (See the deposition transcript of Cecil Crook, 5/28/92, pp. 12-20).

KING MILL:

The papermaking process at King Mill differed slightly from that of Bryant Mill in the order and types of machines used. See the schematics in Appendix 5b-1 for more information. Additionally, King Mill had a Photo Paper Division that coated stock to be manufactured into photographic paper by another company. (See the deposition transcript of Ernest Gilman, 2/09/93, pp. 564-566, KA 4600438, and SA 45770). It is unclear whether King Mill had any other kind of coating operation.

c) The dates of such operations.

See responses to Questions 2(a) and 3(a).

d) The nature and dates of significant changes to those operations.

MHI has little direct evidence regarding significant changes to paper production operations over time. It does, however, have information concerning the following:

- June, 1958 -- By this date, Allied had installed Sveen-Pedersen Savealls for paper machines #1 - #9. These newer Savealls replaced Savealls that previously had been in place. (See SA 45804).

- October, 1969 -- Paper machine #1 switched from a Fourdrinier machine to a Verti-Forma machine. (See KA 440349-4400350).

Various minor alterations and improvements to different devices employed in the papermaking process were made over the years. For a summary of those minor alterations and improvements, see Appendix 22D.

Inputs: Paper Production Processes

Question No. 23: Stock Sources

Including without limitation input from the pulp production processes described above, please list the type and amount of all stock (e.g., virgin fiber/pulp; de-inked pulp; secondary pulp, etc.) from internal and external sources used in the paper production processes, past and present, and the source for each type of stock. For each paper

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production process and type of stock listed, please provide the following information (and reference any and all records or documents that indicate):

a) **For each month in operation, the source(s) (internal and external) of the stock used in the paper production processes.**

Allied does not have information about stock sources on a monthly basis. Generally, three types of stock or pulp were used in Allied's papermaking process: virgin stock, de-inked wastepaper and recycled broke and/or salvage. Allied received its virgin stock from a variety of sources located outside of the Kalamazoo area (e.g., Allied's Alabama facility, Crestbrook, Prince Albert, Celgar, Dryden, Terrace Bay and Prince George). Monthly reports from 1978 through 1985 identify various sources of virgin stock. (SA 65774-65915; SA 65917-66118; SA 66120-66331; SA 66456-66622; SA 66624-66674; SA 67671-67792; SA 67861-68073; SA 68075-68247; SA 68249-68395 and SA 68397-68582). See responses to Questions 7(a) and 9(a) for the sources of de-inked wastepaper and recycled broke and/or salvage, respectively. Photographic raw stock, which Allied coated, came from the Lee Paper Co., also known as Simpson Lee Paper Co. (See SA 45770).

b) **Whether stock was sorted before use in the paper production processes and, if so, by what method.**

Before being combined to create furnish, each of the three types of stock was kept separately in its own stock chest. There was no need to sort incoming virgin stock, as virgin stock was purchased and received separately according to type. (See responses to Questions 7(b) and 9(b)).

c) **For each month in operation, the average amount of each material used in the paper production processes on a tons per day basis. Please report amount on a moisture basis (e.g., air-dry tons, bone-dry tons, or actual percent moisture).**

For the amount of de-inked stock used see the response to Question 13(a). For the amount of virgin stock used, prior to 1978 MHI has only sporadic information. According to a 1963 NCASI report entitled "Report on Waste Disposal," Bryant used 50-60 tons/day of virgin pulp, while King used 20-30 tons/day. (KA 04800443 - 04800479).

EPA "Pulp, Paper, and Paperboard Industry Survey Forms," offer averages for different categories of virgin pulp used at Allied's mills. When totaled up, they indicate that Bryant consumed an average of 168 tons/day of virgin pulp in 1976 and 179 tons/day in 1977. (SA 33981). At Monarch the averages of virgin pulp used were 37 tons/day in 1976 and 35 tons/day in 1977. (See SA 33953).

During the period 1978 to 1985, unidentified monthly reports appear to provide information on the average daily amount of virgin stock, broke and chemicals used in Allied's paper production process. (SA 65774-65915, SA 65917-66118, SA 66120-66331, SA 66456-66622, SA 66624-66674, SA 67671-67792, SA 67861-68073, SA

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68075-68247, SA 68249-68395, and SA 68397-68582). Inventory lists from 1985 note the types of chemicals that were used at Allied. (See SA 48398, and SA 51919-51922). Those chemicals listed include: clay, alum, Clinsize, Stayzme S, Stayzme 112, titanium, ansilex, defoamer, paramel, Nopco-Floc, Stazyme-GA, Douglass Starch, glue, sodium aluminate, caustic soda, latex, ammonia, salt, borax, formaldehyde and drocote protein.

d) **The capacity for paper production, estimate on a tons per day basis. In addition, please report actual production figures, where available. Please report capacity and other amounts on a moisture basis (e.g., air-dry tons, bone-dry tons, or actual percent moisture). Please include information on the capacity for inputs to the processes.**

An NCASI survey from 1963 lists the Monarch Mill capacity as 48 tons/day, the Bryant Mill capacity as 180 tons/day and the King Mill capacity as 200 tons/day. (See SA 33412, SA 33416 and NCASI 000124). To the extent that paper production numbers published in The Lockwood Post are evidence of capacity, those numbers are summarized in Appendix 7C-3. MHI has no other direct information related to capacity.

e) **For each month in operation, any and all information on the PCB content of the materials used in paper production processes.**

Allied had virgin pulp tested on two occasions (March 14, 1972 and April 9, 1976). Both pulp samples had a PCB content of less than 0.1 ppm. (See SA 35937-34938, SA 35943, and SA 34945). (See also, response to Question 3(g)). MHI has no other information to suggest the existence of PCBs, if any, in its raw materials.

f) **For each month in operation, any and all information on the amount of additional PCB or PCB-containing materials added to any product during production.**

Allied did not add any PCB-containing materials to any product during production.

g) **For each month in operation, the relative percentage for each type of stock used in the paper production process.**

MHI does not have consistent documentation regarding the relative percentage of each type of stock used in the paper production process. The only document available containing information on the amount of different types of stock used is a 1963 NCASI report entitled "Report on Waste Disposal." This report states that the Bryant Division used 140-150 tons of de-inked wastepaper and 50-60 tons of virgin pulp per day. (KA 04800444). It also notes that King used 170-180 tons of de-inked wastepaper and 20-30 tons of virgin pulp per day. (KA 4800462). That document is a snapshot in time, however, and does not show trends (upward or downward) in the relative use of virgin and de-inked pulp.

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Over time, Allied began favoring virgin stock over de-inked stock in its production of paper. Allied opened a pulp mill in Alabama in 1964 or 1965, providing an economic incentive to use virgin stock. (See KA 5500257). As a result, by 1965 Bryant Division had decreased its use of de-inked stock and King Division stopped de-inking altogether. (See SA 11408). Additionally, de-inking wastepaper became more costly than pulping virgin stock. Suppliers stopped pre-sorting their wastepaper and the percentage of usable stock that could be reclaimed by de-inking wastepaper dropped. (See KA 5100623, and the deposition transcript of Jack Gilman, 1/18/93, p. 128). Also contributing to the trend away from using de-inked stock were customer demands for higher quality paper (See the deposition transcript of Jack Gilman, 1/19/93, p. 212), and the loss of two major accounts that heavily relied on de-inked stock (Wrigley gum wrap and Camel cigarette paper). (See the deposition transcript of George Gerard, 7/22/92, p. 125).

Question No. 24: Water Sources

Please list the type and amount of all water sources used in each of the paper production processes, past and present. For each of the sources listed, please provide the following information (and reference any and all records or documents that indicate):

a) **For each month in operation, the average amount of water used in the processes on a million gallons per day basis.**

See response to Question 8(a).

b) **Identify what type of treatment, if any, was used to treat the raw process water. Please provide the dates thereof.**

See response to Question 8(b).

c) **For each month in operation, any and all information on the PCB content of the water used in process.**

See response to Question 8(c).

Outputs: Paper Production Processes

Question No. 25: Final Paper Production and Fate

Please list the type (e.g. parchment, bond, coated papers, boxboard, etc.) and amount of all final paper produced in the paper production processes, past and present. For each type listed, please provide the following information (and reference any and all records or documents that indicate):

a) **For each month in operation, the average amount of the paper produced from the process on a tons per day basis.**

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MHI does not have consistent information on paper production spanning the period of interest. Monthly production reports for Monarch Mill from September 1975 through September 1980 and for Bryant Mill from March 1977 through 1985 are available. (See SA 53424-54193, SA 55388-56075, SA 65112-65772, SA 66333-66454, SA 67111-67481, and SA 67483-67670). Appendices 25A-1 and 25A-2 summarize the production information from these reports and calculate a tons per day total for each month, based upon the number of days in production and the monthly totals. These tables include production totals for paper on the winder and as a finished product (after "off-q" amounts were subtracted). While data for winder totals appears complete, there are gaps in the information for finished product, which is typically lower than winder totals, after off-q amounts were subtracted.

Recognizing that much of the data includes off-q paper, it appears that Bryant Mill produced, on average, between 190 and 230 tons per day of paper and Monarch Mill produced 35-40 tons per day during the period for which there are documents. Other episodic information on Bryant and Monarch production exists outside of the time period covered by the monthly production reports. That information is summarized in Appendix 13.

Production information for the King Mill is more limited. A 1963 NCASI report entitled "Report on Waste Disposal" shows production to be 200 tons/day. (KA 4800462). Other episodic third-party information on King Mill production is summarized in Appendix 13.

Lockwood Post endeavored to report estimated production rates for all paper mills. Appendix 13C-2 summarizes the Lockwood Post production information for the Bryant, Monarch, King and Rex Mills.

George Gerard, Tower Foreman and Mill Superintendent at the Bryant Mill estimated the following production numbers spanning his years at Bryant (years are given in approximations): Mill C (1952-1965 – average of 50-70 tons per day; Mill D (1965-1968 – average of 150-250 tons per day; Mill C (1968-1970s – average of 80-100 tons per day; Mill D (1968-1970s – average of 150 tons per day). (Deposition of George Gerard, 7/22/92, pp. 49-55).

MHI compiled paper production data from all documentary sources in Summary Table 1; where data was not available, overall totals were estimated based upon historical data.

Allied offered a variety of coated and uncoated products from 1954 to 1985 (e.g., offset, letterpress, lithograph, mimeograph, duplicator, book, bond, ledger, envelope, label and gum wrap). Production amounts for specific paper grades from 1980 to 1985 are noted in the monthly production reports. (See SA053424-054193, SA055388-056075, SA065112-065772, and SA067111-067481.). See also response to Question 3(d).

According to witness testimony, at some point Allied experimented in the laboratory with development of its own form of carbonless copy paper. This experiment never went beyond the laboratory stage, since they were not able to coat the paper. Although the

testimony is not completely consistent on this point, the weight of the evidence strongly suggests that the trials were run in the mid-to-late 1970s, after PCBs were used in this application. See depositions of Ernest Klimczak, 1/12/93, pp. 78-79, 4/1/93, pp. 280-281; Malcolm Rendell, 11/16/92, p. 267; and Stanley Oakleaf, 8/21/92, p. 15). But see deposition of Fred Harrison, 7/1/92, pp. 31-36, 44 (trial runs may have been as early as 1968-1971).

b) **For each month in operation, the fate of the paper (including wastepaper) produced from the paper production process (i.e., amount re-used, amount sold, to whom sold, etc.).**

Finished paper was sold to third parties. MHI has sporadic information on the identity of the buyers of finished paper (e.g., American Heritage Publ. Co., National Publ. Co., Encyclopedia Britannica, R.J.R.- Archer, and Wrigley). Coated Photographic paper was shipped to Lee Paper Co. for further processing (See SA 45770) and coated carbon tissue paper was sent to Allied-Egry (an Ohio division of SCM-Allied) for use in business forms. (See the deposition transcript of James Curtis, 5/08/92, p. 23). Actual sales records do not exist.

Wastepaper created in the paper production process was either used as broke for recycling or was sold to third parties as salvage. Actual sales records do not exist.

c) **For each month in operation, any and all information on the PCB content of the paper produced from the processes, including any information on proportion of PCBs partitioning to paper versus wastewater.**

MHI has very little information regarding the PCB content of any paper produced. Appendix 25C-1 compiles the results of paper tested for PCB.

Question No. 26: Wastewater Production and Discharge

Please list the amount of all wastewater produced from the paper production processes, past and present. For each process, please provide the following information (and reference any and all records or documents that indicate):

a) **For each month in operation, the average amount of wastewater produced from the paper production processes on a million gallons per day basis.**

Wastewater production and discharge volumes specific to the paper production processes (as distinct from recycling, de-inking, *etc.*) are not available. For total discharge volumes from the Bryant, King, and Monarch Mills, respectively, see response to Question 14(a).

b) **For each month in operation, the fate of the wastewater produced from the paper production process (e.g., on-site wastewater treatment, discharge to POTW, direct discharge to river, etc.).**

Information regarding the fate of wastewater produced specifically from the paper production processes is not available. For a discussion of the fate of wastewater produced plant-wide, see response to Question 14(b).

c) **For each month in operation, the amount, measured or estimated, of raw water used in the paper production processes that was not discharged with process wastewater (e.g., the amount of non-contact cooling water discharged).**

Information regarding volumes of raw water used in the paper production processes (*e.g.*, amount of non-contact cooling water discharged) is not available.

d) **Describe the wastewater stream(s) from creation in the paper production processes to final discharge point, including any material changes thereto.**

See response to Question 14(d).

e) **For each month in operation, any and all information on the PCB, BOD, TSS, TDS and TVS content of the wastewater produced from the paper production processes.**

PCB, BOD, TSS, TDS and TVS information specific to the paper production process is not available. For plant-wide PCB, BOD, TSS and TDS concentration data, see response to Question 14(e).

<u>Question No. 27: Sludge Production and Disposal</u>

Please list the amount of all sludge produced in the paper production processes (separate from any sludge produced during other production/wastewater treatment operations), past and present. For each process, please provide the following information (and reference any and all records or documents that indicate:

There is no information available to indicate that any sludge was generated from the paper production process separate from the wastewater treatment system.

a) **For each month in operation, the average amount of sludge produced from the paper production processes and the percent moisture of the material as disposed.**

Not applicable.

b) **For each month in operation, the fate of the sludge produced from the paper production process (e.g., discharge to lagoon or impoundment, etc.).**

Not applicable.

c) **Any and all information on the PCB content and moisture content of the sludge produced from the paper production processes.**

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Not applicable.

d) Describe the lifecycle of the sludge stream from creation in the paper production processes to final disposal sites.

Not applicable.

e) If sludge was disposed at an off-site location, please identify the sites of disposal, the volumes disposed, the dates of disposal, the manner of transportation, etc.

Not applicable.

IV. QUESTIONS CONCERNING WASTEWATER AND SLUDGE TREATMENT AND DISPOSAL

Question No. 28: Wastewater Treatment Facilities

Please identify and describe the wastewater treatment facilities used to treat wastewater streams and discharges, permitted or otherwise, generated at each facility (this includes without limitation both on-site treatment and bypass systems, and POTWs, if used to treat wastewater generated from the facility), including the following:

a) The type, capacity, dimensions, and startup date for each unit process (include process flow diagram(s) and a description of solids removal processes). Please indicate the approximate retention time in settling ponds, and whether any flocculates or other materials were added to aid in solids settlement, etc.

Documentation of type, capacity, dimensions and start-up dates for Allied's wastewater treatment facilities mainly exists in the form of memoranda and correspondence. Following is a summary of the available information organized by plant name and date of activity.

Bryant:

Process wastewater from the Bryant Mill was either recycled in the process or piped to the clarifier. A 790,000 gallon clarifier with a 100 ft. diameter was installed in 1952 and began operation in May 1954 to treat wastewater from the Bryant Mill. (See SA029097, SA011073, SA033993, SA034145, and SA033394). Other documents state that the size of the clarifier was 850,000 gallons, which may include the freeboard distance to the top of the tank. (See SA033394). The design overflow rate of the clarifier was 764 gpd/ft^2 at a flow rate of 6.00 MGD. (See SA030392). The retention time averaged between 5.2 – 7.5 hours (See SA033394) after which the water was discharged to Portage Creek through

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Outfall No. 001.

In 1957 and 1958, Savealls were installed on all paper machines. (See NCASI 000942-943, and SA033977). An undated (likely post-1971 because the schematic does not list the de-inking process) schematic titled the, "[Bryant] Mill Process Flow Diagram" shows that a portion of the effluent from the Saveall was recycled back to the paper machines, and the remainder went to wastewater treatment. (See SA030395).

In September 1969, major changes were made to the destination of Bryant clarifier effluent. Recycling wastewater was routed from Bryant clarifier to Kalamazoo WWTP; Bryant papermaking wastewater was routed to Monarch clarifier. (See SA011319, and SA011317). A few months later, in February of 1970, the direct "Chlorine Drop-Leg" discharge to Bryant Mill Pond was discontinued. (See SA011283, and SA034612).

In 1976, a real-time total organic carbon analyzer was installed to regulate wastewater flows between the Kalamazoo WWTP and the Monarch clarifier. (See MDNR003888, and SA003844). In July 1977, Bryant Mill effluent flow destinations were altered again to comply with the new NPDES permit requirements. In the new configuration, effluent flow from the Bryant clarifier was split between the Kalamazoo WWTP (75%) and the Monarch clarifier (25%). (See SA033949 – SA033975, SA030370 – SA030398, SA0250249 – SA0250250, and SA034158). Flow maps from 1979 indicate that filter backwash water was then routed to the Bryant clarifier. (See KA04800841 – KA04800846).

Monarch:

A 90 ft. diameter, 640,000 gallon clarifier was installed in 1951 and began operation in October 1953 to treat mill waste water. (See SA033965, SA034145, and SA033394). Other documents state that the size of the clarifier was 650,000 gallons, which may include the freeboard distance to the top of the tank. (See SA033394, and SA034145). The design clarifier overflow rate was 865 gpd/ft^2 at 5.5 MGD. (See SA030424). The retention time averaged between 5.2 – 7.5 hours. (See SA033394). In 1957 and 1958, Savealls were placed in all paper machines (See NCASI 000942-943) and the de-inking operation was shut down. (See SA033950). In 1969, the Monarch clarifier began receiving papermaking wastewater from the Bryant clarifier. (See SA011319, and SA011317).

A 1976 drawing entitled "Allied's Water Treatment Flow Schematic" shows that the water used from the Monarch Pond on Portage Creek was chlorinated and then filtered. Approximately 90% of this water (1.842 MGD) went to process streams, and the remaining 10% went to waste treatment as backwash water. (See the EPA 1976 Survey Form, SA030394, and SA0250249 - SA0250250).

In July 1977, an EPA survey shows that alum and a polymer were added at the Monarch Mill prior to wastewater processing in the Monarch clarifier. This practice may have pre-dated the EPA survey. (See SA030396).

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King:

A 110 ft. diameter, 850,000 gallon clarifier was installed at the King Mill in 1953 and began operation in August 1955. (See SA010998 - SA011000, SA034145, and SA033394). Other documents state that the size of the clarifier was 1,000,000 gallons, which may include the freeboard distance to the top of the tank. (See SA034145). The retention time averaged between 5.2 – 7.5 hours. (See SA033394). In 1957 and 1958, Savealls were installed on all paper machines. (See NCASI 000942-943). A flow diagram from March 3, 1959 shows that an acid and a flocculent (0.1% concentration) were added to the fresh water before being routed to the Saveall. (See SA028936). In 1965, de-inking was discontinued at the King Mill.

Rex Mill:

A 50 ft. diameter, 11 ft. deep tank, called a Harding Sludge Separator, was installed at the Rex Mill in September 1954 as part of a wastewater purifying system (See KB22501869). Paddles rotated in the tank, which sped up settling time and allowed the accumulated sludge to be moved from the tank *via* pump to sludge pits on the property. The system was to purify all wastewater from the plant, and could process 1,200 gallons per minute (See KB22501869). Initial tests showed that 840-960 gpm of wastewater were being handled by the purifying system (See KB22501869).

b) The outfall(s) where the treated or bypassed wastewater was discharged.

The following table describes the outfalls and NPDES permit numbers at the three Allied Mills:

Mill Name	Outfall Description	Outfall Number	Applicable Dates
Bryant	Bryant clarifier to Portage Creek	390004-001	1956 - 1969
Bryant	Bryant clarifier to Kalamazoo WWTP	390004-001	1969 - 1988
King	King clarifier to Kalamazoo City Storm Sewer Outfall which discharged to the River		Through 1971
Monarch	Monarch clarifier to Portage Creek	390006-002	Through 1988[1]

[1]Although the Monarch Mill shut down in 1980, the clarifier remained in operation until 1988 to treat waste streams from Bryant.

Both outfalls 390004-001 (Bryant Clarifier) and 390006-002 (Monarch Clarifier) discharged to Bryant Mill Pond until September 1969. After discharge to Bryant Mill Pond from the Bryant Clarifier was terminated, the waste stream that flowed to the Kalamazoo sewer line and WWTP continued to be referred to as outfall 001. In addition, both the Bryant and Monarch chlorine drop leg waste streams discharged directly to Bryant Mill Pond. The King Mill clarifier and chlorine drop leg both discharged into the Kalamazoo River (see Figure 14d).

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There were intermittent bypasses from Allied's mills that discharged to Portage Creek and Bryant Mill Pond (Bryant and Monarch) or the Kalamazoo River (King) in times of high flow and equipment malfunction (see Figure 14d). The bypass discharge locations are shown schematically on Figure 14d-1 and are summarized below:

Discharge Location	Water Stream(s)
Outfall 001 (re-routed to city WWTP in 1969)	Bryant clarifier bypasses.
Bryant Mill Pond (south of dam)	Mill A chlorine drop leg (until 2/70).
Bryant Mill Pond	Water Treatment Plant sand filter backwash (until 1977).
North of Bryant Mill Dam at Alcott Street	Overflow from Mill A interceptor pump station.
Adjacent to Mill C/D interceptor pump station	Mill C and/or Mill D waste water bypasses when interceptor station could not handle flow.
Mill D East Side Basement of Beater Room and Machine Room had several "gates" that lead to Portage Creek (Herbert, p. 287 – 288; Herbert Exhibit #35, SA 030935- 030936)	Intermittent bypass *via* flap gate openings in beater room and machine room basements when sump pumps in Mill D could not handle water flow.
Adjacent to Mill D (east side of creek)	Non-contact cooling water from Mill D power plant.
Mill D west side of Portage Creek	Mill D beater room on west side of creek -- mainly wash up water, pump cooling water (Herbert, p. 290).
Mill E west side of Portage Creek (until 1970)	Intermittent wash water (Herbert p. 55)
Outfall 002 – Monarch	Clarifier bypasses and direct discharge of chlorine drop leg
King Outfall (King Street storm sewer)	Clarifier bypasses and direct discharge of chlorine drop leg

Rex Mill: As of 1950, all wastewater from both the de-ink mill and the one paper machine was discharged through the one sewer at the plant (Sewer No. 1) (See NCASI 000540). Sewer No. 1 was an open earth channel, located directly south of the west end of the main mill building (See NCASI 000540). Although the sewer outfall

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discharge point is not specified in existing documentation, it is likely that the outfall was to the Kalamazoo River given that the plant property bordered the River.

c) The NPDES permit number(s) for the outfalls listed in b), above.

The Monarch clarifier discharge to Portage Creek is the only discharge that was regulated by a NPDES permit. The permit number for this outfall was MI0000779 (See SA 038073) and was originally issued on December 20, 1974. (See NCASI 000845, and SA 008916).

d) Summary of all operating data for the period of 1954 through the present, including:

i) Flow rate data.

Flow rate data from the clarifiers are available for varying months at the three Allied Mills. (See Tables 14a-1, 14a-2 and 14a-3 for the Bryant, King and Monarch Mills, respectively). Appendices 14a-A, 14a- B, and 14a-C present the daily data and source documentation that was used to create the monthly data presented in Tables 14a-1, 14a-2 and14a-3. The first column of Tables 14a-1, 14a-2 and 14a-3 present the monthly flows from the clarifiers at each plant.

ii) Influent and effluent quality data for TSS , TDS, TVS, BOD, and PCBs (if available).

Influent and effluent monthly BOD, TSS and TDS concentration data from the wastewater treatment facilities is presented in Tables 14a-1, 14a-2 and 14a-3, for the Bryant, King and Monarch Mill clarifiers, respectively.[10] Appendices 14a-A, 14a-B and 14a-C present the daily data and source documentation that was used to create the monthly data presented in Tables 14a-1, 14a-2 and 14a-3. During the time when the papermaking mills were in operation, Allied did not routinely test its influent and effluent from its wastewater treatment facilities for PCBs. On occasion, MDNR tested Allied's influent and effluent from the wastewater treatment facility for PCBs. See MDNR003940-003944, SA022279-022280, SA025246-025254, 0005160, SA002697-002713, MDNR003940-003944, SA031349-031350, SA030157 and SA021077.

Very limited influent and effluent quality data have been found for the Rex Mill. Table 14a-D summarizes WRC data available for the Rex Mill.

iii) Summary of all known or documented bypasses or spills into the Kalamazoo River or its tributaries.

[10] See footnote 3.

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Like all of the paper mills along the Kalamazoo River, the Allied mills experienced bypasses of their waste treatment systems, normally due to high flow rates, equipment failure or clarifier capacity issues. As a general proposition, bypasses were more frequent in the mid-to-late 1950s, and decreased over time as Allied improved its wastewater treatment system in response to Michigan Wate. Resource Commission's concerns about water quality.

Bypasses at the Bryant and Monarch Plants flowed directly to Bryant Mill Pond and Portage Creek. Bypasses at the King Plant flowed to the Kalamazoo River. Much of the information on bypasses is anecdotal and non-quantitative – there is little hard data about duration and flow. Table 28d-1 summarizes effluent loads for bypasses with sufficient data to calculate the bypass loadings. Appendix 28d-2 provides a list of documented bypasses at all of the Allied mills.

Witness testimony about bypasses in general is also available. (See Deposition of Per Hagard, 7/31/92, pp. 51-52 (bypasses would occur if a pump ceased operating or if too much water was introduced to the pump), 108-110 (some overflows occurred into the creek from the pump house that handled the wastewater from Mills C and D when there were surges of water caused by discharges of some of the water holding tanks or the shutting down of the machines); Deposition of Elbert Herbert, 9/16/92, pp. 324-325 (bypasses occurred during an unknown time frame, on the average, about once or one-and-a-half times per week), 4/2/92, 107-108 (during an unknown time frame some bypasses occurred from the wastewater tank at Mill A, through a 30-inch-diameter pipe into Portage Creek, generally as the result of too large a volume of water, or the failure of a pump).

It appears that the most common reason for bypasses at the Bryant Mill was due to heavy flow rates. Bryant de-inking mill waste bypassed directly to Portage Creek just downstream of the Bryant Mill pond dam when the influent flow rate to the wet well exceeded the pumping rate to the clarifier (SA029206 – SA029215). During such episodes, wastewater spilled over the top of a baffle in the interceptor pumping station and flowed into an overflow line to Portage Creek (SA011346 - SA011354). In 1968, representatives from the Water Resources Commission and representatives from Allied met in an effort to further improve water quality in Portage Creek. At this time the Water Resources Commission requested that the bypasses of untreated wastes be terminated (SA032010 – SA032030). This request, in part, led to the flow configuration changes, in which the effluent flows from the Bryant Mill clarifier were split and routed to the Monarch clarifier and to the City of Kalamazoo POTW in September 1969 (see response to Question 14).

There were other non-routine bypasses at the Bryant Mill as well. From, July 8 to July 20, 1968, only the Mill A wastewater (de-inking) was pumped to the Bryant Clarifier, allowing Mill C and D wastewater to overflow at the Mill D pump wet well (SA029087 – SA029088). This was a change requested by the city of Kalamazoo to get actual data on effluent quality when only Mill A wastewater was treated in the Bryant Clarifier. Additionally, there were equipment problems

on occasions that caused waste streams to be bypassed directly into Portage Creek. A letter dated June 6, 1961 discussed the bypassing of de-inking waste directly to Portage Creek due to the plugging of a hand-cleaned bar grate at the main pump station (SA010966 – SA010970). There is also information that suggests the mills may have bypassed wastewater from specific paper machines during times when colored paper was being produced.

During times when the Mill C/D interceptor pumping station could not handle the flow of water, bypasses to Portage Creek occurred at the location of the Mill C/D interceptor pumping station through a "T" in the pipe connecting the wastewater streams from the two mills (deposition of Elbert Herbert, 4/2/92, p. 128; SA 47647; MHI 00028). Documents also suggest that, from time to time, Allied considered re-routing a portion of lower BOD-containing water from Mills C and D directly to Portage Creek in an effort to maximize the BOD removal efficiency of the clarifier. (*See, e.g.*, SA 00010988, KA 04500135, KA 04600400). It is unclear whether these plans were implemented and if they were, over what period of time. *See also*, KA 04800443-04800479 (1963 NCASI report suggesting that a portion of wastewater from Mills C and D was being discharged directly to Portage Creek). *But see*, deposition of Ernest Gilman, 2/9/93, pp. 596-605 (wastewater streams identified in NCASI report were wastewater sampling points, not discharges); deposition of Elbert Herbert, 4/2/92, p. 99-101 (all of the Mill C/D wastewater was conveyed to the Bryant clarifier); NCASI 001145 (April 1963 letter reporting that total flow from Bryant Division was going to the clarifier); SA 028987 (wastewater from Mills C and D was pumped to the clarifier); KA 04600400 (April 1960 Inter-Office Memo noting sewer pumps from Mills C and D to the interceptor station); SA 028970 (May 1963 Inter-Office Memo noting all waste streams from Mills C and D as going to the clarifier); MDNR 004502 (March 1967Allied document outlining wastewater flows from Mills C and D); KA 04800197 (March 1970 Inter-Office memo outlining Bryant wastewater system).

In 1961, for a period of time, there was a direct discharge of white-water at the Bryant Mill (SA010966 – SA010970). The 1961 direct discharge was caused by mechanical troubles to both pumps at the pump house. An internal Allied memorandum in 1971 (Oct. 27th) states that there are numerous white-water overflows, mostly during weekend shutdowns (SA034813).

Non-routine bypasses were also noted at the King Mill. An April 29, 1964 letter indicates that during a Water Resources Commission site visit sizable flows were bypassing treatment through a leak in the "flap gate." At times, it was noted that clarifier effluent flowed back through the gate from the reverse side combining with the raw waste in the wet well. At least once, the gate was stuck in the open position (SA011418; MDNR003624). An undetermined amount of King Mill wastewater bypassed treatment due to the improperly operating gate. In 1961, a similar problem of wastewater leaking through the "back-water gate" was noted and confirmed with a dye tracer test (SA010966 – SA010970). The Water

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Resources Commission notes that, on most occasions, there was no need for bypassing (SA011418).

iv) **Quantity of sludge generated and removed from the treatment system (specify if the quantity is on a dry or wet weight basis and the percent moisture if available).**

Information regarding the quantity of sludge generated and removed from the Allied wastewater treatment systems is provided in response to Question 28(d)(v) and Question 29(e).

v) **For each month in operation, the amount and fate of the sludge produced from the wastewater treatment process, including without limitation sludge generated on your property and produced to a POTW, and sludge generated at a POTW as a result of the treatment of wastewater discharged to the POTW from (at least in part) your property.**

MHI has no documents showing the amount of sludge generated on a monthly basis from each of the mills during the relevant time. On Summary Table 1, MHI estimated the amount of sludge generation on an annual basis based upon clarifier influent and effluent solids data. The mass of solids being discharged from the clarifier was subtracted from the mass of solids entering the clarifier, for time periods when influent and effluent data were available. A 1977 schematic shows that 1,444 gallons/day of underflow from the Bryant clarifier and 2,281 gallons/day of underflow from the Monarch clarifier is going to the sludge lagoons. (See SA 00030396). A December 10, 1963 NCASI survey shows an underflow from the Bryant clarifier of 41,000 GPD with a solids content of seven to ten percent. (SA 033416). A December 6, 1963 NCASI survey shows an underflow from the Monarch clarifier of 8,000 – 10,000 GPD with a solids content of five percent. (SA 033412). A December 6, 1963 NCASI survey shows an underflow from the King clarifier of 288,000 GPD with a solids content of seven to ten percent. (NCASI 000124).

A one year inventory of residuals production at the Allied facility for 1985 was presented in the Program for Effective Residuals Management Report prepared by Wilkins & Wheaton, Inc., February 1986. The results are included in Appendix 28d-1.

All of the solids generated as a result of the wastewater treatment operation at the Allied site have been disposed on site. The sludge from the King Mill was disposed at the A-Site. The sludge from the Bryant Mill was disposed at the Bryant HRDL/FRDL, the Western Disposal Area and the former Type III Landfill. The sludge from the Monarch Mill was disposed at the Monarch HRDL and the Bryant HRDL. MHI has no information available regarding the amount of sludge generated by the POTW.

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As explained in Question 29(a), after clarification, settled residuals from the Bryant clarifier were pumped to the Bryant HRDLs and FRDLs for de-watering. The dewatered residuals either remained in the HRDLs/FRDLs or were placed in the Type III landfill and the Western Disposal Area. As shown on the site map included in Appendix 29-B, the clarifiers, HRDLs, FRDLs, Type III landfill and the Western Disposal Area are all in close proximity. The residuals removed from the HRDLs were transported to other areas of the site in dump trucks. There are no shipping documents available because the material was only transported within the boundaries of the site.

The Bryant HRDL has not been an active residuals disposal area since the late 1970s. Since that time, the residuals generated by the wastewater treatment operation were dewatered in the FRDLs and then stabilized with sand and disposed at the Type III landfill. The Monarch HRDL has not been an active residuals disposal area since approximately 1960.

Decant water from the dewatered residuals in the HRDLs was sent directly to Portage Creek until sometime in the late 1970s. The discharge had a very low flow and low solids concentration (SA 029367). Since that time the decanted water has been routed back to the Bryant clarifier.

vi) PCB analytical results for any sludge samples.

There is no PCB data available for sludge samples collected from the wastewater treatment system. There are PCB data from residuals disposal (see response to Question 40).

e) Describe all types of monitoring reports, monitoring data, and documentation sent to or received from regulatory authorities. Provide all such information and documentation to the depository.

Allied sent and received routine monitoring reports and data, most of it in the form of correspondence between Allied and the WRC. In addition to correspondence, other types of documents include progress reports, studies, surveys, permit applications and permits, and monthly operator reports. All of these documents are located in the document depository, and are described in Table 28e-1.

f) Describe all types of design reports and/or basis of design documentation for the treatment system. Provide all such information and documentation to the depository.

Descriptions of Allied's wastewater treatment systems and modifications to these systems exist primarily in the form of correspondence between Allied and the WRC, minutes of WRC hearings, and deposition testimony, all of which have been produced to the document depository. A number of design drawings, also produced to the depository,

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provide design information for elements of Allied's wastewater treatment system.

Bryant:

Bates#:	Date	Description
000573 (DWG. E-690)	9/30/53	Wastewater treatment system showing collection sumps, clarifiers, and connections between mills.
SA43151	1/18/64	Stock and water flow diagram, Mill A.
SA43154	5/4/64	Stock and water flow diagram, Mill A.
SA46150	3/7/66	Stock and water flow diagram, Mill A.
SA46158	3/28/66	Stock and water flow diagram, Mill A.
SA46155	12/23/69	Schematic flow diagram of stock and water, Mill A.
000090	8/15/72	No. 5 machine stock and white water flow diagram, Mill C showing hydra pulper, sewer and overflow sewer.
000089	8/15/72	No. 6 machine stock and white water flow diagram, Mill C showing sewer.
SA048308	8/15/72	No. 7 machine stock and white water flow diagram, Mill D showing sewer and overflow sewer.
SA048309	8/15/72	No. 8 machine stock and white water flow diagram, Mill D showing white water storage, sewer and overflow sewer.
SA048310	8/15/72	No. 9 machine stock and white water flow diagram, Mill D showing sewer.
SA048311	7/10/73	White water flow, Mill D showing pipe to gray water tank, white water collection and flow to sewer.
DWG. C-1739	5/6/76	Details for overflow into 16" effluent – Bryant clarifier.
SA048307	2/27/76	Waste treatment at Bryant and Monarch clarifiers showing connections, and lines to city sewer.
DWG. E-1160	5/17/78	Filter plant backwash water control schematic.
DWG. E-1159	5/15/78	Filter plant backwash water disposal system.

King:

Bates#:	Date	Description
SA47643	4/24/59	Diagram of white water system for No. 1 paper machine
SA47644	4/24/59	Diagram of white water system for No. 2 paper machine
SA47645	4/27/59	Diagram of white water system for No. 3 paper machine
SA46139	4/24/59	Diagram of white water system for No. 4 paper machine

Monarch:

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Bates#:	Date	Description
SA048298	7/20/72	Stock and white water flow diagram for No. 10 Paper Machine
SA048318	8/7/72	Stock and white water flow diagram for No. 11 Paper Machine
SA048297	1/23/75	Stock and white water flow diagram for No. 10 Paper Machine
SA048296	2/17/75	Stock and white water flow diagram for No. 11 Paper Machine
SA048300	6/27/75	Waste stream flow diagram – basement showing the sand filter for the backwash waters.
MHI 00029	7/21/76	Layout of Creek water system to filters showing elevations and distances.
SA048299	2/2/79	Saveall collection and white water system for No. 10 paper machine showing overflow to sewer and white water storage chest.
SA048302	2/5/79	Saveall collection and white water system for No. 11 paper machine showing line to sewer and white water storage chest.
SA47657	Undated	Schematic of layout of feed water pump to clarifier for mill waste water system.

g) For any facility that discharged wastewater to the local POTW or had direct discharge of untreated wastewater, identify what percentages and quantities of the total flow were sent to the various discharge points.

MHI has a limited amount of information on quantities of wastewater discharged to the POTW. The available information is summarized in Appendix 28-G. The available information on clarifier flow appears in Appendices 14a-1, 14a-2, 14a-3, 14a-A, 14a-B and 14a-C and Summary Table 1. As early as 1969, the Bryant Mill clarifier effluent was discharged to the City of Kalamazoo sanitary sewer system *via* Outfall [001] (Permit No. 390004). (See SA038058 – SA038073, SA011319, and SA011317)). As of 1977, the Bryant clarifier discharged a portion of its flow to the Monarch clarifier and the remainder to the Kalamazoo sanitary sewer. Approximately 25% of the flow from the Bryant Clarifier was routed to the Monarch Clarifier and eventually discharged to Portage Creek through outfall 390006-002. The remaining 75% of the flow from the Bryant Clarifier was routed to the Kalamazoo WWTP through outfall 390004-001. (See SA033949, and SA034341 - SA034352). A June 14, 1982 letter to DNR notes the average flow to the Kalamazoo WWTP from June 1981 through May 1982 as 69.4%. (MHI 00001).

Prior to February 1970, the chlorine drop leg from the bleach process at the Bryant Mill was discharged directly into Bryant Mill Pond (SA029087; SA011346 - SA011354; SA034938; SA010966 – SA010970). The chlorine drop leg direct discharge was sampled on various occasions and the results are summarized in Table 28g-1. Information on bypasses and other direct discharges is summarized on Table 28d-2 and Table 28g-3 and the responses to Question 28(b) and (d)(iii).

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The Monarch and King Mills also directly discharged chlorine waste streams. At the Monarch Mill, on occasion, a portion of the bleach waste was discharged directly to Portage Creek until de-inking was discontinued at the mill in 1957 (SA039024 – SA039028). The limited quantitative data for the King Mill chlorine drop leg are summarized in Table 28g-2.

h) For any POTW referred to in (g), above, provide any and all information, including but not limited to monitoring data, on the amount of wastewater discharged to the POTW, the location of the discharge point, and the concentration of PCBs in the wastewater discharge to the POTW and in the effluent from the POTW.

See answer to (g) above. In 1976, the distribution of wastewater became controlled by a real-time TOC analyzer. When a certain BOD loading had been discharged into Portage Creek from the Monarch Clarifier, the TOC analyzer directed the remaining wastewater from the Bryant Mill to the POTW for secondary treatment. Information on PCBs in the wastewater, to the extent that it exists, is contained in response to Question 28(d)(ii).

i) Describe any decommissioning activities conducted when individual unit processes were taken off line.

There is no information available related to decommissioning activities for individual unit processes.

j) Identify all permits and notices of wastewater-related violations issued for your facility (including those related to discharges to or from a POTW).

For permit information, see response to Question 28(b). For a detailed summary of all wastewater-related violations, see Appendix 36-2.

Question No. 29: Information on Lagoons, Landfills and Impoundments

Identify and describe each lagoon, landfill, or impoundment on your property, past or present. Please identify and describe each off-site lagoon, landfill, or impoundment used for disposal of wastewater treatment sludges, pulp or paper production sludges, or any other materials potentially containing PCBs, past or present. For each such on or off-site lagoon, landfill, or impoundment, please include:

a) The nature of its uses, past and present (including a description of its sources, contents, treatment processes, and the destinations of its content if any removal actions were conducted).

'A'-Site

The A-Site was originally a paper residual dewatering lagoon used by the Allied Paper

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Company's King Mill Division. An earthen dike surrounded most of the A-Site. The paper residuals were piped from the King Mill, located at 1608 Lake Street. Allied ceased using A-Site in 1971. (See Technical Memorandum No. 9, Willow Boulevard/A-Site Operable Unit, BBL, April 1995.)

Area East of Davis Creek

It appears that additional paper making residuals were placed in the Area East of Davis Creek. An earthen berm was located along the perimeter of this area. (See Technical Memorandum No. 9, Willow Boulevard/A-Site Operable Unit, BBL, April 1995.)

Area South of 'A'-Site Berm

It appears that additional paper making residuals from the A-Site were placed in the Area South of the A-Site Berm. (See Remedial Investigation/Focused Feasibility Study, Willow Boulevard/A Site Operable Unit, BBL, June 1999.)

Monarch HRDL

The Monarch HRDL is an earthen-bermed de-watering lagoon that was constructed by Allied as part of a primary treatment facility for the former Monarch Mill. Wastewater from the mill was sent to the Monarch clarifier. After clarification, settled residuals from the Monarch clarifier were pumped to the Monarch HRDL for de-watering. De-watered residuals were placed in the Type III Landfill and the Western Disposal Area on the Allied property. (See Draft Remedial Investigation Report, Allied Paper, Inc. Operable Unit, BBL, March 1999.)

Bryant HRDL

The Bryant HRDL is an earthen-bermed de-watering lagoon that was constructed by St. Regis Paper Company as part of a primary treatment facility for the former Bryant Mill. Wastewater from the mill was sent to the Bryant clarifier. After clarification, settled residuals from the Bryant clarifier were pumped to the Bryant HRDL and FRDLs for de-watering. De-watered residuals were placed in the Type III Landfill and the Western Disposal Area. (See Draft Remedial Investigation Report, Allied Paper, Inc. Operable Unit, BBL, March 1999.)

Bryant FRDL

The Bryant FRDL is a series of four earthen-bermed de-watering lagoons that were constructed by St. Regis Paper Company as an addition to the primary treatment facility for the former Bryant Mill. Wastewater from the mill was sent to the Bryant clarifier. After clarification, settled residuals from the Bryant clarifier were pumped to the Bryant HRDL and FRDLs for de-watering. The FRDLs also were used for de-watering underflow from the Bryant clarifier. De-watered residuals were placed in the Type III Landfill and the Western Disposal Area. (See Draft Remedial Investigation Report,

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Allied Paper, Inc. Operable Unit, BBL, March 1999.)

Former Type III Landfill

The Former Type III Landfill was operated by Allied for the disposal of non-process industrial wastes (such as cardboard, packing strips, waste paper and demolition materials) and to receive de-watered residuals from the HRDLs and FRDLs. (See Engineering Design Report, Allied Paper, Inc. Operable Unit, BBL, August 1999.)

Western Disposal Area

The Western Area is believed to have received residuals from the de-watering lagoons. (See Technical Memorandum No. 7, Allied Paper, Inc. Operable Unit, BBL, March 1994.)

b) Location. Please provide a location map if possible.

'A'-Site

The A-Site is located in the City of Kalamazoo, and is bounded on the north by the Kalamazoo River, on the east by Davis Creek, on the south by a berm that merges with former Olmstead Creek and on the west by the Willow Boulevard Site. See Appendix 29-B for a site location map.

Area East of Davis Creek

The Area East of Davis Creek is located in the City of Kalamazoo, and is bounded on the north by the Kalamazoo River, on the west by Davis Creek, and on the south and east by an earthen berm. See Appendix 29-B for a site location map.

Area South of 'A'-Site Berm

The Area South of A-Site Berm is located in the City of Kalamazoo, and is bounded on the north by the A-Site, on the east by Davis Creek, and on the south and west by former Olmstead Creek. See Appendix 29-B for a site location map..

Monarch HRDL

The Monarch HRDL is located in the City of Kalamazoo, and is bounded on the north by Portage Creek, on the west by the Monarch clarifier and on the south by Cork Street. See Appendix 29-B for a site location map.

Bryant HRDL

The Bryant HRDL is located in the City of Kalamazoo, and is bounded on the north by the Bryant FRDL and Bryant Clarifier, on the south and east by Portage Creek and on the

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west by the Western Area. See Appendix 29-B for a site location map.

Bryant FRDL

The Bryant FRDL is located in the City of Kalamazoo, and is bounded on the north by the former Type III Landfill, on the west by the Bryant Clarifier, on the south by the Bryant HRDL and on the east by Portage Creek. See Appendix 29-B for site location maps.

Former Type III Landfill

The Former Type III Landfill is located in the City of Kalamazoo, and is bounded on the north by Portage Creek/former Bryant Mill Pond, on the south and east by the Bryant FRDLs and Bryant Clarifier Creek and on the west by the Western Area. See Appendix 29-B for a site location map.

Western Disposal Area

The Western Disposal Area is located in the City of Kalamazoo on the west side of the Allied OU, and is bounded on the north by the Panelyte property, on the west by the railroad tracks, on the south by Cork Street and on the east by the Bryant FRDLs and Former Type III Landfill. See Appendix 29-B for a site location map.

c) **The dates of use or operation.**

'A'-Site

Historical aerial photographs indicate that the A-Site lagoons began operation in the late 1950s. The King Mill clarifier was installed in 1953. Aerial photographs also indicate that the lagoons were active in 1960 and 1967. The operations of the King Mill ceased in 1971. The lagoons were inactivated, as shown in a 1974 aerial photograph. Georgia-Pacific purchased the Site in 1975 to replace the Willow Boulevard Site, and it was used by Georgia-Pacific until it was closed in 1987. (Remedial Investigation/Focused Feasibility Study, Willow Boulevard/A-Site Operable Unit, BBL, June 1999).

Area East of Davis Creek

MHI has no information on the precise dates of operation of this area. Based upon aerial photographs and history, it probably operated for a portion of the time the A-Site operated.

Area South of 'A'-Site Berm

MHI has no information on the precise dates of operation of this area. Based upon aerial photographs and history, it probably operated for a portion of the time the A-Site operated.

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Monarch HRDL

The Monarch HRDL was constructed in the early 1950s. It has not been an active residuals disposal area since the 1960s. (See Description of Current Situation Report, BBL, May 1992.)

Bryant HRDL

The Bryant HRDL was constructed in 1954 and has not been an active residuals disposal area since the late 1970s. Between October 1998 and April 1999, approximately 150,000 yd^3 of sediments were excavated from former Bryant Mill Pond. The excavated sediments were placed in the Bryant HRDL and Bryant FRDLs 3 and 4. (See Description of Current Situation Report, BBL, May 1992 and Draft Remedial Investigation Report, Allied Paper, Inc. Operable Unit, BBL, March 1999.)

Bryant FRDL

The Bryant FRDLs were constructed by 1960 and have not been active residuals disposal areas since 1989, but have collected stormwater since that time. Between October 1998 and April 1999, approximately 150,000 yd^3 of sediments were excavated from former Bryant Mill Pond. The excavated sediments were placed in the Bryant HRDL and Bryant FRDLs 3 and 4. FRDLs 1 and 2 continue to act as a stormwater basin. (See Description of Current Situation Report, BBL, May 1992 and Draft Remedial Investigation Report, Allied Paper, Inc. Operable Unit, BBL, March 1999.)

Former Type III Landfill

Allied began operating the Former Type III Landfill in 1966 to receive non-process wastes, and in 1985 it was classified as a Type III landfill to receive paper residuals and some demolition materials. Disposal to the landfill ceased in the late 1980's and the landfill license is no longer active. (See Bryant HRDL/FRDLs Closure, Allied Paper, Inc. Operable Unit, BBL, August 1999.)

Western Disposal Area

The dates of operation for this area are unknown.

d) ***Any and all activities or efforts to close or otherwise take a lagoon, landfill, or impoundment out of service, or any remediation or removal activities or efforts with respect to any lagoon, landfill, or impoundment, or their contents, including without limitation any capping, solidification, stabilization, containment, on or off-site disposal, treatment, or decommissioning thereof. Please provide the dates for each activity or effort.***

'A'-Site

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Subsequent to Remedial Investigation activities, as an interim measure, Georgia-Pacific and MHI installed a sheetpile wall along the length of the Kalamazoo River, extending approximately 150 feet up Davis Creek. Construction was completed in early 1999. This wall was installed to an elevation of 2 feet above the 100-year flood elevation (267 ft) to reduce the potential for residuals to be transported to the river in the possible event of failure of the existing dikes, and is intended to be left in place. Capping of the A-Site has been proposed, but has not yet been approved or implemented. A fence was installed on the south side of the A-Site in 2000. (See Remedial Investigation/Focused Feasibility Study, Willow Boulevard/A-Site Operable Unit, BBL, June 1999).

Area East of Davis Creek

Remedial actions are proposed to excavate the residuals located in the Area East of Davis Creek and move them to the A-Site, prior to capping of the A-Site. (See Remedial Investigation/Focused Feasibility Study, Willow Boulevard/A-Site Operable Unit, BBL, June 1999).

Area South of 'A'-Site Berm

Remedial actions are proposed to excavate the residuals located in the Area South of A-Berm and move them to the A-Site, prior to capping of the A-Site. (See Remedial Investigation/Focused Feasibility Study, Willow Boulevard/A-Site Operable Unit, BBL, June 1999).

Monarch HRDL

The Monarch HRDL is presently covered with soil; any additional efforts will occur after a ROD for the Allied OU has been issued.

Bryant HRDL and Bryant FRDL

To close the Bryant HRDL and Bryant FRDL, a final cover system has been largely constructed (a small portion remains to be completed). The final cover system includes: 12-inch thick sand gas venting layer; 30-mil. PVC flexible membrane liner; geosynthetic drainage composite layer; 24-inch thick soil protection layer; and 6-inch vegetated topsoil layer. The final cover system also includes a permanent stormwater retention and sedimentation basin. A sheetpile wall has also been installed along Portage Creek to provide the necessary structural support and groundwater management. MHI took these actions voluntarily and at risk, in an effort to secure the site in advance of a completed RI/FS and ROD. Although the State approved the activities, which MHI anticipates will be consistent with the final remedy, MHI has no guarantee that either DEQ or EPA will not require further work at the site. (See Bryant HRDL/FRDLs Closure, Allied Paper, Inc. Operable Unit, BBL, August 1999.)

Former Type III Landfill

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An erosion control plan was implemented in 1991. The area was seeded with erosion control vegetation (crown vetch) and site runoff was routed to two retention basins. Any additional remedial efforts will be the subject of a ROD for the Allied OU.

Western Disposal Area

The Western Area is presently covered with soil: any additional remedial efforts will be the subject of a ROD for the Allied OU.

e) The dimensions and volume by source of materials disposed of within the lagoon, landfill, or impoundment (include calculations of volumes, if available).

In its work at the site, BBL has estimated residual volume in the various disposal areas based on the classification of soils/residuals in soil borings in each area, as well as the results of PCB samples that were collected. Because of the limited amount of data collected per unit area, these estimates are subject to uncertainty. BBL has estimated the residuals volume based on the classification of soils/residuals in soil borings in each disposal area. These estimates assume a uniform interval of residuals across the entire disposal area. BBL's calculations follow:

'A'-Site

BBL estimated that the A-Site contains a total approximate residuals volume of 475,400 yd^3 (See Remedial Investigation/Focused Feasibility Study, Willow Boulevard/A-Site Operable Unit, BBL, June 1999; Technical Memorandum No. 9, Willow Boulevard/A-Site Operable Unit, BBL, April 1995.). These residual volumes are the same as those provided by Georgia Pacific. These volumes include the entire volume of residuals at the A-Site, covering periods of use by Allied and Georgia Pacific.

Area East of Davis Creek

The Area East of Davis Creek contains a total approximate residuals volume of 3,800 yd^3 (See Remedial Investigation/Focused Feasibility Study, Willow Boulevard/A-Site Operable Unit, BBL, June 1999.)

Area South of 'A'-Site Berm

BBL estimated that the Area South of A-Site Berm contains a total approximate residuals volume of 2,900 yd^3. (See Remedial Investigation/Focused Feasibility Study, Willow Boulevard/A-Site Operable Unit, BBL, June 1999.)

Monarch HRDL

BBL estimated that the Monarch HRDL contains a total approximate residuals volume of 170,000 yd^3. (See Draft Remedial Investigation, Allied Paper, Inc. Operable Unit, BBL,

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November 2000; Technical Memorandum No. 7, Allied Paper, Inc. Operable Unit, BBL, March 1994.)

Bryant HRDL

Prior to 1998, BBL estimated that the Bryant HRDL contained a total approximate residuals volume of 390,000 yd^3. During the period from October 1998 to April 1999, BBL estimated that approximately 100,000 yd^3 of sediment were distributed over the Bryant HRDLs as a result of the Bryant Mill Pond Sediment Removal Action. (See Draft Remedial Investigation, Allied Paper, Inc. Operable Unit, BBL, November 2000, Technical Memorandum No. 7, Allied Paper, Inc. Operable Unit, BBL, March 1994.)

Bryant FRDL

Prior to 1998, BBL estimated that the Bryant FRDL contained a total approximate residuals volume of 54,000 yd^3. During the period from October 1998 to April 1999, approximately 46,000 yd^3 of sediment were distributed over FRDLs 3 and 4 as a result of the Bryant Mill Pond Sediment Removal Action. (See Draft Remedial Investigation, Allied Paper, Inc. Operable Unit, BBL, November 2000, Technical Memorandum No. 7, Allied Paper, Inc. Operable Unit, BBL, March 1994.)

Former Type III Landfill

BBL estimated that the Former Type III Landfill contains a total approximate residuals volume of 140,000 yd^3 (including the area between the landfill southeastern edge and the FRDLs) (See Draft Remedial Investigation, Allied Paper, Inc. Operable Unit, BBL, November 2000, Technical Memorandum No. 7, Allied Paper, Inc. Operable Unit, BBL, March 1994.)

Western Disposal Area

BBL estimated that the Western Disposal Area contains a total approximate residuals volume of 380,000 yd^3. (See Draft Remedial Investigation, Allied Paper, Inc. Operable Unit, BBL, November 2000, Technical Memorandum No. 7, Allied Paper, Inc. Operable Unit, BBL, March 1994.)

The residual volume has also been estimated using a more refined approach. The Thiessen polygon method was used to weight data from each boring in proportion to their representative areas. The polygon areas were determined by connecting the adjacent boring locations and constructing perpendicular bisectors to each connecting line. Instead of using an average residuals thickness across the entire disposal area, the specific residuals interval from each individual boring was applied to the polygon area associated with that boring. Although there are still data limitations, this approach mitigates at least some of the uncertainty. A comparison of the results of both approaches appears in Table 29e-1; the calculations are contained in Appendix 29-E.

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Table 29e-1. Residual Volumes

Site Area	BBL Residual Volume (yd^3)	Thiessen Polygon Residual Volume (yd^3)
Monarch HRDL	170.000	158.929
Bryant HRDL*	390.000	214.059
Bryant FRDL*	54.000	74.505
Former Type III Landfill	122.000	142.334
Landfill Perimeter Strip	18.000	19.035
Western Area	380.000	246.898
Bryant Mill Pond	146.000 (a)	88.049 (b)
A-Site (e)	475.400 (d)	543.538 (c) (d)
Area East of Davis Creek (e)	3.800	2.020
Area South of A-Site Berm (e)	2.900	1.647

* These estimates represent the volume of residuals present prior to the Bryant Mill Pond Sediment Removal Action.

(a) Volume estimated by BBL to have been removed from the Bryant Mill Pond and placed in the Bryant HRDL and FRDL.

(b) Volume of sediment (in-place) calculated using Thiessen polygon method.

(c) Georgia-Pacific (BBL) calculation of residuals volume using Thiessen polygon method (Mediation Questionnaire Response, January 2001).

(d) The residual volumes provided by Allied for the A-Site are the same as those provided by Georgia Pacific. These volumes include the entire volume of residuals at the A-Site, covering periods of use by Allied and Georgia Pacific.

(e) Allied believes it is responsible for in the range of 50% of the A-Site and all of the Area East of Davis Creek and the Area South of the A-Site Berm.

f) A summary of all environmental investigation data collected for each lagoon, landfill, or impoundment, to the extent available, including:

i) Soil boring logs.

ii) Test pit logs.

iii) PCB analytical data for sludge, soil and groundwater samples (include table(s) and/or figure(s) itemizing sample location, sample depth, sample interval, and both total PCBs and Aroclor-specific analytical results).

iv) Density and moisture content data for sludge samples.

Numerous investigations have been performed at the A-Site and the Allied property. Those investigations are summarized in technical memoranda and reports related to the remedial investigations at these sites. (See, e.g., Description of the Current Situation, BBL, May 1991; Description of the Current Situation, BBL, May 1992; Addendum to the

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Draft Description of the Current Situation. BBL. April 1993; Draft Technical Memorandum 7. Allied Paper. Inc. Operable Unit. BBL. March 1994; Technical Memorandum 7. Allied Paper. Inc. Operable Unit. BBL. March 1994; Draft Technical Memorandum 16. Surface Water Investigation. BBL. March 1995; Technical Memorandum 9. Willow Boulevard/A-Site Operable Unit. BBL. April 1995; Technical Memorandum 15. Mill Investigation. BBL. August 1996; Addendum to Technical Memorandum No. 7. BBL. March 1999; Remedial Investigation/Focused Feasibility Study. Willow Boulevard/A-Site OU. BBL. June 1999; Draft Technical Memorandum 7. Allied Paper. Inc. Operable Unit. BBL. July 1997; Removal Action Summary. King Street Storm Sewer. BBL. February 2000; Response Activities Summary. Former Allied Paper. Inc. King Mill Lagoons. BBL. March 2000; Draft Remedial Investigation. Allied Paper. Inc. Operable Unit. BBL. November 2000; BBL electronic database (1999).

These reports and available information are summarized below.

ALLIED PAPER SITE

The Description of Current Situation Report (BBL. 1991-1993) provides data collected during investigations conducted prior to 1990. PCB related investigations at the Allied HRDLs were initiated in 1985. During the 1985 investigation of PCB concentrations in Portage Creek. two rivulets were identified by MDNR between the Bryant HRDL perimeter dikes and Portage Creek. PCBs were detected in the initial samples collected from the two rivulets. Investigations were conducted between 1985 and 1989 to identify the source of the "seeps" and to determine the source and concentrations of PCB in the "seep" water. These investigations included: the installation and sampling of monitoring wells near "Seep 1" and in the perimeter dike of the lagoons; sampling and analysis of residuals in the HRDLs; sampling and analysis of "seep" water; and sampling of soils in the vicinity of the seeps. The results of the investigations indicated that the residuals are approximately 12 feet thick and overlie native topsoil and peat. The PCB concentration of the soil/residual samples collected between 1985 and 1986 ranged from below detection to 20 mg/kg. PCB concentrations ranged from 0.005 mg/kg to 1,200 mg/kg in the soil/residual samples collected in the HRDLS during the 1989 HRDL investigation. The PCB concentration in water samples collected from the "seeps" ranged from 0.015 ug/L to 4.4 ug/L.

In 1989 Allied conducted several investigations to: further evaluate the extent and distribution of PCB in the HRDLs; further evaluate possible groundwater quality impacts resulting from the HRDLs; further evaluate possible PCB migration from the HRDLs; and further evaluate "Seep 2" to determine its source, the water quality and to confirm that it is not a leachate seep resulting from the HRDLs. The investigations included: sampling of the residuals at nine locations in the HRDLs ; installation of four additional perimeter monitoring wells; sampling and analysis of water in the existing and new perimeter wells; installation, sampling and analysis of a monitoring well at "Seep 2"; sampling of soils at two locations near "Seep 2"; and sampling of soil downgradient of the pump house drain located in the northeast corner of the Bryant HRDL.

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In October 1988, the Type III landfill was investigated and nine soil borings were installed and sampled. PCBs were only detected in one sample (0.012 mg/kg). Twenty-six soil borings were collected from an area east of the landfill around monitoring well MW-5, in 1989. Fourteen samples were collected from 10 borings and analyzed for PCB. The resulting PCB concentrations in the soil samples ranged from 0.06 to 37 mg/kg. Quarterly groundwater sampling of the landfill perimeter wells began in 1985. Groundwater samples collected and analyzed during the monitoring program had PCB concentrations ranging from non-detectable to 2.1 ug/L.

Numerous investigations of Bryant Mill Pond sediments have been conducted. A hydrogeological investigation was performed in the Bryant Mill Pond area in 1990 to obtain groundwater information related to possible remedial alternatives. Fifteen groundwater monitoring wells (MW-101 to MW-114) and two test wells (TW-1 and TW-2) were installed as part of a Phase I investigation. Phase II included installation of two additional monitoring wells (MW-115 and 116). Groundwater sampling was conducted at 17 wells in 1989. Soil borings were also installed on the western perimeter of the Bryant Mill Pond as part of a stream diversion plan in July and August 1989. Out of the 23 borings that were installed, 14 samples were collected from 10 borings and analyzed for PCB.

After the AOC was signed, field work started on the Allied OU Remedial Investigation. The investigation included the installation and sampling of 34 borings to characterize the residuals and soil. Geotechnical sampling and laboratory testing were conducted to provide data for assessing the stability of the dikes and the strength and deformation characteristics of the residuals. The hydrogeological investigation included an inventory of the existing monitoring wells, installation, construction, rehabilitation and decommissioning of monitoring wells and piezometers. Twelve shallow monitoring wells were installed, as well as ten deep wells, one residuals monitoring well, two replacement wells and six piezometers. One round of groundwater samples was collected from each of the 25 new wells and from 27 selected existing wells. The sediment investigation activities involved collection of sediment samples from the former Bryant Mill Pond and along Portage Creek. The activities conducted included the installation and sampling of 12 soil borings, collection of five stream bed samples from Portage Creek, and probing and collection of sediment cores in the stream bed. Residential property sampling was also conducted to assess the potential presence of PCB in the former floodplain sediments or surficial soils.

In general terms, the BBL investigation results indicate that the average PCB concentration is 144.5 mg/kg (13 samples) in the Bryant HRDL, 5.53 (20 samples) in the Bryant FRDL, 31.2 mg/kg (36 samples) in the Monarch HRDL, 515.01 mg/kg (5 samples) in the Landfill Strip, 179.8 mg/kg (47 samples) in the Western Area, and 49.42 mg/kg (32 samples) in Bryant Mill Pond.

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Additional monitoring wells were installed and sampled between 1994 and 1999. The results of this sampling is included in the Addendum to Tech Memo No. 7 (BBL, 1999). An RI, summarizing the work at the Allied Site, was submitted to MDEQ last fall.

FORMER ALLIED PAPER KING MILL LAGOONS

Investigation activities were conducted in 1994 at the former King Mill to determine the presence of PCB associated with the mill's former lagoons and clarifiers. Six soil borings were installed and sampled in the area of the former lagoons and two soil borings were installed and sampled in the area of the former clarifiers (Tech Memo 15). The maximum depth of residuals was found at 9 feet below ground surface. The PCB concentrations in the soil samples ranged from not detected to 79 mg/kg.

KING STREET STORM SEWER

Investigation activities were conducted in 1994 at the King Street Storm Sewer to assess the potential impacts of stormwater runoff or drainage from the 48-inch diameter pipe that drained King Mill wastewater to the Kalamazoo River (Tech Memo 15). Grey clayey soils with fibers were observed in eight of the eleven borings. These soils had a thickness of 1.0 to 2.5 feet and a maximum depth of 3.0 feet below ground surface. The PCB concentrations in the soil samples ranged from 0.63 mg/kg to 32 mg/kg.

A-SITE

A remedial investigation was performed at the Willow Blvd/A-Site, including residuals characterization by drilling and sampling of eight borings (3 at A-Site) and ten sediment cores (5 near A-Site). Five groundwater monitoring wells existed at the A-Site at the time of the RI (1993/94). To supplement the existing groundwater monitoring wells, 19 additional monitoring wells were installed (15 at A-Site). One round of groundwater sampling was conducted in October 1993.

The soil and sediment investigation included the collection and analysis of background soil samples, reconnaissance soil samples, residential soil samples, and area east of Davis Creek soil samples, and a geotechnical sampling and analysis program. Background soil sampling was conducted at one location upgradient of the A-Site (AMW-3A). The PCB concentration in the soil/residual samples collected ranged from not detected to 290 mg/kg. The PCB concentration in the groundwater samples collected ranged from not detected to 1.5 ug/L.

Previous investigations indicated that residuals extend to the southern portion of the A-Site. To assess the possible lateral and vertical extent of the residuals, a soil reconnaissance survey was conducted outward from the southern perimeter of the A-Site. The area was probed with a shovel to determine if residuals were present. A core was

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collected at each location (3) at the edge of the residuals. Two samples were collected from each boring. The PCB concentration in the soil/residual samples ranged from not detected to .77 mg/kg.

Previous investigations indicated that residuals were present in a floodplain area east of Davis Creek. To assess the possible lateral and vertical extent of residuals in the area east of Davis Creek, eight borings were installed, two samples collected from each location. The PCB concentration in the soil/residual samples ranged from not detected to 36 mg/kg.

Geotechnical sampling was conducted to provide data for assessing the stability of the dikes at the A-Site and the strength and deformation characteristics of the residuals. The geotechnical investigation includes an evaluation of piezometer information and the collection of disturbed and undisturbed samples of soil and residuals.

Additional data was collected at the A-Site between 1995 and 1999. (RIFS Willow/A-Site June 1999) The 1995 activities included re-sampling of all existing monitoring wells. Additional sampling was conducted at AMW-3A. Two borings were installed and 21 samples were collected. Seven additional borings were installed in 1998. Also, an additional 46 samples were collected from 13 borings on and near residential properties.

In response to concerns of a local property owner over the possible breach of a potential former lagoon area south of the A-Site berm, 46 samples were collected from nine soil borings. They also collected 20 samples from 27 additional borings in the area South of the A-Site berm. The PCB concentration in the soil/residual samples ranged from not detected to 61 mg/kg.

g) **Estimated mass of PCBs within lagoon, landfill, or impoundment (prior to initiating any remedial activities that were conducted). Please include all calculations and assumptions that lead to this estimate.**

In connection with its work at the site, BBL has estimated the PCB mass based on the classification of soils/residuals in soil borings in each disposal area, as well as the results of PCB samples that were collected from those borings. These estimates assume a uniform interval of residuals across the area and use an average PCB concentration from all of the samples collected within that area. The bulk density used was calculated from the geotechnical data collected from residuals in the Monarch HRDL and the Bryant FRDL, as well as the A-Site and King Highway Landfill. BBL's estimates are noted below. MHI performed a more refined analysis of PCB mass, which follows thereafter.

'A'-Site, Area East of Davis Creek and Area South of 'A'-Site Berm

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BBL has estimated the mass of PCBs within the A-Site, the Area East of Davis Creek and the Area South of A-Site Berm as 4,700 kg. Georgia Pacific has estimated the PCB mass in A-Site only, for the time period it was used by both Allied and Georgia Pacific, at 5,779 kg.

It is MHI's position that Allied was responsible for approximately 50% of the PCB mass in the A-Site and all of the mass in the Area East of Davis Creek and the Area South of the A-Site Berm.

Monarch HRDL

BBL has estimated the mass of PCBs within the Monarch HRDL as 1,304 kg.

Bryant HRDL

BBL has estimated the mass of PCBs within the Bryant HRDL as 12,804 kg prior to 1999.

Bryant FRDL

BBL has estimated the mass of PCBs within the Bryant FRDL as 98 kg prior to 1999.

Former Type III Landfill

BBL has estimated the mass of PCBs within the Former Type III Landfill as 2,858 kg.

Western Disposal Area

BBL has estimated the mass of PCBs within the Western Disposal Area as 25,774 kg.

The PCB mass has also been estimated using the Thiessen polygon method to weight data from each boring in proportion to their representative areas. The polygon areas were determined by connecting the adjacent boring locations and constructing perpendicular bisectors to each connecting line. Instead of using an average residuals thickness across the entire disposal area, the specific residuals interval from each individual boring was applied to the polygon area associated with that boring. In addition, the length weighted PCB concentration from each individual boring was applied to the polygon area, instead of averaging all of the PCB data. Two different bulk density estimates were used for this method. The first bulk density was calculated by BBL using the geotechnical data collected from the Monarch HRDL and the Bryant FRDL. The average bulk density for these two areas was used for the other disposal areas at the site. The solids mass was also calculated using the percent solids data collected during the remedial investigation and assuming a porosity of 40%.

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A sensitivity analysis was also conducted to determine the error associated with the estimates. This involved removing a sample point, re-drawing the polygons and calculating a PCB mass. This was continued until each sample point had been removed. The sensitivity analysis provides a range of PCB mass estimates for each disposal area. The root mean square error can then be calculated for each range of estimates.

A table comparing the BBL and Thiessen methods, as well as the backup calculations and polygon map, are contained Appendix 29G. Please note that the mass estimates for the Bryant HRDLs and FRDLs contained in Table 29g-1 represent the PCB mass present prior to the Bryant Mill Pond Sediment Removal Action. During the period from October 1998 to April 1999, approximately 2,247 kg of additional PCB was placed in the Bryant HRDL and 1,236 kg was placed in Bryant FRDLs 3 and 4 as a result of the Bryant Mill Pond Sediment Removal Action.

The PCB mass estimate provided by Allied for the A-Site is the same as those provided by Georgia Pacific. This mass estimate includes the entire volume of residuals at the A-Site, covering periods of use by Allied and Georgia Pacific. The PCB mass in the Area East of Davis Creek and the Area South of the A-Site Berm have been calculated separately.

h) Construction drawings or as-built drawings illustrating the size, dimensions, and configuration of the lagoon, landfill, or impoundment, and the deposition of waste materials within the lagoon, landfill, or impoundment.

Construction drawings or as-built drawings are not available for the lagoons and landfills at the Allied site.

As stated in the response to Question 29 (c), Allied began dewatering sludge from the primary wastewater treatment systems in the mid-1950s. Solids were settled out in primary clarifiers (Bryant and Monarch) and subsequently dewatered in lagoons before being landfilled. Prior to being used as a disposal area, the area containing the Bryant HRDL, Bryant FRDL and Monarch HRDL was a low-lying marsh and celery field. The average surface elevation of the Bryant HRDL was approximately 795 feet above mean sea level while the elevation in 1991 was 810 feet.

The lagoon dikes were not engineered, but rather built up over time to meet the need to contain the accumulating sludges. The location of the dikes are shown in Appendix 29-H. The source of the material used to build the dikes is unknown, but it was probably obtained from an on-site sand borrow pit in the early years. In later years, stabilized gravel was brought on-site. The residuals in the HRDL are approximately 12 feet deep and the dikes are approximately 15 feet high. The average slope for most locations in 1991 was approximately 1:1. At that time the exterior slopes of the dikes were vegetated with mature trees and underbrush in most locations.

Sloughing occurred in certain limited areas and erosion control work was conducted in 1993 on a 290 feet long area on the south side of the Bryant HRDLs to correct the

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problem. Rock-filled wire mesh baskets were installed on the portion of the dike that was below the 100-year flood elevation of Portage Creek. The portion of the dike that was above the 100-year flood elevation was re-vegetated.

The results of the geotechnical investigation conducted by BBL as part of the remedial investigation indicate that the soils in the berms are generally loose to medium dense granular material that can be classified as silty sands. Gravel is also present in varying percentages. Some upper portions of the berms appear to have been built out onto paper residuals as indicated by the soil boring logs. These logs also indicate that up to 10 feet of berm material is found above a layer of paper residuals. In most cases, more berm material was found below the paper residuals in the borings indicating that the berms may have been raised several times.

Work on the final cover system for the HRDLs began in 2000 and is largely completed. This work included berm stabilization with sheetpile installation to reduce the potential for PCB migration into Portage Creek via berm erosion or failure. The sheetpile location and final berm elevations are shown in the figures included in Appendix 29-H and described in the Allied Paper, Inc. Operable Unit Bryant HRDL/FRDLs Closure, Engineering Design Report (BBL, 1999)

See Allied Paper, Inc. Operable Unit, Bryant HRDL/FRDLs Closure, Engineering Design Report, BBL 1999; Technical Memorandum No. 7; Allied Paper, Inc. Operable Unit, BBL, March 1994; Description of Current Situation Report, BBL 1991/1992

i) Any information regarding known or suspected releases or spills of materials from any lagoon, landfill, or impoundment into the Kalamazoo River or its tributaries.

'A'-Site

Releases from the A-Site: a letter from BBL to Scott Cornelius, dated February 17, 1999, states that a local resident told of a breach in the A-Site's southern berm (caused by a burrowing animal) occurring adjacent to his property. This event had occurred approximately 30 years earlier. According to the resident, paper-making residuals were released to his property.

Area East of Davis Creek

No information is available on releases from the Area East of Davis Creek.

Area South of 'A'-Site Berm

No information is available on releases from the Area South of the A-Site Berm.

Monarch HRDL

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No information is available on releases from the Monarch HRDL.

Bryant HRDL/FRDL

The Allied Paper, Inc. – Bryant HRDL/FRDLs Engineering Design Report (BBL, 1999) states that slump and erosion features are visible in a number of locations on the outside face of the berm. Examination of these features indicated that they generally appear to be slow moving surface slumps approximately 1 to 2 feet deep and several feet long. Most of the slump features are small, but occasionally connect laterally to each other to create an unstable face, where there is little woody vegetation. The scarps are usually located on the slope itself and typically have not encroached significantly on the crest. Work on the final cover system for the HRDLs began in 2000. This work included berm stabilization with sheetpile installation to reduce the potential for PCB migration into Portage Creek via berm erosion or failure. The sheetpile location and final berm elevations are shown in the figures included in Appendix 29-H and described in the Allied Paper, Inc. Operable Unit Bryant HRDL/FRDLs Closure, Engineering Design Report (BBL, 1999). A slump on the Monarch HRDL berm was repaired in 1994.

In addition, residuals removal activities outside of the Bryant HRDL dike/sheetpile wall were conducted in 2000. These activities consisted of: probing activities to determine the possible presence of residuals; focused investigation (test pits) of areas along the sheetpile; collection of samples for PCB analysis during the probing/test pit excavations; residuals excavation activities at locations selected based on the results of the probing/test pits; and post-excavation sampling at certain excavation locations. The excavation of residuals was conducted in four areas. The excavated material was placed onto the Bryant FRDLs prior to capping.

In an August 1976 MDNR Industrial Wastewater Survey, "leachate" from the company's sludge lagoons was reported to be entering a ditch and flowing into Portage Creek. (SA 029820-029828) The "leachate" was sampled by MDNR after it was combined with the ditch flow. PCB Aroclor 1242 was detected at a concentration of 0.40 ug/L. It is uncertain whether the "leachate" sampled by MDNR was in fact leachate emanating from the lagoons. There were groundwater springs that surfaced outside the perimeter of the lagoons and then entrained floodplain sediment. It is likely that these springs were mislabeled by MDNR as "leachate." A July 1977 MDNR Industrial Wastewater Survey also noted that the underdrainage from the sludge disposal area. PCBs were not detected in the sample collected. (SA 033499- 033507). See also response to Question 29-F.

A Water Resources Commission river sampling survey conducted on May 21, 1968 found that there was one area of the Bryant HRDL/FRDL where sludge was present outside of the dikes. (MDNR 002488).

Former Type III Landfill

No information is available on releases from the Former Type III Landfill.

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Western Disposal Area

No information is available on releases from the Western Area.

j) **An indication whether the lagoon, landfill, or impoundment is, or ever was, lined and, if so, the type of liner and an estimate of its hydraulic conductivity.**

There is no indication that any of the lagoons, landfills or impoundments were ever lined.

k) **To the extent not answered in Question 28, for any discharges to a POTW, provide any and all information on the amount of sludge produced to the POTW, the amount of sludge produced at the POTW as a result of the treatment of discharges to the POTW from (at least in part) your property, the location of the disposal site(s) for the POTW-sludge, and the concentration of PCBs in the POTW sludge.**

'A'-Site

There were no discharges to the POTW from the 'A'-Site.

Area East of Davis Creek

There were no discharges to the POTW from the Area East of Davis Creek.

Area South of 'A'-Site Berm

There were no discharges to the POTW from the Area South of the A-Site Berm.

Monarch HRDL

There were no discharges to the POTW from the Monarch HRDL.

Bryant HRDL

Decant water from the Bryant HRDLs began being recycled back to the Bryant Clarifier in the late 1970s, and this was continued until mill operations ceased. Surface water runoff from the Bryant HRDLs has been discharged to the POTW from 1990 to the present. The amount of sludge produced at the POTW is unknown.

Bryant FRDL

Decant water from the Bryant FRDLs began being recycled back to the Bryant Clarifier in the late 1970s, and this was continued until mill operations ceased. Surface water runoff from the Bryant FRDLs has been discharged to the POTW from 1990 to the present. The amount of sludge produced at the POTW is unknown.

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Former Type III Landfill

There were no discharges to the POTW from the Former Type III Landfill.

Western Disposal Area

There were no discharges to the POTW from the Western Disposal Area.

Outfalls and Releases:

Question No. 30: Outfalls to Kalamazoo River

Please identify and describe any and all outfalls to the Kalamazoo River or its tributaries, past or present, from your property. Please include dates of use, and each outfall's source and the receiving body. Please include a figure identifying the source and location of each outfall. If different than the wastewater effluent data requested in Question 28, please provide all available PCB, BOD, TSS, TDS and TVS data for each of these outfalls.

The following schematics depict the wastewater streams at the three Allied mills for various dates: SA 030395, SA 029790, SA 028936, SA 029215, SA 034350, SA 030396, SA 038062, SA 034351, SA 051992, SA 051994, SA 051995, and SA005640.

See also, responses to Question 28. All available BOD, TSS and TDS data have been summarized in Tables 14a-1, 14a-2 and 14a-3.

Question No. 31: Releases to Kalamazoo River

To the extent not otherwise provided above, please provide any information you have related to the amount of paper waste, sludge, stormwater, treated or untreated effluent, or other materials from your facilities released to the Kalamazoo River or its tributaries from your property. To the extent possible, please describe the nature of such releases, and the dates thereof.

MHI has no information responsive this question.

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Question No. 32: PCB Releases to Kalamazoo River

Identify all known spills, leaks, releases, or acts of disposal of PCBs from your property or facility to the Kalamazoo River, its tributaries, or to any other property. For each, please include the date(s) of each release, and their nature, source, location, and amount. Also, describe any remediation undertaken. Provide a location map if possible.

MHI has no information to suggest there have been spills, releases or other disposals to the Kalamazoo River, its tributaries, or to any other property, except for what is identified elsewhere in the answers to this Questionnaire.

Question No. 33: PCB Spill Information

Identify all known spills, leaks, releases, or acts of disposal of PCBs on your property. For each, please include the date(s), and its nature, source, location, and amount. Also, describe any remediation undertaken. Provide a location map if possible.

MHI has no information to suggest that there were spills, releases or other disposals on its property, except for what is identified in the answer to Question 35.

V. OTHER QUESTIONS

Use of PCBs and PCB-Containing Materials:

Question No. 34: Use of PCB Materials

Please identify and describe any operations on your property, other than those described above, that included the use of any PCBs or materials containing PCBs. For each of the operations described, please provide the following information (and reference any and all records or documents that indicate):

a) **The dates of such operations.**

See response to Question 35; otherwise, not applicable.

b) **The PCBs or PCB-containing materials used.**

See response to Question 34(a).

c) **The handling, fate, and disposal of the PCBs or PCB-containing materials**

See response to Question 34(a).

Question No. 35: Presence of PCB Materials

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Please provide the following information (and reference any and all records or documents that indicate, identify or describe):

a) **The type, quantity, and disposal of any hydraulic oils, if any, used at your property that were known or suspected to contain PCBs.**

Allied's hydraulic oils did not contain PCBs. (See SA 31997, SA 37395, SA 48411, and SA 48414). To the extent sporadic documents might suggest that Allied purchased Aroclor 1254 at some point during its operations, to the best of MHI's knowledge, it would have only been for use in transformers and capacitors.

b) **The number and handling of transformers and capacitors at your property.**

Depending on the year, Allied had between 38 and 50 transformers. (See SA 23061-23076, SA 37484, SA 37743-37745, SA 37747-37749, SA 37773-37774, SA 37844, and SA 44805-44826). Appendix 35B-1 lists each transformer by its Serial Number and notes its operational status as of 1988 (i.e., whether still in use, in storage, or disposed of).

In addition to the transformers, there were a number of capacitors on site. For more information, see SA 13481, SA 36911, SA 37753-37754, SA 37767-37768, SA 37845, SA 44807, and SA 44813.

c) **Please describe the procedures and results for testing for PCB content in the materials listed in a) and b), above, at your property. If PCBs were found, please describe the procedures followed for addressing the PCBs contained in the materials.**

Allied's transformers were periodically sampled for PCBs. Appendix 35B-1 compiles the PCB results for each transformer tested, based on documents from 1981, 1982, 1983, 1984 and 1987. All transformers with PCB content greater than 50 ppm ultimately were either disposed of or were retrofilled. There are no PCB sampling results for Allied's PCB capacitors.

The general procedure for transformers or capacitors containing PCBs was either to gradually phase them out of operation and dispose of them off-site or to retrofill their contents with fluids that did not contain PCBs. (See SA 37442, SA 37827, and the deposition transcript of Al E.Vickery, 11/13/92, p. 63). Furthermore, all PCB-containing transformers and capacitors were properly labeled in accordance with applicable regulations. (See SA 37446, SA 37772, SA 44806, and SA 44813). Appendix 35B1 notes when individual transformers were disposed of. MHI has only sporadic information regarding Allied's disposal of capacitators. (See SA 37754, SA 37845, and SA 37854).

There were only a few instances when transformers were found to be leaking. In May of 1981, an EPA inspection report noted leaks in some of Allied's transformers. (See Appendix 35B-1.) Additionally, several small leaks were uncovered by Allied later that

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year. (See SA 23072). Leaks were corrected when they were observed. (See the deposition transcript of Vickery, 11/13/92, p. 76). Furthermore, all transformers had secondary containment or curbs around them to contain leaks. (See the deposition transcript of Jack Gilman, 1/18/93, p. 93). MHI has no information suggesting that any of Allied's capacitors ever leaked.

Environmental Information and Analytical Data:

Question No. 36: Environmental Citations

Please identify and describe any and all notices of violation (NOV), fines, administrative orders, court orders, lawsuits, penalties, or other environmental citations issued, sought, or imposed by any federal, state, or local governmental body related to your property, to operations on your property, or to releases from your property (including discharges to POTWs).

Over its operating history, Allied has received Notices of Noncompliance and other communications from the State of Michigan related to violations such as bypassing of the waste treatment facilities and/or exceedance of NPDES permit limitations for BOD and/or TSS. (See, e.g., MDNR003848-003849, MDNR004793-004794, MDNR004824, MDNR003963-003964, MDNR004798-004799, MDNR004800-004801, MDNR004802-004803, MDNR003539-003541, MDNR003665-003666, KA04800323-04800324 and MDNR003882-003883).

In addition, Allied has received Sanitary Landfill Evaluation Reports indicating noncompliance with Michigan solid waste regulations such as failure to properly cover its sanitary landfill, disposal of refuse into the flood plain of Bryant Mill Pond, and erosion of the landfill. (See, e.g., 9000284, SA009857, KA04500261, SA009854, KA04800185, MDNR002544, SA009843, SA009841, SA009831, SA009821, SA009818, SA009817, SA009816, SA009815, SA009812, SA009810, SA009809, SA009806, SA005498, SA030624, SA001766, SA049231-049233, SA001756, SA001755, SA020622, SA001765, SA001722, SA001726, SA001729, SA006248, SA001725 and SA006249.

On May 12, 1982, a complaint was filed against Allied by the USEPA under TSCA alleging the leakage of PCBs from a transformer on Allied property. Allied was fined $300 for use and storage violations, and duly paid this fine. (See SA048842, SA048416, SA044835, and SA038684-038689.)

On December 2, 1987, suit was commenced in the United States District Court for the Western District of Michigan in the matter of *Kelley v. Allied Paper, Inc.*, alleging causes of action pursuant to various federal and state statutes resulting from the alleged release of PCBs to Portage Creek. On July 24, 1990, this action was stayed pending the outcome of the remedial efforts at the site. That stay remains in effect.

Allied also entered into an Administrative Order on Consent with Georgia Pacific and Simpson Plainwell to perform a remedial investigation at the site. In addition, Allied has

entered into an Administrative Order on Consent with the USEPA to perform a removal action at the Bryant Mill Pond. That work has been completed.

See Appendix 36-2 for a detailed summary of all non-wastewater citations. See Appendix 36-1 for a detailed summary of all wastewater-related citations.

Question No. 37: PCB Sampling Data

To the extent not covered elsewhere in this questionnaire, please provide all PCB analytical data for sediments, soil, groundwater, and surface water at your property, or at any off-site facility described in Question 29. Please provide the concentration levels of PCBs for all sampling events collected on your property and during sampling events under your control. Please segregate data by media sampled, and list by sampling location and date. Please describe, reference (by document and relevant page numbers), and produce to the depository any documents with data relevant to answering this question that were not produced to the depository as part of your initial production. Please reference (by document and relevant page numbers) all documents in the depository that were relied on to answer this question.

In 1982, Allied took two samples from an area where a leaking transformer used to be located. One had less than 10 ppm PCBs and the other had 65 ppm PCBs. These results are attached. (See SA 228078-22808).

The results of the sediment sampling of Bryant Mill Pond conducted as part of the EPA Sediment Removal Action are summarized in Appendix 37-A. The sample location map is also included in Appendix 37-A. Appendix 37-A also includes the results of: Portage Creek surface water sampling conducted during the EPA Sediment Removal Action at Bryant Mill Pond; additional groundwater sampling at the former Landfill; and Bryant Mill Pond seep sampling conducted by CDM in May 2000.

For additional sediment and surface water PCB data, see the following reports: Description of Current Situation, BBL, May 1991; Draft Technical Memorandum 7, Allied Paper, Inc. Operable Unit, BBL, March 1994; Draft Technical Memorandum 16, Surface Water Investigation, BBL, March 1995; Draft Remedial Investigation, Allied Paper, Inc. Operable Unit, BBL, November 2000; BBL Electronic Database (1999). See also discussion in response to Question 28(f).

For other miscellaneous PCB data, see SA 040666, SA 029858; SA 030680; SA 003905, SA 031994, SA 044177, SA 038861, SA 039275, SA 039276, SA 039277.

Question No. 38: Groundwater Flow Direction

Please attach a figure delineating the groundwater flow direction on your property.

Hydrogeological investigations were conducted at the Bryant Mill site and the Monarch Mill site as part of the remedial investigations conducted by BBL, as well as earlier

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investigations of the site. These investigations included installation of groundwater monitoring wells and piezometers. Groundwater flows in an easterly direction towards Portage Creek from the Bryant Mill site (between Alcott Street and Cork Street). Groundwater from the Monarch Historical Residual Dewatering Lagoon flows north towards Portage Creek. The potentiometric surface map is included in Appendix 38-A.

A hydrogeological investigation was not conducted at the King Mill but groundwater would be expected to flow northeast towards the Kalamazoo River.

Question No. 39: Depth to Groundwater

Please provide depth to groundwater at your property.

The depth to groundwater at the Allied site ranges from 4 feet to 38.5 feet below ground surface. Static water elevation data for the site is included in Appendix 39-A.

A hydrogeological study was not conducted at the King Mill, therefore the depth to groundwater is unknown.

Question No. 40: Remediation Activities

In addition to remedial activities discussed in Question 29 above, please provide information regarding any environmental response activities potentially involving PCBs or PCB-containing materials conducted on your property, or on the Kalamazoo River, its tributaries, or other abutting property, at your direction or under your control. Please indicate when it was done, what was done, the location, the expenses incurred, the results, and, if it has not concluded, when the environmental response activity is expected to conclude.

King Street:

MHI conducted remedial activities at the King Street Storm Sewer in 1999. Sheetpiling was installed within 10 feet of the riverbank between the storm sewer outfall channel and the western limits of the excavation and along the western edge of the storm sewer outfall channel. Approximately 350 linear feet of sheetpiling was installed in June 1999. Silt fencing (approximately 1,100 linear feet) was installed beginning in June 1999 along the perimeter of the King Street Storm Sewer site. Silt curtains (approximately 330 linear feet) were installed in the river and in the storm sewer outfall channel. Approximately 5,000 yd^3 were excavated in June 1999. A bypass pump was used to pump the flow from the storm sewer, around the excavation, to the Kalamazoo River. The excavated material was gravity dewatered, as necessary, before being transported to King Highway Landfill Cell 4. Upon arrival at Cell 4, the material was stabilized with fly ash and wood chips. Water from the excavation activities was pumped to the on-site water treatment system. The water was treated, sampled, and discharged. The cost of this remediation was $480,000.

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Reference: BBL, 2000
Removal Action Summary
King Street Storm Sewer
February 2000

King Mill:

In 1999, 11,314 yd^3 of residuals were removed from Lagoon ES, located on the former King Mill property. Excavated residuals were removed, gravity-dewatered (as necessary) and transported to the King Highway Landfill Cell 4 for disposal in September and October 1999. Upon arrival at Cell 4, the material was stabilized with fly ash. Water from excavation activities was placed in an on-site frac tank and transported to the water treatment system at the King Highway Landfill. The water was treated, sampled, and stored in frac tanks until analytical results indicated that discharge was appropriate. Excavation activities ceased before all suspected residual waste was removed from Lagoon EW; the disposal site (King Highway Landfill), could not accept any waste after October 7, 1999. This cost of this remediation was $330,000.

Reference: BBL, 2000
Response Activities Summary
Former Allied Paper, Inc. King Mill Lagoons
March 2000

Monarch Mill:

No remedial activities have been conducted at the Monarch Mill. The site has been razed and redeveloped.

Bryant Mill:

During the period from October 1998 to April 1999, EPA removed approximately 150,000 cubic yards of PCB-containing soil and sediment from the former Bryant Mill Pond (the area within the 790 foot elevation). Confirmatory sampling was conducted prior to backfilling the excavated areas with certified clean fill. At locations where the performance standard goal of 1 mg/kg PCB was not initially met, the EPA conducted additional excavation and confirmatory sampling, as appropriate. The excavated sediment was placed in the Bryant HRDL/FRDL. The cost of this remedial activity was $7.5 million.

The final cover system for the Bryant HRDL/FRDL has been largely constructed (a small portion remains to be completed). The final cover system includes: 12-inch thick sand gas venting layer; 30-mil. PVC flexible membrane liner; geosynthetic drainage composite layer; 24-inch thick soil protection layer; and 6-inch vegetated topsoil layer. The final cover system also includes a permanent stormwater retention and sedimentation basin. The system will collect precipitation and convey it to the sedimentation basin, which will discharge to Portage Creek. A sheetpile wall has also been installed along Portage Creek to provide the necessary structural support and

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groundwater management. The objective is to reduce the potential for PCB migration into Portage Creek via berm erosion or failure and groundwater flow. The cost of sheetpiling was approximately $3 million: the capping of the Bryant HRDL and FRDL is expected to be in the range of $3.6 million for construction. These figures do not include engineering costs, which hare billed through BBL and included in the figures set forth below. See response to Question 29(d).

Question No. 41: Funding Information

Please indicate how much money, to date, has been:

a) **paid on your behalf, or is owed by you, to the EPA, MDEQ or any other government or governmental unit related to the RI/FS, and/or to other oversight agencies; and**

Allied/MHI has paid MDEQ approximately, $1,331,686 in oversight costs. Those costs are not easily divisible between the River and various operable units; however, the majority of the oversight costs likely relate to the River. Allied/MHI has also paid EPA $49,552 in oversight costs for a fence project.

b) **spent on your behalf, or is owed by you, for investigation, remediation, and consultant/contract fees and costs in relation to the Kalamazoo River Superfund Site (not including attorney's fees and costs, and not including money paid or owned to any government or governmental agency).**

Through October 31, 2000, Allied/MHI has spent approximately $31,294,416 (excluding legal fees and internal costs) on the Kalamazoo River Superfund Site. Given the period of time over which these funds have been spent, and the limitations of historic accounting systems, the precise amount may be higher. Of the total, approximately $22,190,272 has been spent at the Allied Site (including the $7.5 million Bryant Mill Pond cash out settlement); approximately $1,208,609 has been spent on the A-Site; $480,000 has been spent on the King Street Storm Sewer; $330,000 has been spent at the former King Mill property; and $7,085,535 has been spent investigating the Kalamazoo River.

In answering Question 41, please segregate all costs and expenses between those incurred in relation to the Operable Unit(s) related specifically to the Kalamazoo River, and those incurred in relation to other Operable Units (please specify).

Appendices

SUMMARY TABLE 1

Table 1
Allied Mills -- Summary of Annual Paper Production De-Inking/Recycling and Wastewater Parameters

Mill	Parameter	Units	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
																								Bryant Mill C/D wastewater to Monarch											
																		Bryant Clarifier discharges to Kalamazoo WWTP							Portion of Bryant clarifier effluent to Monarch										
Bryant	Paper Production	(ton/day)	225	181	225	168	200	200	200	175	200	200				214	191	200	200	200	200	200	200	200	134	218	208	228	223	198	222	231	222	241
Bryant	De Ink Pulp	(ton/day)														89#	102#	110*		56 8*	stopped de-inking (sold Mill A)					-		-		-	-		-	
Bryant	Waste Paper Input	(ton/day)					166	161	174																									
Bryant	Clarifier Flow	MGD		6 3	5 8	5 6	6 6	5 7	5 1	2 3	4 2	4 5		3 3	4 2	3 9	3 0	2 1	1 6	1 2	1 1	0 9	0.8			2 3	3 0	1 9	2 8	1 5	1 7			
Bryant	Influent BOD	(ton/day)		11 9	15 4	9 3	16 2	12 7	13 5	12 6		3 5		7 0	8 9	6 5	5 2	7 1	7 4	4 8			0 5											
Bryant	Influent DS	(ton/day)				20 4	44 8	33 7	31 2					26 2	23 4	17 1	15 7	14 8	20 2	15 3														
Bryant	Influent SS	(ton/day)		50 2	37 2	43 3	53 1	42 3	44 1	30 7		21 4		34 2	31 1	27 1	25 2	19 0	19 2	16 1			4 8											
Bryant	Effluent BOD	(ton/day)		7 7	8 1	7 5	10 9	7 6	7 6	7 7	6 8	0 7		5 3	5 7	4 6	2 6	3 3	4 7	2 6			0.2			1 0			1 5	0 7	0 7			
Bryant	Effluent DS	(ton/day)				27 7	5 7	5 5						25 9	24 6	15 3	13 3	12 7	18 8	12 8						5 6			7 5	4 1	4 5			
Bryant	Effluent SS	(ton/day)		23 7	18 5	18 0	19 9	12 2	7 1	7 1	10 5	0 6		9 0	3 7	2 1	1 4	0 9	0 4	0 5	0 1	0 1	0.1			0 7		0 1	0 5	0 3	0 2			
Bryant	Sludge Estimate	(ton/day)		26 4	18 7	25 2	33 2	30 1	37 1	23 6		20 8		25 2	27 5	25 0	23 8	18 1	18 8	15 6			4.7											

Mill Re-opened Sept 1959 and no longer de inked (Coating only 1/57 11/57 mill idle 1/58 - 9/59)

Mill	Parameter	Units	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Monarch	Paper Production	(ton/day)		103	100			50	50	40	50	50	50	50	50	67	50	42	40	50	50	50	50	42	37	35	37	38	37	mill closed				
Monarch	De Ink Pulp	(ton/day)				- - mill down -			no deinking																					mill closed				
Monarch	Waste Paper Input	(ton/day)																												mill closed				
Monarch	Clarifier Flow	MGD		5 5	3 6	3 9	5 0	1 9	0 8	1 5		1 6		1 8	1 7	1 8	2 0	2 8	3 3	3 7	3 1	3 0		3 1	4 0	2 6	2 8	2 4	1 4	0 7	0 4	0 5	0 4	0 3
Monarch	Influent BOD	(ton/day)		7 4	5 0			2 9	1 3			0 9		1 4	1 3				2 5	2 9														
Monarch	Influent DS	(ton/day)			2 9 9	1 8 8	3 0 9	3 9	1 7					3 8	4 4	3 0	3 4	2 3	8 8	9 4														
Monarch	Influent SS	(ton/day)		2 0 5	1 9 8	2 0 4	2 9 2	1 5 9	6 2			4 6		8 4	6 6	5 9	6 7	2 9	10 1	13 2														
Monarch	Effluent BOD	(ton/day)		5 2	4 4			0 9	0 2	0 4		0 2		0 2	0 1	0 2	0 3		1 0	0 7				0 4	0 3	0 2	0 2	0 2	0 2	0 3	0 2		0 2	0 3
Monarch	Effluent DS	(ton/day)					3 0 4		2 8					2 9	3 6	2 5	2 5	4 1	7 4	7 7				5 1	7 5	5 9	8 1	3 9	3 0	1 6	1 0			
Monarch	Effluent SS	(ton/day)		8 5	8 8	9 8	6 3	1 3	0 3	0 1		0 5		0 7	0 4	0 3	0 3	0 4	0 4	0 3	0 1	0 2		0 2	0 1	0 1	0 1	0 1	0 0	0 2	0 1		0 1	0 1
Monarch	Sludge Estimate	(ton/day)		12 0	11 0	10 7	23 0	14 6	5 9			4 1		7 8	6 2	5 6	6 4	2 5	9 8	12 9														

Mill	Parameter	Units	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
King	Paper Production	(ton/day)	170	192	193	200	200	200	200	200	200	200	200	200	200	190	184	200	200	200	Mill Closed													
King	De Ink Pulp	(ton/day)						150*				192*				stopped de inking																		
King	Waste Paper Input	(ton/day)					174	206	224																									
King	Clarifier Flow	MGD		6 5	6 5	7 6	6 3	6 4	6 9	7 0	5 0	7 1		4 8	3 2	1 3	3 3	3 1	3 2	3 3														
King	Influent BOD	(ton/day)			8 2	12 1	14 3	18 2	18 8	21 6		16 0		3 6	2 3				2 3	3 1														
King	Influent DS	(ton/day)				50 7	48 8	56 5	55 5					18 4	14 9	12 7	14 9	15 0	13 0	14 0														
King	Influent SS	(ton/day)			29 2	48 5	46 5	54 7	65 0	78 7	59 7	83 0		18 5	10 5	10 9	16 2	18 0	18 7	25 3														
King	Effluent BOD	(ton/day)		7 7	6 6	8 3	9 9	14 0	14 5	14 2	5 9	9 5		1 7	1 3	0 4	0 9		0 6	0 6														
King	Effluent DS	(ton/day)												16 3	13 4	5 5	13 0	11 8	11 4	12 0														
King	Effluent SS	(ton/day)		16 8	16 4	15 3	15 9	21 3	37 7	35 0	8 8	27 5		5 4	0 8	0 5	0 5	0 4	0 3	0 3														
King	Sludge Estimate	(ton/day)			12 7	33 2	30 6	33 3	27 3	43 8	50 9	55 5		13 1	9 8	10 4	15 7	17 6	18 3	25 0														

Mill	Parameter	Units	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Rex	Paper Production	(ton/day)	30	21 0	30	21 5	30	27 6	30	30	30	30	30	30	30	30		18																
Rex	De-Ink Pulp	(ton/day)																																
Rex	Waste Paper Input	(ton/day)																																
Rex	Clarifier Flow	MGD		1 1		1 1		1 1		1 6			1 4																					
Rex	Influent BOD	(ton/day)		2 5		1 4		1 7																										
Rex	Influent DS	(ton/day)																																
Rex	Influent SS	(ton/day)		9 1		8 8		10 9																										
Rex	Effluent BOD	(ton/day)		1 0		0 7		1 1		1 5			1 6																					
Rex	Effluent DS	(ton/day)																																
Rex	Effluent SS	(ton/day)		3 0		2 7		2 5		8 6			6 9																					
Rex	Sludge Estimate	(ton/day)		6 1		6 1		8 4																										

Allied purchased mill in March
Sold to Eaton-Dikeman in Sept

Mill ceases production late 1960s

Table 1 Notes

Blanks indicate data unavailable

Period of De Inking shown in aqua shading

Production and Waste Paper Input are averages from reported data in Appendix 7 and Appendix 25 tables except as noted below

150 Blue (bold) = Lockwood Post Production

Production numbers in small print are approximations (totals of all mills held equal to production capacity reported by Lockwood Post)

\# De-ink pulp from Table 7c 2

* De-ink pulp as discussed in Question 13(a) response

Clarifier flow and loads are averaged from data in Appendix 28 tables

Rex Mill data is from Appendix 14a-F except blue (bold) is from Lockwood Post production

Shaded cell with bold text indicates November 2001 revision

Sludge Estimate Influent SS - Effluent SS

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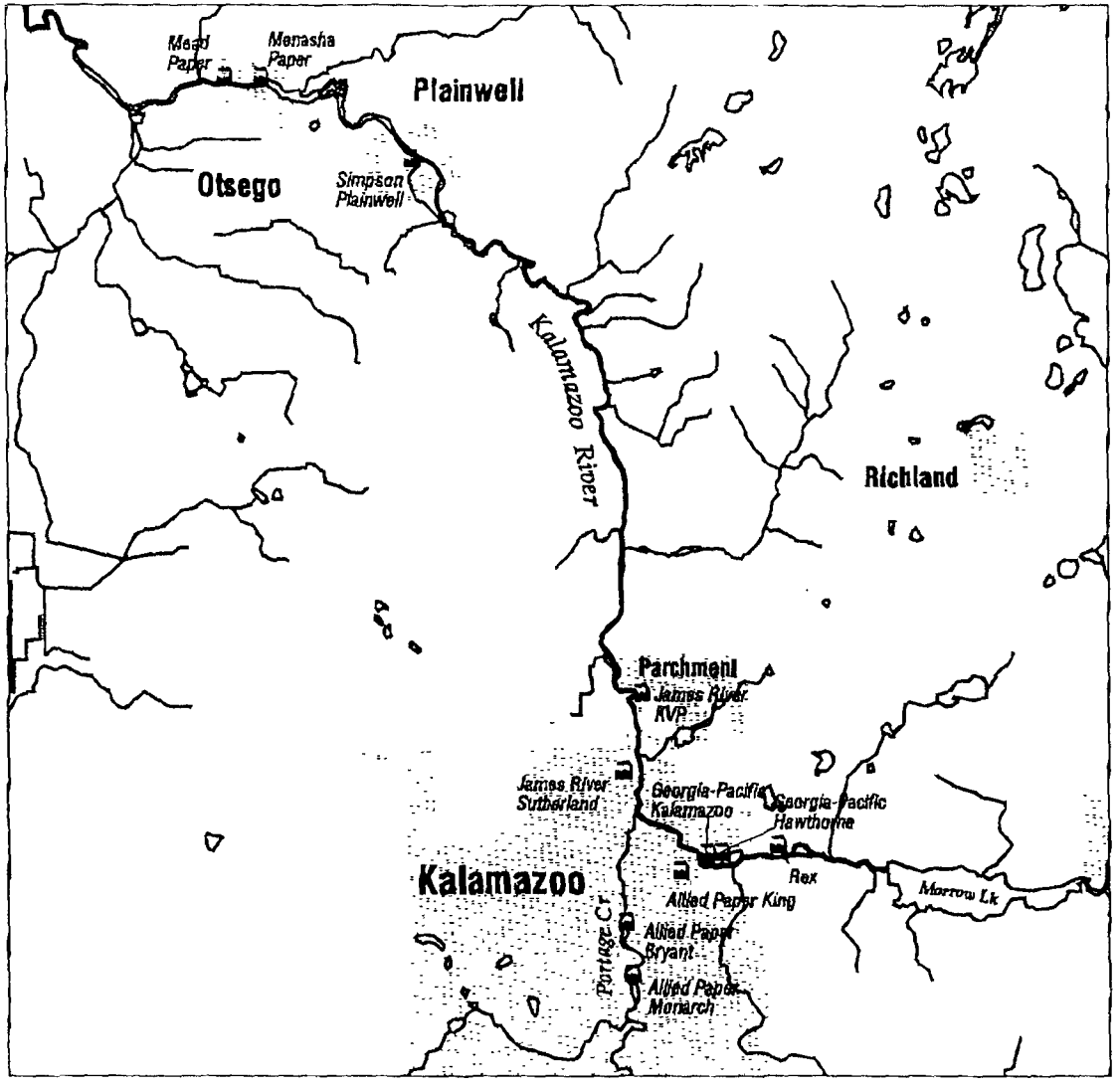
APPENDIX 2A-4

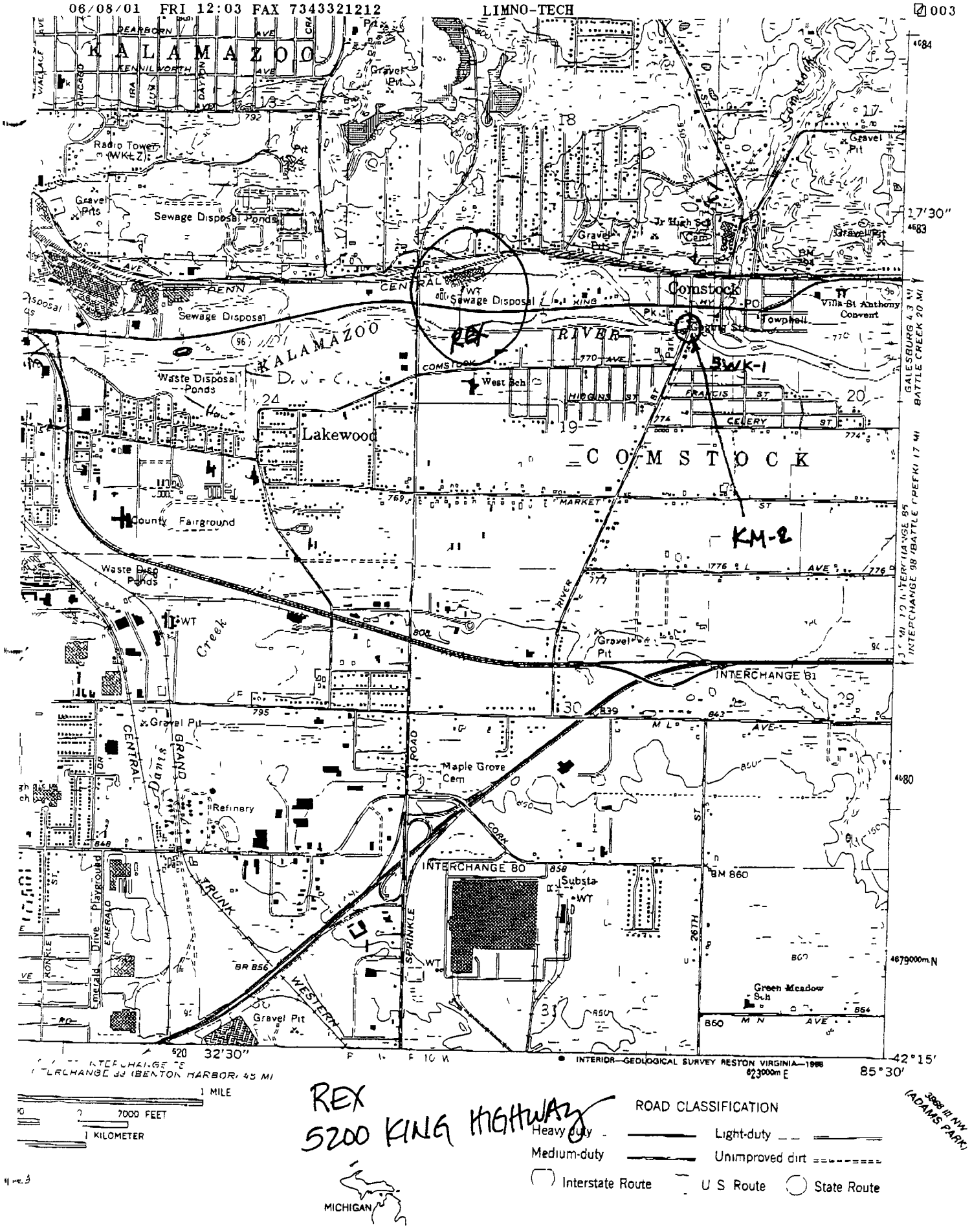


Paper Mill Locations near Kalamazoo, Michigan

Past or present mill site

0 3 mi
0 5 km

Limno-Tech, Inc.



REX
5200 KING HIGHWAY

3068 III NW (ADAMS PARK)

APPENDIX 7C-1

APPENDIX 7C-1
PORTAGE CREEK
Summary of Wastepaper Input
1958 - 1960[1]

Privileged and Confidential
Settlement and Joint
Defense Communication

MONTH/YEAR	"DENVER" WASTE PAPER TONS when avail.)[2]	KING WASTE PAPER - TOTAL TONS[3]	KING WASTE PAPER - %BOOK[3][4]	KING WASTE PAPER - BOOK TONS	KING - D.I. PULP PROD. - RETENTION RATE (70%)[5]	KING - D.I. PULP PROD. - RETENTION RATE (80%)[5]	BRYANT WASTE PAPER - TOTAL TONS[3]	BRYANT WASTE PAPER %BOOK[3][4]	BRYANT WASTE PAPER - BOOK TONS	BRYANT - D.I. PULP PROD. - RETENTION RATE (70%)[5]	BRYANT - D.I. PULP PROD. - RETENTION RATE (80%)[5]
July 1958											
7/28		185.4	66.2	122.7			169.0	75.3	127.3		
7/29		214.7	65.7	141.1			185.0	72.8	134.7		
7/30		191.8	65.6	125.8			177.0	70.4	124.6		
7/31		178.2	69.5	123.8			170.0	70.1	119.2		
	Total Tons	770.1		513.5			701.0		505.7		
	Average Daily Volume	192.5	66.8	128.4	134.8	154.0	175.3	72.2	126.4	122.7	140.2

CONFIDENTIAL BUSINESS INFORMATION

APPENDIX 7C-1
PORTAGE CREEK
Summary of Wastepaper Input
1958 - 1960[1]

MONTH/YEAR	"DENVER" WASTE PAPER TONS when avail.)[2]	KING WASTE PAPER - TOTAL TONS[3]	KING WASTE PAPER - %BOOK[3][4]	KING WASTE PAPER - BOOK TONS	KING - D.I. PULP PROD. - RETENTION RATE (70%)[5]	KING - D.I. PULP PROD. - RETENTION RATE (80%)[5]	BRYANT WASTE PAPER - TOTAL TONS[3]	BRYANT WASTE PAPER %BOOK[3][4]	BRYANT WASTE PAPER - BOOK TONS	BRYANT - D.I. PULP PROD. - RETENTION RATE (70%)[5]	BRYANT - D.I. PULP PROD. - RETENTION RATE (80%)[5]
August 1958											
8/1		124 5	70 0	87 2			N/A*	N/A*	N/A*		
8/2		181 2	72 4	131 2			194 5	71 0	138 1		
8/3		179 3	68 2	122 3			179 0	72 0	128 9		
8/4		107.5	55.5	59.7			163.8	71.9	117.8		
8/5		187.9	67.8	127.4			188.2	70.0	131.7		
8/6		178.1	64.7	115.2			172.2	70.2	120.9		
8/7		175.9	57.8	101.7			173.4	71.6	124.2		
8/8		133.7	74.0	98.9			179.5	70.7	126.9		
8/9		126.3	71.3	90.1			N/A*	N/A*	N/A*		
8/10		151.6	65.2	98.8			165.0	70.9	117.0		
8/11		219.2	58.4	128.0			179.0	68.9	123.3		
8/12		188.6	59.4	112.0			194.1	69.3	134.5		
8/13		136.5	76.4	104.3			172.6	69.2	119.4		
8/14		169.7	63.3	107.4			165.8	71.0	117.7		
8/15		180.2	N/A*	N/A*			108.4	70.5	76.4		
8/16		107.0	N/A*	N/A*			109.4	70.5	77.1		
8/17		160.9	69.0	111.0			155.4	69.9	108.6		
8/18		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/19		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/20		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/21		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/22		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/23		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/24		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/25		144.7	66.3	95.9			182.8	69.3	126.7		
8/26		147.3	70.1	103.3			175.3	69.4	121.7		
8/27		188.6	69.4	130.9			161.9	69.6	112.7		
8/28		165.3	68.5	113.2			129.3	70.6	91.3		
8/29		133.8	65.2	87.2			162.4	69.8	113.4		
8/30		161.9	68.4	110.7			179.2	70.3	126.0		
8/31		156.9	68.0	106.7			165.2	69.8	115.3		
	Total Tons	3806.6		2343.2			3656.4		2569.5		
	Average Daily Volume	158.6	66.8	106.5	111.0	126.9	166.2	70.3	116.8	116.3	133.0

CONFIDENTIAL SETTLEMENT AND JOINT DEFENSE

Privileged and Co[illegible]ential
Settlement and Joint
Defense Communication

APPE[illegible]X 7C-1
PORTAGE CREEK
Summary of Wastepaper Input
1958 - 1960[1]

MONTH/YEAR	"DENVER" WASTE PAPER TONS when avail.)[2]	KING WASTE PAPER - TOTAL TONS[3]	KING WASTE PAPER - %BOOK[3][4]	KING WASTE PAPER - BOOK TONS	KING - D.I. PULP PROD. - RETENTION RATE (70%)[5]	KING - D.I. PULP PROD. - RETENTION RATE (80%)[5]	BRYANT WASTE PAPER - TOTAL TONS[3]	BRYANT WASTE PAPER %BOOK[3][4]	BRYANT WASTE PAPER - BOOK TONS	BRYANT - D.I. PULP PROD. - RETENTION RATE (70%)[5]	BRYANT - D.I. PULP PROD. - RETENTION RATE (80%)[5]
September 1958											
9/1		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/2		150.0	67.5	101 3			171.4	70.1	120.2		
9/3		182.2	69 6	126.8			186.8	69 2	129.3		
9/4		241.1	68 6	165.4			193.6	70.2	135.9		
9/5		206 0	71.3	146 9			196 0	69.3	135 8		
9/6		180 7	69 2	125 0			139.2	74.1	103 1		
9/7		192 0	69 2	132 9			177.4	70 6	125.2		
9/8		138.4	68.5	94.8			158.0	74.0	116.9		
9/9		90.8	69.5	63.1			194.2	77.2	149.9		
9/10		101.5	76.0	77.1			197.1	78.8	155.3		
9/11		122.0	81.0	98.8			178.2	80.3	143.1		
9/12		162.0	84.8	137.4			N/A*	N/A*	N/A*		
9/13		161.7	83.2	134.5			109.6	72.8	79.8		
9/14		129.4	77.2	99.9			167.5	76.6	128.3		
9/15		170.0	81.0	137.7			N/A*	N/A*	N/A*		
9/16		139.0	80.0	111.2			N/A*	N/A*	N/A*		
9/17		151.0	79.0	119.3			N/A*	N/A*	N/A*		
9/18		N/A*	N/A*	N/A*			176.7	78.0	137.8		
9/19		N/A*	N/A*	N/A*			147.1	78.0	114.7		
9/20		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/21		N/A*	N/A*	N/A*			177.7	77.0	136.8		
9/22	25.8	152.1	71.0	108.0			182.1	79.0	143.9		
9/23	57	167.5	70.0	117.3			164.5	74.0	121.7		
9/24	40.5	165.9	71.0	117.8			154.1	73.0	112.5		
9/25	34	181.9	65.0	118.2			159.3	66.0	105.1		
9/26	10.9	142.9	78.0	111.5			167.3	67.0	112.1		
9/27		189.1	66.0	124.8			96.3	67.0	64.5		
9/28		166.6	70.0	116.6			153.9	71.0	109.3		
9/29		185.8	66 8	124.1			171.4	67.8	116.2		
9/30		205.4	67.4	138.4			176.2	67.7	119.3		
	Total Tons	4075.0		2948.8			3995.6		2916.9		
	Average Daily Volume	163.0	72.8	118.0	114.1	130.4	166.5	72.9	121.5	116.5	133.2

CONFIDENTIAL BUSINESS INFORMATIC

PORTAGE CREEK
Summary of Wastepaper Input
1958 - 1960[1]

Privileged and Confidential
Settlement and Joint
Defense Communication

MONTH/YEAR	"DENVER" WASTE PAPER TONS when avail.)[2]	KING WASTE PAPER - TOTAL TONS[3]	KING WASTE PAPER - %BOOK[3][4]	KING WASTE PAPER - BOOK TONS	KING - D I. PULP PROD. - RETENTION RATE (70%)[5]	KING - D I. PULP PROD. - RETENTION RATE (80%)[5]	BRYANT WASTE PAPER - TOTAL TONS[3]	BRYANT WASTE PAPER %BOOK[3][4]	BRYANT WASTE PAPER - BOOK TONS	BRYANT - D.I. PULP PROD. - RETENTION RATE (70%)[5]	BRYANT - D I PULP PROD. - RETENTION RATE (80%)[5]
October 1958											
10/1		N/A*	N/A*	N/A*			160 3	65 5	105 0		
10/2		N/A*	N/A*	N/A*			151 6	69 1	104 8		
10/3		N/A*	N/A*	N/A*			144 9	67 2	97 4		
10/4		N/A*	N/A*	N/A*			152 1	68 8	104 6		
10/5		N/A*	N/A*	N/A*			159 6	67 7	108 0		
10/6		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/7		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/8		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/9		N/A*	N/A*	N/A*			177 7	77 0	136 8		
10/10		N/A*	N/A*	N/A*			166 8	76 0	126 8		
10/11		N/A*	N/A*	N/A*			172 8	70 0	121 0		
10/12		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/13		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/14		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/15		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/16		N/A*	N/A*	N/A*			169 3	69 0	116 8		
10/17		N/A*	N/A*	N/A*			153 1	69 0	105 6		
10/18		N/A*	N/A*	N/A*			155 8	71 0	110 6		
10/19		N/A*	N/A*	N/A*			174 7	78 0	136 3		
10/20		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/21		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/22		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/23		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/24		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/25		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/26		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/27		151 4	72 3	109 5			178 0	71 9	128 0		
10/28		177 8	74 3	132 1			165 4	74 6	123 4		
10/29		201 4	74 3	149 6			146 0	74 1	108 2		
10/30		208 7	71 6	149 4			166 7	71 6	119 4		
10/31		212 1	75 3	159 7			162 6	62 7	102 0		
	Total Tons	**951.4**		**700.3**			**2757.4**		**1954.6**		
	Average Daily Volume	**190.3**	**73.6**	**140.1**	**133.2**	**152.2**	**162.2**	**70.8**	**115.0**	**113.5**	**129 8**

CONFIDENTIAL BUSINESS INFORMATION

APPENDIX 7C-1
PORTAGE CREEK
Summary of Wastepaper Input
1958 - 1960[1]

Privileged and Confidential
Settlement and Joint
Defense Communication

MONTH/YEAR	"DENVER" WASTE PAPER TONS when avail.)[2]	KING WASTE PAPER - TOTAL TONS[3]	KING WASTE PAPER - %BOOK[3][4]	KING WASTE PAPER - BOOK TONS	KING - D.I. PULP PROD. - RETENTION RATE (70%)[5]	KING - D.I. PULP PROD. - RETENTION RATE (80%)[5]	BRYANT WASTE PAPER - TOTAL TONS[3]	BRYANT WASTE PAPER %BOOK[3][4]	BRYANT WASTE PAPER - BOOK TONS	BRYANT - D.I. PULP PROD. - RETENTION RATE (70%)[5]	BRYANT - D.I. PULP PROD. - RETENTION RATE (80%)[5]
November 1958											
11/1		212 1	75 3	159 7			N/A*	N/A*	N/A*		
11/2		N/A*	N/A*	N/A*			163 7	N/A*	N/A*		
11/3		179 1	67 8	121 4			161 9	77 8	126 0		
11/4		179 3	70 0	125 5			177 6	77 8	138 2		
11/5		198 9	69 2	137 6			176 3	78 2	137 9		
11/6		161 2	66 6	107 4			169 6	74 9	127 0		
11/7		216 4	70 0	151 5			166 6	73 8	123 0		
11/8		187 0	68 7	128 5			62 2	74 0	46 0		
11/9		N/A*	N/A*	N/A*			152 4	76 0	115 8		
11/10		173 3	70 4	122 0			167 6	71 1	119 2		
11/11		183 0	70 5	129 0			164 6	73 6	121 1		
11/12		125 6	68 8	86 4			178 3	74 0	131 9		
11/13		155 5	68 8	107 0			177 5	71 4	126 7		
11/14		186 1	70 3	130 8			177 4	68 9	122 2		
11/15		N/A*	N/A*	N/A*			198 0	73 3	145 1		
11/16		164 7	69 8	115 0			177 3	72 0	127 7		
11/17		N/A*	N/A*	N/A*			189 6	73 6	139 5		
11/18		N/A*	N/A*	N/A*			163 1	73 4	119 7		
11/19		N/A*	N/A*	N/A*			184 1	72 5	133 5		
11/20		N/A*	N/A*	N/A*			176 4	75 0	132 3		
11/21		N/A*	N/A*	N/A*			190 3	75 7	144 1		
11/22		N/A*	N/A*	N/A*			226 9	71 1	161 3		
11/23		N/A*	N/A*	N/A*			188 4	74 0	139 4		
11/24		N/A*	N/A*	N/A*			181 0	75 2	136 1		
11/25		N/A*	N/A*	N/A*			181 2	72 3	131 0		
11/26		N/A*	N/A*	N/A*			162 1	72 7	117 8		
11/27		N/A*	N/A*	N/A*			182 9	75 3	137 7		
11/28		N/A*	N/A*	N/A*			163 6	71 2	116 5		
11/29		N/A*	N/A*	N/A*			162 4	75 6	122 8		
11/30		174 3	69 7	121 5			172 2	73 7	126 9		
	Total Tons	**2496.5**		**1743.3**			**4995.2**		**3566.5**		
	Average Daily Volume	**178.3**	**69.7**	**124.5**	**124.8**	**142.7**	**172.2**	**73.9**	**127.4**	**120.6**	**137 8**

CONFIDENTIAL BUSINESS INFORMATION

APPENDIX 7C-1
PORTAGE CREEK
Summary of Wastepaper Input
1958 - 1960[1]

Privileged and Confidential
Settlement and Joint
Defense Communication

MONTH/YEAR	"DENVER" WASTE PAPER TONS when avail.)[2]	KING WASTE PAPER - TOTAL TONS[3]	KING WASTE PAPER - %BOOK[3][4]	KING WASTE PAPER - BOOK TONS	KING - D.I. PULP PROD. - RETENTION RATE (70%)[5]	KING - D.I. PULP PROD. - RETENTION RATE (80%)[5]	BRYANT WASTE PAPER - TOTAL TONS[3]	BRYANT WASTE PAPER %BOOK[3][4]	BRYANT WASTE PAPER - BOOK TONS	BRYANT - D.I. PULP PROD. - RETENTION RATE (70%)[5]	BRYANT - D.I. PULP PROD. - RETENTION RATE (80%)[5]
December 1958											
12/1		N/A*	N/A*	N/A*			151 6	74 9	113 5		
12/2		N/A*	N/A*	N/A*			166 8	74 0	123 4		
12/3		N/A*	N/A*	N/A*			175 9	72 2	127 0		
12/4		N/A*	N/A*	N/A*			173 9	72 2	125 6		
12/5		N/A*	N/A*	N/A*			174 1	73 3	127 6		
12/6		N/A*	N/A*	N/A*			196 0	73 5	144 1		
12/7		N/A*	N/A*	N/A*			173 0	75 5	130 6		
12/8		N/A*	N/A*	N/A*			182 5	N/A*	N/A*		
12/9		N/A*	N/A*	N/A*			180 1	N/A*	N/A*		
12/10		N/A*	N/A*	N/A*			189 3	N/A*	N/A*		
12/11		N/A*	N/A*	N/A*			189 0	73 0	138 0		
12/12		N/A*	N/A*	N/A*			156 3	72 0	112 5		
12/13		N/A*	N/A*	N/A*			157 8	N/A*	N/A*		
12/14		N/A*	N/A*	N/A*			175 9	74 0	130 2		
12/15		211 0	N/A*	N/A*			153 3	71 3	109 3		
12/16		226 0	N/A*	N/A*			182 4	74 8	136 4		
12/17		231 0	N/A*	N/A*			172 0	73 8	126 9		
12/18		247 0	N/A*	N/A*			178 0	71 4	127 1		
12/19		213 0	N/A*	N/A*			154 2	69 2	106 7		
12/20		153 0	N/A*	N/A*			50 1	73 2	36 7		
12/21		214 0	N/A*	N/A*			146 8	72 3	106 1		
12/22		221 3	70 6	156 2			144 3	68 1	98 3		
12/23		254 6	64 0	162 9			149 4	71 7	107 1		
12/24		53 6	69 8	37 4			N/A*	N/A*	N/A*		
12/26		195 1	69 8	136 2			165 8	69 4	115 1		
12/27		228 7	71 2	162 8			99 4	73 8	73 4		
12/28		N/A*	N/A*	N/A*			139 7	70 8	98 9		
12/29		226 3	69 7	157 7			138 7	71 2	98 9		
12/30		224 9	70 3	158 1			128 0	69 8	98 8		
12/31		183 9	71 8	132 0			123 9	65 1	80 7		
	Total Tons	**3083.4**		**1103.5**			**4568.2**		**2792.8**		
	Average Daily Volume	**205.6**	**69.7**	**137.9**	**143.9**	**164.4**	**157.5**	**72.0**	**111.7**	**110.3**	**126.0**

CONFIDENTIAL PURSUANT TO FRE 408

APPENDIX 7C-1
PORTAGE CREEK
Summary of Wastepaper Input
1958 - 1960[1]

Privileged and Confidential
Settlement and Joint
Defense Communication

MONTH/YEAR	"DENVER" WASTE PAPER TONS when avail.)[2]	KING WASTE PAPER - TOTAL TONS[3]	KING WASTE PAPER - %BOOK[3][4]	KING WASTE PAPER - BOOK TONS	KING - D.I. PULP PROD. - RETENTION RATE (70%)[5]	KING - D.I. PULP PROD. - RETENTION RATE (80%)[5]	BRYANT WASTE PAPER - TOTAL TONS[3]	BRYANT WASTE PAPER %BOOK[3][4]	BRYANT WASTE PAPER - BOOK TONS	BRYANT - D.I. PULP PROD. - RETENTION RATE (70%)[5]	BRYANT - D.I. PULP PROD. - RETENTION RATE (80%)[5]
January 1959											
1/1		186.3	70.2	130.8			147.6	67.4	99.5		
1/2		164.4	67.2	110.5			172.6	66.4	114.6		
1/3		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
1/4		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
1/5		167.2	N/A*	N/A*			154.9	64.0	99.1		
1/6		196.3	N/A*	N/A*			166.6	65.0	108.3		
1/7		236.0	67.0	158.1			184.5	68.0	125.5		
1/8		222.8	N/A*	N/A*			122.4	68.0	83.2		
1/9		179.8	66.0	118.7			105.9	68.0	72.0		
1/10		50.3	N/A*	N/A*			N/A*	N/A*	N/A*		
1/11		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
1/12		222.1	69.5	154.4			139.4	60.0	83.6		
1/13		213.1	67.5	143.8			115.0	N/A*	N/A*		
1/14		206.0	65.0	133.9			128.1	65.4	83.8		
1/15		225.0	68.0	153.0			152.0	72.0	109.4		
1/16		178.4	71.0	126.7			118.4	67.6	80.0		
1/17		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
1/18		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
1/19		126.1	69.2	87.3			142.4	66.5	94.7		
1/20		190.7	75.5	144.0			150.8	64.5	97.3		
1/21		204.3	72.0	147.1			118.2	63.8	75.4		
1/22		181.5	73.5	133.4			98.5	63.5	62.5		
1/23		214.7	74.5	160.0			169.2	68.2	115.4		
1/24		N/A*	N/A*	N/A*			100.3	67.7	67.9		
1/25		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
1/26		138.8	71.4	99.1			150.4	65.0	97.8		
1/27		191.4	70.8	135.5			162.3	63.8	103.5		
1/28		189.9	68.6	130.3			135.8	69.2	94.0		
1/29		203.9	84.2	171.7			111.7	66.4	74.2		
1/30		185.2	65.6	121.5			142.4	66.5	94.7		
1/31		221.9	64.9	144.0			44.2	83.8	37.0		
	Total Tons	4496.1		2703.6			3233.6		2073.5		
	Average Daily Volume	187.3	70.1	135.2	131.1	149.9	134.7	67.0	90.2	94.3	107.8

CONFIDENTIAL BUSINESS INFORMATION

PORTAGE CREEK
Summary of Wastepaper Input
1958 - 1960[1]

Privileged and Confidential
Settlement and Joint
Defense Communication

MONTH/YEAR	"DENVER" WASTE PAPER TONS when avail.)[2]	KING WASTE PAPER - TOTAL TONS[3]	KING WASTE PAPER - %BOOK[3][4]	KING WASTE PAPER - BOOK TONS	KING - D.I. PULP PROD. - RETENTION RATE (70%)[5]	KING - D.I. PULP PROD. - RETENTION RATE (80%)[5]	BRYANT WASTE PAPER - TOTAL TONS[3]	BRYANT WASTE PAPER %BOOK[3][4]	BRYANT WASTE PAPER - BOOK TONS	BRYANT - D.I. PULP PROD. - RETENTION RATE (70%)[5]	BRYANT - D.I PULP PROD. - RETENTION RATE (80%)[5]
February 1959											
2/1		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
2/2		168.1	64.7	108.8			148.1	61.0	90.3		
2/3		163.7	67.7	110.8			128.9	51.7	66.6		
2/4		181.8	65.2	118.5			145.5	58.2	84.7		
2/5		209.1	66.0	138.0			134.5	56.6	76.1		
2/6		160.3	67.9	108.8			136.8	57.7	78.9		
2/7		N/A*	N/A*	N/A*			78.1	67.8	53.0		
2/8		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
2/9		204.6	66.0	135 0			158.2	N/A*	N/A*		
2/10		178 2	68 2	121 5			143 5	N/A*	N/A*		
2/11		183 2	67 0	122 7			167.0	64.4	107.5		
2/12		220 7	66.0	145.7			162.0	67.8	109.8		
2/13		166.7	68.0	113.4			156.3	71.1	111.1		
2/14		262.9	67.0	176.1			56.8	68.7	39.0		
2/15		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
2/16		202.9	67.8	137.6			155.4	N/A*	N/A*		
2/17		205.1	67.5	138.4			82.2	N/A*	N/A*		
2/18		186.8	67.0	125.2			133.6	68.2	91.1		
2/19		200.3	66.0	132.2			104.5	69.0	72.1		
2/20		157.8	70.0	110.5			156.6	72.5	113.5		
2/21		167.4	70.0	117.2			118.0	73.5	86.7		
2/22		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
2/23		172.4	66.4	114.5			150.0	71.1	106.7		
2/24		213 8	68.1	145 6			180 2	74 2	133 7		
2/25		195.1	69.2	135.0			168.0	71 8	120 6		
2/26		190.0	67.7	128.6			171.7	70 8	121 6		
2/27		195 0	69.0	134.6			159 2	68.0	108 3		
2/28		220.5	66.4	146.4			88.6	77.4	68.6		
	Total Tons	4406.4		2965.1			3283.7		1840.1		
	Average Daily Volume	191.6	67.3	128.9	134.1	153.3	136.8	67.1	92.0	95.8	109.5

CONFIDENTIAL BUSINESS INFORMATION

PORTAGE CREEK
Summary of Wastepaper Input
1958 - 1960[1]

Privileged and Confidential
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MONTH/YEAR	"DENVER" WASTE PAPER TONS when avail.)[2]	KING WASTE PAPER - TOTAL TONS[3]	KING WASTE PAPER - %BOOK[3][4]	KING WASTE PAPER - BOOK TONS	KING - D.I. PULP PROD. - RETENTION RATE (70%)[5]	KING - D.I. PULP PROD. - RETENTION RATE (80%)[5]	BRYANT WASTE PAPER - TOTAL TONS[3]	BRYANT WASTE PAPER %BOOK[3][4]	BRYANT WASTE PAPER - BOOK TONS	BRYANT - D.I. PULP PROD. - RETENTION RATE (70%)[5]	BRYANT - D.I. PULP PROD. - RETENTION RATE (80%)[5]
March 1959											
3/1		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
3/2		180.1	69.1	124.4			N/A*	N/A*	N/A*		
3/3		216.2	69.5	150.3			137.1	75.2	103.1		
3/4		225.1	N/A*	N/A*			151.6	69.2	104.9		
3/5		218.7	N/A*	N/A*			130.8	74.5	97.4		
3/6		201.1	N/A*	N/A*			142.3	76.1	108.3		
3/7		N/A*	N/A*	N/A*			137.3	77.5	106.4		
3/8		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
3/9		203.8	68.1	138.8			149.1	74.0	110.3		
3/10		173.3	66 4	115.1			190.8	75.6	144.2		
3/11		198.7	N/A*	N/A*			143.7	70.4	101.2		
3/12		N/A*	N/A*	N/A*			176.1	67.6	119.0		
3/13		N/A*	N/A*	N/A*			160.1	67.2	107.6		
3/14		N/A*	N/A*	N/A*			117.9	70.3	82.9		
3/15		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
3/16		232.3	73.5	170.7			232.3	73.5	170.7		
3/17		224.2	69.5	155.8			224.2	69.5	155.8		
3/18		210.7	67.5	142.2			210.7	67.5	142.2		
3/19		238.0	N/A*	N/A*			238.0	N/A*	N/A*		
3/20		236.0	N/A*	N/A*			236.0	N/A*	N/A*		
3/21		247.0	N/A*	N/A*			247.0	N/A*	N/A*		
3/22		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
3/23		170.3	67.7	115.3			173.9	69.0	120.0		
3/24		217.3	66.2	143.9			176.9	67.0	118.5		
3/25		201.9	67.0	135.3			177.0	62.0	109.7		
3/26		235.8	67.3	158.7			154.8	62.1	96 1		
3/27		229.2	67.7	155.2			163.2	69.4	113.3		
3/28		275.1	67.4	185.4			141.9	71.2	101.0		
3/29		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
3/30		210.0	68.3	143.4			159.1	69.5	110.6		
3/31		137.4	67.2	92.3			189.8	69.5	131.9		
	Total Tons	4682.2		2126.8			4361.6		2555.4		
	Average Daily Volume	212.8	68.2	141.8	149.0	170.3	174.5	70.4	116.2	122.1	139.6

CONFIDENTIAL BUSINESS INFORMATION

APPEN[illegible]X 7C-1

PORTAGE CREEK

Summary of Wastepaper Input

1958 - 1960[1]

Privileged and Confidential
Settlement and Joint
Defense Communication

MONTH/YEAR	"DENVER" WASTE PAPER TONS when avail.)[2]	KING WASTE PAPER - TOTAL TONS[3]	KING WASTE PAPER - %BOOK[3][4]	KING WASTE PAPER - BOOK TONS	KING - D.I. PULP PROD. - RETENTION RATE (70%)[5]	KING - D.I. PULP PROD. - RETENTION RATE (80%)[5]	BRYANT WASTE PAPER - TOTAL TONS[3]	BRYANT WASTE PAPER %BOOK[3][4]	BRYANT WASTE PAPER - BOOK TONS	BRYANT - D.I. PULP PROD. - RETENTION RATE (70%)[5]	BRYANT - D.I. PULP PROD. - RETENTION RATE (80%)[5]
April 1959											
4/1		221.5	69.4	153.7			173.3	70.0	121.3		
4/2		200.8	65.8	132.1			173.9	69.8	121.4		
4/3		229.7	67.4	154.8			159.2	70.2	111.8		
4/4		218.4	66.0	144.1			170.2	71.5	121.7		
4/5		N/A*	N/A	N/A*			N/A*	N/A*	N/A*		
4/6		N/A*	N/A	N/A*			N/A*	N/A*	N/A*		
4/7		200.0	68.0	136 0			154.9	71.0	110.0		
4/8		206.7	86.2	178.2			147.4	61.0	89 9		
4/9		236.5	67.8	160.3			142 0	62.0	88.0		
4/10		N/A*	N/A	N/A*			N/A*	N/A*	N/A*		
4/11		N/A*	N/A	N/A*			N/A*	N/A*	N/A*		
4/12		N/A*	N/A	N/A*			N/A*	N/A*	N/A*		
4/13		N/A*	N/A	N/A*			N/A*	N/A*	N/A*		
4/14		209.7	67.0	140.5			162.2	65 0	105.4		
4/15		202.9	69.0	144.7			187.7	65.0	122.0		
4/16		199.9	72.0	143.9			173.2	67.0	116.0		
4/17		N/A*	N/A	N/A*			N/A*	N/A*	N/A*		
4/18		N/A*	N/A	N/A*			N/A*	N/A*	N/A*		
4/19		N/A*	N/A	N/A*			N/A*	N/A*	N/A*		
4/20		N/A*	N/A	N/A*			N/A*	N/A*	N/A*		
4/21		229 7	66.0	151.6			177.7	70.0	124.4		
4/22		200.7	66.0	132.5			188.6	69.0	130.1		
4/23		210.0	65.5	137.6			196.9	66.6	131.1		
4/24		N/A*	N/A	N/A*			N/A*	N/A*	N/A*		
4/25		N/A*	N/A	N/A*			N/A*	N/A*	N/A*		
4/26		N/A*	N/A	N/A*			N/A*	N/A*	N/A*		
4/27		N/A*	N/A	N/A*			N/A*	N/A*	N/A*		
4/28		250 4	67.1	168.0			177.6	64.5	115.4		
4/29		230.4	67.4	155.3			193.3	65.0	125.6		
4/30		228.1	64.9	148.0			134.6	65.9	88.7		
	Total Tons	3475.4		2381.4			2712.7		1823.0		
	Average Daily Volume	217.2	68.5	148.8	152.0	173.8	169.5	67.1	113.9	118.7	135.6

CONFIDENTIAL BUSINESS INFORMATION

PORTAGE CREEK
Summary of Wastepaper Input
1958 - 1960[1]

Privileged and Con[illegible]ential
Settlement and Joint
Defense Communication

MONTH/YEAR	"DENVER" WASTE PAPER TONS when avail.)[2]	KING WASTE PAPER - TOTAL TONS[3]	KING WASTE PAPER - %BOOK[3][4]	KING WASTE PAPER - BOOK TONS	KING - D I. PULP PROD. - RETENTION RATE (70%)[5]	KING - D.I. PULP PROD - RETENTION RATE (80%)[5]	BRYANT WASTE PAPER - TOTAL TONS[3]	BRYANT WASTE PAPER %BOOK[3][4]	BRYANT WASTE PAPER - BOOK TONS	BRYANT - D.I. PULP PROD. - RETENTION RATE (70%)[5]	BRYANT - D I PULP PROD. - RETENTION RATE (80%)[5]
May 1959											
5/1		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/2		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/3		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/4		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/5		173.7	68 7	119 3			206 4	69.7	143 9		
5/6		263.4	70.0	184.4			181.7	65.3	118.7		
5/7		266.1	67 5	179.6			197.0	60 4	119 0		
5/8		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/9		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/10		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/11		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/12		240 4	69 8	167 8			167 1	70 0	117 0		
5/13		232 8	67 0	156 0			178 4	67 0	112 0		
5/14		229 3	66 0	151 3			195 2	71 0	138 6		
5/15		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/16		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/17		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/18		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/19		256 6	66 0	169.4			178.1	53 0	94 4		
5/20		231.9	66.0	153.1			169.6	64.0	108.5		
5/21		230.7	66.9	154.3			181.4	56 0	101 6		
5/22		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/23		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/24		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/25		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/26		237 6	69 6	165 4			201 2	67 0	134 8		
5/27		244 0	65 4	159 6			189 6	55 0	104 3		
5/28		257 0	65 1	167 3			180 0	69 0	124 2		
5/29		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/30		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/31		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
	Total Tons	2863.5		1927.4			2225.7		1416.8		
	Average Daily Volume	238.6	67.3	160.6	167 0	190.9	185.5	64.0	118 1	129.8	148 4

CONFIDENTIAL BUSINESS INFORMATION

PORTAGE CREEK
Summary of Wastepaper Input
1958 - 1960[1]

Privileged and Confidential
Settlement and Joint
Defense Communication

MONTH/YEAR	"DENVER" WASTE PAPER TONS when avail.)[2]	KING WASTE PAPER - TOTAL TONS[3]	KING WASTE PAPER - %BOOK[3][4]	KING WASTE PAPER - BOOK TONS	KING - D.I. PULP PROD. - RETENTION RATE (70%)[5]	KING - D.I. PULP PROD. - RETENTION RATE (80%)[5]	BRYANT WASTE PAPER - TOTAL TONS[3]	BRYANT WASTE PAPER %BOOK[3][4]	BRYANT WASTE PAPER - BOOK TONS	BRYANT - D.I. PULP PROD. - RETENTION RATE (70%)[5]	BRYANT - D.I. PULP PROD. - RETENTION RATE (80%)[5]
June 1959											
6/1		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/2		266.7	73.6	196.3			80.3	68.4	54.9		
6/3		252.5	73.0	184.3			151.1	68.2	103.1		
6/4		216.7	74.0	160.4			187.6	72.0	135.1		
6/5		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/6		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/7		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/8		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/9		236.6	67.4	159.5			179.6	67.1	120.5		
6/10		235.8	68.5	161.5			174.7	72.3	126.3		
6/11		231.5	69.1	160.0			177.3	69.8	123.8		
6/12		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/13		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/14		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/15		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/16		242.9	69.7	169.3			185.7	62.5	116.1		
6/17		200.2	69.0	138.1			176.7	59.4	105.0		
6/18		225.2	69.2	155.8			193.4	54.0	104.4		
6/19		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/20		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/21		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/22		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/23		250.6	62.0	155.4			171.4	68.0	116.6		
6/24		243.2	66.0	160.5			197.4	67.0	132.3		
6/25		233.0	64.0	149.1			176.8	67.0	118.5		
6/26		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/27		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/28		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/29		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/30		185.1	64.3	119.0			164.9	61.3	101.1		
	Total Tons	3020.0		2069.2			2216.9		1457.4		
	Average Daily Volume	232.3	68.4	159.2	162.6	185.8	170.5	65.9	112.1	119.4	136.4

CONFIDENTIAL BUSINESS INFORMATION

APPENDIX 7C-1
PORTAGE CREEK
Summary of Wastepaper Input
1958 - 1960[1]

Privileged and Confidential
Settlement and Joint
Defense Communication

MONTH/YEAR	"DENVER" WASTE PAPER TONS when avail.)[2]	KING WASTE PAPER - TOTAL TONS[3]	KING WASTE PAPER - %BOOK[3][4]	KING WASTE PAPER - BOOK TONS	KING - D.I. PULP PROD. - RETENTION RATE (70%)[5]	KING - D.I. PULP PROD. - RETENTION RATE (80%)[5]	BRYANT WASTE PAPER - TOTAL TONS[3]	BRYANT WASTE PAPER %BOOK[3][4]	BRYANT WASTE PAPER - BOOK TONS	BRYANT - D.I. PULP PROD. - RETENTION RATE (70%)[5]	BRYANT - D.I. PULP PROD. - RETENTION RATE (80%)[5]
July 1959											
7/1		236.5	66.3	156.8			200.8	61 0	122.5		
7/2		243.9	66.3	161.7			167.9	61.3	102.9		
7/3		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/4		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/5		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/6		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/7		271.2	65.1	176.6			162.8	59.8	97.4		
7/8		232.3	64.3	149.4			177.1	65.6	116.2		
7/9		213 8	62.4	133.4			188.9	62.0	117.1		
7/10		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/11		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/12		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/13		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/14		229.9	63.6	146.2			173.1	63.4	109.7		
7/15		244.4	63.6	155.4			185.7	63.0	117.0		
7/16		235.2	64 0	150.5			163.1	66.0	107.6		
7/17		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/18		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/19		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/20		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/21		184.1	62.2	114.5			171.6	61.0	104.7		
7/22		165.4	65.0	107.5			149.7	61.0	91.3		
7/23		166.7	63.4	105.7			121.1	62.0	75.1		
7/24		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/25		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/26		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/27		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/28		N/A*	N/A*	N/A*			91.2	70 2	64 0		
7/29		N/A*	N/A*	N/A*			182.5	66.4	121 2		
7/30		N/A*	N/A*	N/A*			165.4	65.0	107.5		
7/31		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
	Total Tons	2423.4		1557.7			2300.9		1454.2		
	Average Daily Volume	220.3	64.2	141.6	154.2	176.2	164.4	63.4	103.9	115.0	131.5

CONFIDENTIAL BUSINESS INFORMATION

APPENDIX 7C-1
PORTAGE CREEK
Summary of Wastepaper Input
1958 - 1960[1]

MONTH/YEAR	"DENVER" WASTE PAPER TONS when avail.)[2]	KING WASTE PAPER - TOTAL TONS[3]	KING WASTE PAPER - %BOOK[3][4]	KING WASTE PAPER - BOOK TONS	KING - D.I. PULP PROD. - RETENTION RATE (70%)[5]	KING - D.I. PULP PROD. - RETENTION RATE (80%)[5]	BRYANT WASTE PAPER - TOTAL TONS[3]	BRYANT WASTE PAPER %BOOK[3][4]	BRYANT WASTE PAPER - BOOK TONS	BRYANT - D.I. PULP PROD. - RETENTION RATE (70%)[5]	BRYANT - D.I. PULP PROD. - RETENTION RATE (80%)[5]
August 1959											
8/1		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/2		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/3		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/4		N/A*	N/A*	N/A*			156.8	67.0	105.1		
8/5		N/A*	N/A*	N/A*			158.6	64.7	102.6		
8/6		N/A*	N/A*	N/A*			118.9	64.9	77.2		
8/7		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/8		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/9		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/10		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/11		151 2	68.3	103.3			164 1	54.7	89.8		
8/12		218.8	70 7	154 7			166.4	55 9	93.0		
8/13		217 2	64 3	139 7			208 2	62 3	129.7		
8/14		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/15		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/16		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/17		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/18		205.1	66.0	135.4			196.1	69.6	136.5		
8/19		164.0	67.0	109.9			180.8	70.0	126.6		
8/20		155.8	75.0	116.9			153.1	67.6	296.1		
8/21		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/22		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/23		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/24		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/25		208.6	61 0	127.2			171.2	62.6	107.2		
8/26		200 9	60.0	120.5			181.6	68.4	124.2		
8/27		258.2	68.0	175.6			196.6	66.5	44.2		
8/28		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/29		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/30		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/31		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
	Total Tons	1779.8		1183.1			2052.4		1432.1		
	Average Daily Volume	197.8	66.7	131.5	138.4	158.2	171.0	64.5	119.3	119.7	136 8

CONFIDENTIAL BUSINESS INFORMATION

PORTAGE CREEK
Summary of Wastepaper Input
1958 - 1960[1]

Privileged and Confidential
Settlement and Joint
Defense Communication

MONTH/YEAR	"DENVER" WASTE PAPER TONS when avail.)[2]	KING WASTE PAPER - TOTAL TONS[3]	KING WASTE PAPER - %BOOK[3][4]	KING WASTE PAPER - BOOK TONS	KING - D.I. PULP PROD. - RETENTION RATE (70%)[5]	KING - D.I. PULP PROD. - RETENTION RATE (80%)[5]	BRYANT WASTE PAPER - TOTAL TONS[3]	BRYANT WASTE PAPER %BOOK[3][4]	BRYANT WASTE PAPER - BOOK TONS	BRYANT - D.I. PULP PROD. - RETENTION RATE (70%)[5]	BRYANT - D.I. PULP PROD. - RETENTION RATE (80%)[5]
September 1959											
9/1		144.9	55 0	79 7			171 7	67 7	116 2		
9/2		222.6	64.0	142.5			153 7	71 7	110 2		
9/3		157.8	64.0	101.0			197 2	53 2	104 9		
9/4		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/5		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/6		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/7		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/8		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/9		224.0	N/A*	N/A*			187 2	58 7	109 9		
9/10		211.2	N/A*	N/A*			129 4	68 0	88 0		
9/11		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/12		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/13		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/14		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/15		138.0	73.0	100.7			183 4	65 0	119 2		
9/16		N/A*	N/A*	N/A*			179 9	67 0	120 5		
9/17		N/A*	N/A*	N/A*			175 5	66 0	115 8		
9/18		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/19		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/20		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/21		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/22		192.4	74.0	142.4			161 8	69 0	111 6		
9/23		153.8	70.0	107.7			181 2	67 0	121 4		
9/24		210.1	68.0	142.9			185 9	67 0	124 6		
9/25		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/26		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/27		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/28		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/29		200 4	N/A*	N/A*			182 0	70 0	127 4		
9/30		235.5	61.9	145.8			188 3	67 8	127 7		
	Total Tons	2090.7		962.6			2277 2		1497 5		
	Average Daily Volume	190.1	66.2	120.3	133.0	152.1	175 2	66 0	115 2	122 6	140 1

CONFIDENTIAL BUSINESS INFORMATION

PORTAGE CREEK
Summary of Wastepaper Input
1958 - 1960[1]

Privileged and Confidential
Settlement and Joint
Defense Communication

MONTH/YEAR	"DENVER" WASTE PAPER TONS when avail.)[2]	KING WASTE PAPER - TOTAL TONS[3]	KING WASTE PAPER - %BOOK[3][4]	KING WASTE PAPER - BOOK TONS	KING - D.I. PULP PROD. - RETENTION RATE (70%)[5]	KING - D.I. PULP PROD. - RETENTION RATE (80%)[5]	BRYANT WASTE PAPER - TOTAL TONS[3]	BRYANT WASTE PAPER %BOOK[3][4]	BRYANT WASTE PAPER - BOOK TONS	BRYANT - D.I. PULP PROD. - RETENTION RATE (70%)[5]	BRYANT - D.I. PULP PROD. - RETENTION RATE (80%)[5]
October 1959											
10/1		186 4	70 0	130 5			N/A*	N/A*	N/A*		
10/2		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/3		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/4		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/5		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/6		151 7	65 4	99 2			N/A*	N/A*	N/A*		
10/7		180 1	62 0	111 7			N/A*	N/A*	N/A*		
10/8		176 1	61 7	108 7			N/A*	N/A*	N/A*		
10/9		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/10		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/11		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/12		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/13		175 7	65 8	115 6			N/A*	N/A*	N/A*		
10/14		194 2	65 5	127 2			N/A*	N/A*	N/A*		
10/15		147 7	65 2	96 3			N/A*	N/A*	N/A*		
10/16		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/17		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/18		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/19		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/20		184 3	71 5	131 8			N/A*	N/A*	N/A*		
10/21		166 9	73 5	122 7			N/A*	N/A*	N/A*		
10/22		179 1	74 0	132 5			N/A*	N/A*	N/A*		
10/23		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/24		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/25		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/26		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/27		169 9	72 0	122 3			N/A*	N/A*	N/A*		
10/28		121 3	63 0	76 4			N/A*	N/A*	N/A*		
10/29		176 6	73 7	130 2			N/A*	N/A*	N/A*		
10/30		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/31		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
	Total Tons	2210 0		1505 0			N/A*	N/A*	N/A*		
	Average Daily Volume	170 0	67 9	115 8	119 0	136 0	N/A*	N/A*	N/A*	N/A*	N/A*

CONFIDENTIAL BUSINESS INFORMATION

APPENDIX 7C-1
PORTAGE CREEK
Summary of Wastepaper Input
1958 - 1960[1]

MONTH/YEAR	"DENVER" WASTE PAPER TONS when avail.)[2]	KING WASTE PAPER - TOTAL TONS[3]	KING WASTE PAPER - %BOOK[3][4]	KING WASTE PAPER - BOOK TONS	KING - D.I. PULP PROD. - RETENTION RATE (70%)[5]	KING - D.I. PULP PROD. - RETENTION RATE (80%)[5]	BRYANT WASTE PAPER - TOTAL TONS[3]	BRYANT WASTE PAPER %BOOK[3][4]	BRYANT WASTE PAPER - BOOK TONS	BRYANT - D.I. PULP PROD. - RETENTION RATE (70%)[5]	BRYANT - D.I. PULP PROD. - RETENTION RATE (80%)[5]
November 1959											
11/1		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/2		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/3		242.2	66.6	161.3			169.1	65.0	109.9		
11/4		234.9	66.3	155.7			150.8	69.0	104.1		
11/5		247.4	62.5	154.6			168.2	63.0	106.0		
11/6		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/7		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/8		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/9		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/10		233.4	67.6	157.8			177.6	N/A*	N/A*		
11/11		155.5	69.3	107.8			190.2	N/A*	N/A*		
11/12		179.1	64.4	115.3			176.8	N/A*	N/A*		
11/13		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/14		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/15		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/16		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/17		221 6	69.7	154 5			156.2	N/A*	N/A*		
11/18		263.2	64.8	170.6			177.1	N/A*	N/A*		
11/19		214.0	60.2	128.8			172.5	N/A*	N/A*		
11/20		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/21		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/22		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/23		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/24		243.2	64.3	156.4			177.3	N/A*	N/A*		
11/25		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/26		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/27		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/28		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/29		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/30		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
	Total Tons	2234.5		1462.8			1715.8		319.9		
	Average Daily Volume	223.5	65.6	146.3	156.4	178.8	171.6	65.7	106.6	120.1	137.3

CONFIDENTIAL BUSINESS INFORMATION

APPEX 7C-1
PORTAGE CREEK
Summary of Wastepaper Input
1958 - 1960[1]

MONTH/YEAR	"DENVER" WASTE PAPER TONS when avail.)[2]	KING WASTE PAPER - TOTAL TONS[3]	KING WASTE PAPER - %BOOK[3][4]	KING WASTE PAPER - BOOK TONS	KING - D.I. PULP PROD. - RETENTION RATE (70%)[5]	KING - D.I. PULP PROD. - RETENTION RATE (80%)[5]	BRYANT WASTE PAPER - TOTAL TONS[3]	BRYANT WASTE PAPER %BOOK[3][4]	BRYANT WASTE PAPER - BOOK TONS	BRYANT - D.I. PULP PROD. - RETENTION RATE (70%)[5]	BRYANT - D.I. PULP PROD. - RETENTION RATE (80%)[5]
December 1959											
12/1		173 8	63 6	110 5			153 9	62 6	96 3		
12/2		189.7	65 6	124 4			94 2	61 8	58 2		
12/3		234.2	65.0	152.2			164 8	64 2	105.8		
12/4		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/5		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/6		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/7		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/8		241.5	67.0	161.8			186.8	64.0	119.6		
12/9		201.4	66.6	134.1			183.6	63.1	115.9		
12/10		241.6	71.9	173.7			183.5	60.4	110.8		
12/11		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/12		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/13		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/14		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/15		226 8	65 1	147.6			213.6	68.2	145.7		
12/16		228 2	67.6	154.3			166.9	68.2	113.8		
12/17		203 3	66.1	134.4			180.1	69.1	124.4		
12/18		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/19		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/20		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/21		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/22		234.2	65.6	153.6			153.6	67.6	103.8		
12/23		202.4	63.6	128.7			164.9	60.7	100.1		
12/24		N/A*	N/A*	N/A*			25.2	66.4	16.7		
12/25		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/26		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/27		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/28		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/29		212 6	60.2	128.0			189.4	66.8	126 5		
12/30		226 2	69 9	158.1			175.3	72 3	126 7		
12/31		171.3	70.2	120.3			164.5	69 7	114.7		
	Total Tons	2987.2		1981.9			2400.3		1579.1		
	Average Daily Volume	199.1	66.3	132.1	139.4	159.3	160.0	65.7	105.3	112.0	128.0

CONFIDENTIAL BUSINESS INFORMATION

PORTAGE CREEK
Summary of Wastepaper Input
1958 - 1960[1]

Privileged and Confidential
Settlement and Joint
Defense Communication

MONTH/YEAR	"DENVER" WASTE PAPER TONS when avail.)[2]	KING WASTE PAPER - TOTAL TONS[3]	KING WASTE PAPER - %BOOK[3][4]	KING WASTE PAPER - BOOK TONS	KING - D.I. PULP PROD. - RETENTION RATE (70%)[5]	KING - D.I. PULP PROD. - RETENTION RATE (80%)[5]	BRYANT WASTE PAPER - TOTAL TONS[3]	BRYANT WASTE PAPER %BOOK[3][4]	BRYANT WASTE PAPER - BOOK TONS	BRYANT - D.I. PULP PROD. - RETENTION RATE (70%)[5]	BRYANT - D.I. PULP PROD. - RETENTION RATE (80%)[5]
January 1960											
1/1		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
1/2		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
1/3		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
1/4		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
1/5		228.7	76.0	173.8			164.5	63.2	104.0		
1/6		190.8	75.0	143.1			189.0	63.0	119.1		
1/7		97.8	72.0	70.4			176.3	65.3	115.1		
1/8		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
1/9		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
1/10		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
1/11		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
1/12		246.3	67.0	165.0			183.7	80.7	148 2		
1/13		139.8	81.0	113.2			188.8	68.1	128.6		
1/14		219 2	76 0	166.6			184.3	63 4	116.8		
1/15		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
1/16		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
1/17		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
1/18		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
1/19		202.8	78.0	158.2			164.5	63.0	103.6		
1/20		252.9	73.0	184.6			177.3	63.0	111.7		
1/21		243.3	71.0	172.7			184.8	62.0	114.6		
1/22		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
1/23		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
1/24		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
1/25		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
1/26		231.1	71.0	164.1			174.8	63.0	110.1		
1/27		211.1	67.0	141.4			169.5	66.0	111.9		
1/28		255.9	72.0	184.2			166.1	62.3	103.5		
1/29		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
1/30		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
1/31		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
	Total Tons	2519 7		1837.5			2123 6		1387 2		
	Average Daily Volume	210.0	73.3	153.1	147.0	168.0	177.0	65.3	115.6	123.9	141 6

CONFIDENTIAL BUSINESS INFORMATION

PORTAGE CREEK
Summary of Wastepaper Input
1958 - 1960[1]

Privileged and Confidential
Settlement and Joint
Defense Communication

MONTH/YEAR	"DENVER" WASTE PAPER TONS when avail.)[2]	KING WASTE PAPER - TOTAL TONS[3]	KING WASTE PAPER - %BOOK[3][4]	KING WASTE PAPER - BOOK TONS	KING - D.I. PULP PROD. - RETENTION RATE (70%)[5]	KING - D.I. PULP PROD. - RETENTION RATE (80%)[5]	BRYANT WASTE PAPER - TOTAL TONS[3]	BRYANT WASTE PAPER %BOOK[3][4]	BRYANT WASTE PAPER - BOOK TONS	BRYANT - D.I. PULP PROD. - RETENTION RATE (70%)[5]	BRYANT - D.I. PULP PROD. - RETENTION RATE (80%)[5]
February 1960											
2/1		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
2/2		220 5	72 2	159 2			188.1	64 7	121 7		
2/3		229 4	71 2	163 3			177.0	62.0	109 7		
2/4		224 6	71.6	160.8			159.4	60.3	96.1		
2/5		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
2/6		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
2/7		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
2/8		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
2/9		190.2	70.2	133.5			189.7	59.0	111.9		
2/10		229.3	72.5	166.2			179.1	55.0	98.5		
2/11		234.4	74.7	175.1			203.0	59.0	119.8		
2/12		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
2/13		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
2/14		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
2/15		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
2/16		246 8	68 9	170 0			N/A*	N/A*	N/A*		
2/17		223 4	72 2	161 3			188 6	59 0	111 3		
2/18		214 6	69 5	149 1			192 3	56 0	107 7		
2/19		N/A*	N/A*	N/A*			181.6	60 0	109.0		
2/20		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
2/21		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
2/22		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
2/23		229.7	69.8	160.3			167.3	53.0	88.7		
2/24		228.8	73.8	168.9			175.9	70.0	123.1		
2/25		207.3	70.4	145.9			200.8	60.0	120.5		
2/26		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
2/27		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
2/28		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
2/29		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
	Total Tons	2679 0		1913.8			2202 8		1318 0		
	Average Daily Volume	223 3	71 4	159 5	156.3	178 6	183.6	59.8	109 8	128.5	146 9

CONFIDENTIAL BUSINESS INFORMATION

PORTAGE CREEK
Summary of Wastepaper Input
1958 - 1960[1]

Privileged and Confidential
Settlement and Joint
Defense Communication

MONTH/YEAR	"DENVER" WASTE PAPER TONS when avail.)[2]	KING WASTE PAPER - TOTAL TONS[3]	KING WASTE PAPER - %BOOK[3][4]	KING WASTE PAPER - BOOK TONS	KING - D.I. PULP PROD. - RETENTION RATE (70%)[5]	KING - D.I. PULP PROD. - RETENTION RATE (80%)[5]	BRYANT WASTE PAPER - TOTAL TONS[3]	BRYANT WASTE PAPER %BOOK[3][4]	BRYANT WASTE PAPER - BOOK TONS	BRYANT - D.I. PULP PROD. - RETENTION RATE (70%)[5]	BRYANT - D.I. PULP PROD. - RETENTION RATE (80%)[5]
March 1960											
3/1		220.1	66.3	145.9			198.1	60.4	119.7		
3/2		220.9	65.8	145.4			190.8	52.6	100.4		
3/3		235.5	63.8	150.2			186.7	53.8	100.4		
3/4		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
3/5		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
3/6		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
3/7		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
3/8		203.0	71.8	145.8			209.7	55.0	115.3		
3/9		220.0	70.5	155.1			183.8	52.0	109.0		
3/10		231.1	60.8	140.5			149.1	51.0	76.0		
3/11		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
3/12		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
3/13		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
3/14		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
3/15		189.2	72.5	137.2			210.5	64.0	134.7		
3/16		211.7	68.4	144.8			194.9	61.0	118.9		
3/17		230.1	69.8	160.6			170.2	60.0	102.1		
3/18		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
3/19		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
3/20		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
3/21		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
3/22		190.4	61.9	117.9			206.9	70.0	144.8		
3/23		230.1	66.4	152.8			179.1	59.0	105.7		
3/24		199.3	66.3	132.1			180.0	N/A*	N/A*		
3/25		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
3/26		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
3/27		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
3/28		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
3/29		225.0	71.7	161.3			201.2	62.0	124.7		
3/30		261.3	73.0	190.7			189.9	63.1	119.8		
3/31		211.9	75.2	159.3			203.6	65.2	132.7		
	Total Tons	3279.6		2239.7			2854.5		1604.4		
	Average Daily Volume	218.6	68.3	149.3	153.0	174.9	190.3	59.2	114.6	133.2	152.2

CONFIDENTIAL BUSINESS INFORMATION

APPENDIX 7C-1
PORTAGE CREEK
Summary of Wastepaper Input
1958 - 1960[1]

MONTH/YEAR	"DENVER" WASTE PAPER TONS when avail.)[2]	KING WASTE PAPER - TOTAL TONS[3]	KING WASTE PAPER - %BOOK[3][4]	KING WASTE PAPER - BOOK TONS	KING - D.I. PULP PROD. - RETENTION RATE (70%)[5]	KING - D.I. PULP PROD. - RETENTION RATE (80%)[5]	BRYANT WASTE PAPER - TOTAL TONS[3]	BRYANT WASTE PAPER %BOOK[3][4]	BRYANT WASTE PAPER - BOOK TONS	BRYANT - D.I. PULP PROD. - RETENTION RATE (70%)[5]	BRYANT - D.I. PULP PROD. - RETENTION RATE (80%)[5]
April 1960											
4/1		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
4/2		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
4/3		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
4/4		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
4/5		225.5	70.0	157.9			131 5	61 7	81.1		
4/6		235.5	68.4	161.1			166.8	62.6	104.4		
4/7		229.1	N/A*	N/A*			153.2	60.6	92.8		
4/8		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
4/9		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
4/10		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
4/11		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
4/12		164.7	N/A*	N/A*			150.6	62.4	94.0		
4/13		193.0	N/A*	N/A*			175.9	61.2	107.7		
4/14		222.0	N/A*	N/A*			171.2	58.3	99.8		
4/15		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
4/16		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
4/17		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
4/18		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
4/19		208 0	N/A*	N/A*			180.6	52.2	94.3		
4/20		228 0	N/A*	N/A*			165.7	51.9	86.0		
4/21		197.0	N/A*	N/A*			178.1	50.7	90.3		
4/22		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
4/23		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
4/24		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
4/25		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
4/26		150.0	N/A*	N/A*			198.2	55.0	109.0		
4/27		180.5	N/A*	N/A*			183.9	57.0	104.8		
4/28		183.4	72.2	132.4			188.8	50.8	95.9		
4/29		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
4/30		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
	Total Tons	2416.7		451.3			2044.5		1160.1		
	Average Daily Volume	201.4	70.2	150.4	141.0	161.1	170.4	57.0	96.7	119.3	136 3

CONFIDENTIAL BUSINESS INFORMATION

PORTAGE CREEK
Summary of Wastepaper Input
1958 - 1960[1]

Privileged and Confidential
Settlement and Joint
Defense Communication

MONTH/YEAR	"DENVER" WASTE PAPER TONS when avail.)[2]	KING WASTE PAPER - TOTAL TONS[3]	KING WASTE PAPER - %BOOK[3][4]	KING WASTE PAPER - BOOK TONS	KING - D.I. PULP PROD. - RETENTION RATE (70%)[5]	KING - D.I. PULP PROD. - RETENTION RATE (80%)[5]	BRYANT WASTE PAPER - TOTAL TONS[3]	BRYANT WASTE PAPER %BOOK[3][4]	BRYANT WASTE PAPER - BOOK TONS	BRYANT - D.I. PULP PROD. - RETENTION RATE (70%)[5]	BRYANT - D.I. PULP PROD. - RETENTION RATE (80%)[5]
May 1960											
5/1		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/2		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/3		221.3	69.9	154.7			138.3	50.2	69.4		
5/4		184.8	67.8	125.3			135.0	51.6	69.7		
5/5		235.2	71.6	168.4			170.1	54.2	92.2		
5/6		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/7		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/8		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/9		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/10		174.1	66.2	115.3			111.1	56.0	62.2		
5/11		207.8	65.0	135.1			130.5	51.0	66.6		
5/12		223.1	64.3	143.5			132.2	59.0	78.0		
5/13		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/14		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/15		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/16		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/17		208.4	63.0	131.3			184.0	51.0	93.8		
5/18		243.9	69.6	169.8			183.1	N/A*	N/A*		
5/19		224.0	68.1	152.5			162.3	N/A*	N/A*		
5/20		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/21		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/22		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/23		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/24		234.7	65.7	154.2			178.7	N/A*	N/A*		
5/25		224.1	65.6	147.0			162.3	N/A*	N/A*		
5/26		249.4	64.4	160.6			200.7	N/A*	N/A*		
5/27		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/28		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/29		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/30		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
5/31		243.2	69.4	168.8			117.9	57.1	67.3		
	Total Tons	2874.0		1926.4			2006.2		599.2		
	Average Daily Volume	221.1	67.0	148.2	154.8	176.9	154.3	53.8	74.9	108.0	123.5

CONFIDENTIAL BUSINESS INFORMATION

PORTAGE CREEK
Summary of Wastepaper Input
1958 - 1960[1]

Privileged and Co[illegible]ential
Settlement and Joint
Defense Communication

MONTH/YEAR	"DENVER" WASTE PAPER TONS when avail.)[2]	KING WASTE PAPER - TOTAL TONS[3]	KING WASTE PAPER - %BOOK[3][4]	KING WASTE PAPER - BOOK TONS	KING - D.I. PULP PROD. - RETENTION RATE (70%)[5]	KING - D.I. PULP PROD. - RETENTION RATE (80%)[5]	BRYANT WASTE PAPER - TOTAL TONS[3]	BRYANT WASTE PAPER %BOOK[3][4]	BRYANT WASTE PAPER - BOOK TONS	BRYANT - D.I. PULP PROD. - RETENTION RATE (70%)[5]	BRYANT - D.I. PULP PROD. - RETENTION RATE (80%)[5]
June 1960											
6/1		173.8	70.6	122.7			196.4	59.9	117.6		
6/2		228.4	69.0	157.6			182.6	62.3	113.8		
6/3		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/4		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/5		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/6		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/7		131.1	70 8	92.8			180.0	65.0	117 0		
6/8		208.4	70.0	145.9			160.0	61.0	97.6		
6/9		234.6	68.0	159.5			197.8	62.0	122.6		
6/10		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/11		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/12		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/13		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/14		227.5	69.6	158.3			160.9	55.0	88.5		
6/15		248.0	68.3	169.4			170.1	61.0	103.8		
6/16		249.8	66 8	166.9			133.8	65.0	87.0		
6/17		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/18		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/19		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/20		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/21		258.6	69.8	180.5			162.6	N/A*	N/A*		
6/22		232.3	68.1	158.2			130.2	N/A*	N/A*		
6/23		251.8	68.0	171.2			170.5	62.3	106.2		
6/24		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/25		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/26		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/27		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
6/28		224.1	69.8	156.4			189.6	51.3	97.3		
6/29		258.0	70.3	181.4			193.6	60.3	116.7		
6/30		254.4	68.5	174.3			176.2	59.6	105.0		
	Total Tons	3180.8		2195.1			2404.3		1273.1		
	Average Daily Volume	212.1	69.1	146.3	148.4	169 6	160.3	60 4	97 9	112 2	128 2

CONFIDENTIAL BUSINESS INFORMATION

APPENDIX 7C-1
PORTAGE CREEK
Summary of Wastepaper Input
1958 - 1960[1]

Privileged and Confidential
Settlement and Joint
Defense Communication

MONTH/YEAR	"DENVER" WASTE PAPER TONS when avail.)[2]	KING WASTE PAPER - TOTAL TONS[3]	KING WASTE PAPER - %BOOK[3][4]	KING WASTE PAPER - BOOK TONS	KING - D.I. PULP PROD. - RETENTION RATE (70%)[5]	KING - D.I. PULP PROD. - RETENTION RATE (80%)[5]	BRYANT WASTE PAPER - TOTAL TONS[3]	BRYANT WASTE PAPER %BOOK[3][4]	BRYANT WASTE PAPER - BOOK TONS	BRYANT - D.I. PULP PROD. - RETENTION RATE (70%)[5]	BRYANT - D.I. PULP PROD. - RETENTION RATE (80%)[5]
July 1960											
7/1		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/2		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/3		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/4		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/5		N/A*	N/A*	N/A*			145.1	63.8	92.6		
7/6		N/A*	N/A*	N/A*			192.7	60 0	115.6		
7/7		N/A*	N/A*	N/A*			175.3	60.0	105.2		
7/8		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/9		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/10		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/11		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/12		242.7	72.8	176.7			181.6	59.0	107.1		
7/13		231.6	69.5	161.0			181.2	58.0	105.1		
7/14		237.7	69.5	165.2			186.5	57.0	106.3		
7/15		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/16		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/17		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/18		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/19		248.8	65.8	163.7			200.2	63.0	126 1		
7/20		224.0	67.6	151.4			183 9	58 0	106.7		
7/21		235.4	70.6	166.2			170.6	57 0	97 2		
7/22		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/23		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/24		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/25		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/26		248.3	65.4	162.4			139.3	63.0	87.8		
7/27		158.9	68.4	108.7			163.1	66.0	107.6		
7/28		218.3	68.7	150.0			162.0	64.0	103.7		
7/29		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/30		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
7/31		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
	Total Tons	2045.7		1405 2			2081.5		1261.0		
	Average Daily Volume	227.3	68.7	156.1	159.1	181.8	173.5	60.7	105.1	121.4	138 8

CONFIDENTIAL BUSINESS INFORMATION

APPENDIX 7C-1
PORTAGE CREEK
Summary of Wastepaper Input
1958 - 1960[1]

Privileged and Confidential
Settlement and Joint
Defense Communication

MONTH/YEAR	"DENVER" WASTE PAPER TONS when avail.)[2]	KING WASTE PAPER - TOTAL TONS[3]	KING WASTE PAPER - %BOOK[3][4]	KING WASTE PAPER - BOOK TONS	KING - D.I. PULP PROD. - RETENTION RATE (70%)[5]	KING - D.I. PULP PROD. - RETENTION RATE (80%)[5]	BRYANT WASTE PAPER - TOTAL TONS[3]	BRYANT WASTE PAPER %BOOK[3][4]	BRYANT WASTE PAPER - BOOK TONS	BRYANT - D.I. PULP PROD. - RETENTION RATE (70%)[5]	BRYANT - D.I. PULP PROD. - RETENTION RATE (80%)[5]
August 1960											
8/1		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/2		215.5	64.1	140.7			184 6	66.0	121 8		
8/3		213.8	65.3	139.6			145 7	64.3	93.7		
8/4		166 3	64 7	107 6			207 2	69.3	143.6		
8/5		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/6		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/7		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/8		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/9		188.2	61.2	115.2			206.8	62.2	128.6		
8/10		221 3	64 7	143.2			159.8	52.2	83.4		
8/11		226.7	60.0	136.0			129.9	55.2	71.7		
8/12		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/13		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/14		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/15		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/16		236 9	65.5	155.2			159.6	63.0	100 5		
8/17		205 0	65.7	134.7			184.9	62 0	114 6		
8/18		218 7	64 4	140.8			185.5	58.0	107.6		
8/19		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/20		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/21		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/22		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/23		213.3	69.8	148.9			201 6	61.0	123.0		
8/24		208.7	66.9	139.6			183.7	57.0	104.7		
8/25		209.1	70.7	147.8			172.8	60.4	104.4		
8/26		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/27		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/28		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/29		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
8/30		198.3	64.8	128.5			165.2	56.6	93 5		
8/31		170.4	68.8	117.2			142.6	53.8	76.7		
	Total Tons	2892.2		1895.1			2429.9		1467 9		
	Average Daily Volume	206 6	65 5	135 4	144.6	165 3	173 6	60 1	104 9	121 5	138 9

CONFIDENTIAL BUSINESS INFORMATION

PORTAGE CREEK
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1958 - 1960[1]

Privileged and Confidential
Settlement and Joint
Defense Communication

MONTH/YEAR	"DENVER" WASTE PAPER TONS when avail.)[2]	KING WASTE PAPER - TOTAL TONS[3]	KING WASTE PAPER - %BOOK[3][4]	KING WASTE PAPER - BOOK TONS	KING - D.I. PULP PROD. - RETENTION RATE (70%)[5]	KING - D.I. PULP PROD. - RETENTION RATE (80%)[5]	BRYANT WASTE PAPER - TOTAL TONS[3]	BRYANT WASTE PAPER %BOOK[3][4]	BRYANT WASTE PAPER - BOOK TONS	BRYANT - D.I. PULP PROD. - RETENTION RATE (70%)[5]	BRYANT - D.I. PULP PROD. - RETENTION RATE (80%)[5]
September 1960											
9/1		203.6	67.1	136.6			171.3	56.6	97.0		
9/2		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/3		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/4		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/5		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/6		174 6	66 7	116.5			184 7	58 8	108 6		
9/7		188 6	67 0	126 4			188 0	65 1	122 4		
9/8		176 1	67.1	118.2			135 8	65 7	89 2		
9/9		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/10		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/11		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/12		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/13		212.7	62.1	132.1			199.8	67.6	135.1		
9/14		161.5	68.2	110.1			162.8	68.9	112.2		
9/15		224 2	65.3	146.4			166.3	62.3	103.6		
9/16		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/17		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/18		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/19		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/20		184 2	64 3	118 4			181.9	59.6	108.4		
9/21		231 9	64 8	150 3			204.8	73.0	149 5		
9/22		240 2	64 7	155.4			192.2	56.3	108.2		
9/23		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/24		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/25		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/26		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
9/27		230 9	63.4	146.4			176.9	57.0	100.8		
9/28		227.8	65.8	149 9			166.9	65.6	109.5		
9/29		242.1	61.7	149.4			176.6	62.6	110.6		
9/30		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
	Total Tons	2698.4		1619 4			2308.0		1455 0		
	Average Daily Volume	192 7	65 2	115 7	134 9	154 2	164 9	63 0	103 9	115 4	131 9

CONFIDENTIAL BUSINESS INFORMATION

PORTAGE CREEK
Summary of Wastepaper Input
1958 - 1960[1]

Privileged and Confidential
Settlement and Joint
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MONTH/YEAR	"DENVER" WASTE PAPER TONS when avail.)[2]	KING WASTE PAPER - TOTAL TONS[3]	KING WASTE PAPER - %BOOK[3][4]	KING WASTE PAPER - BOOK TONS	KING - D.I. PULP PROD. - RETENTION RATE (70%)[5]	KING - D.I. PULP PROD. - RETENTION RATE (80%)[5]	BRYANT WASTE PAPER - TOTAL TONS[3]	BRYANT WASTE PAPER %BOOK[3][4]	BRYANT WASTE PAPER - BOOK TONS	BRYANT - D.I. PULP PROD. - RETENTION RATE (70%)[5]	BRYANT - D.I. PULP PROD. - RETENTION RATE (80%)[5]
October 1960											
10/1		231.5	63.2	146.3			N/A*	N/A*	N/A*		
10/2		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/3		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/4		213.9	62.0	132.6			187.9	60.1	112.9		
10/5		260.5	65.1	169.6			172.0	61.1	105.1		
10/6		234.1	63.4	148.4			184.2	62.0	114.2		
10/7		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/8		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/9		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/10		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/11		220.4	58.9	129.8			193.2	54.0	104.3		
10/12		268.1	59.2	158.7			191.1	55.6	106.3		
10/13		216.5	61.2	132.5			196.8	61.6	121.2		
10/14		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/15		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/16		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/17		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/18		216.1	65.4	141.3			142.3	62.9	89.5		
10/19		232.0	58.3	135.3			144.0	40.6	58.5		
10/20		275.6	66.9	184.4			183.3	35.9	65.8		
10/21		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/22		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/23		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/24		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/25		262.4	74.3	195.0			180.0	62.0	111.6		
10/26		255.7	73.2	187.2			155.2	63.0	97.8		
10/27		237.5	74.6	177.2			185.1	69.7	129.0		
10/28		237.3	64.8	153.8			N/A*	N/A*	N/A*		
10/29		235.8	62.3	146.9			N/A*	N/A*	N/A*		
10/30		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
10/31		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
	Total Tons	3597.4		2338.9			2115.1		1216.2		
	Average Daily Volume	239.8	64.9	155.9	167.9	191.9	176.3	57.4	101 3	123.4	141 0

CONFIDENTIAL BUSINESS INFORMATION

APPENDIX 7C-1
PORTAGE CREEK
Summary of Wastepaper Input
1958 - 1960[1]

Privileged and Confidential
Settlement and Joint
Defense Communication

MONTH/YEAR	"DENVER" WASTE PAPER TONS when avail.)[2]	KING WASTE PAPER - TOTAL TONS[3]	KING WASTE PAPER - %BOOK[3][4]	KING WASTE PAPER - BOOK TONS	KING - D.I. PULP PROD. - RETENTION RATE (70%)[5]	KING - D.I. PULP PROD. - RETENTION RATE (80%)[5]	BRYANT WASTE PAPER - TOTAL TONS[3]	BRYANT WASTE PAPER %BOOK[3][4]	BRYANT WASTE PAPER - BOOK TONS	BRYANT - D.I. PULP PROD. - RETENTION RATE (70%)[5]	BRYANT - D.I. PULP PROD. - RETENTION RATE (80%)[5]
November 1960											
11/1		261.8	70.5	184.6			168.3	64.0	107.7		
11/2		244.2	73.2	178.8			187.4	65.8	123.3		
11/3		240.6	73.6	177.1			N/A*	N/A*	N/A*		
11/4		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/5		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/6		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/7		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/8		239 8	72.8	174 6			N/A*	N/A*	N/A*		
11/9		259 8	73.7	191.5			N/A*	N/A*	N/A*		
11/10		226.4	78.2	177.0			N/A*	N/A*	N/A*		
11/11		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/12		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/13		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/14		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/15		261.0	68.4	178.5			N/A*	N/A*	N/A*		
11/16		250.0	64.8	162.0			N/A*	N/A*	N/A*		
11/17		273.8	56.9	155.8			N/A*	N/A*	N/A*		
11/18		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/19		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/20		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/21		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/22		265.2	59.7	158.3			N/A*	N/A*	N/A*		
11/23		219.3	67.4	147.8			N/A*	N/A*	N/A*		
11/24		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/25		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/26		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/27		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/28		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
11/29		312.6	65.0	203.2			172.3	62.2	107.2		
11/30		226.1	68.7	155.3			179.6	67.4	121.1		
	Total Tons	3280.6		2244.5			707.6		459.2		
	Average Daily Volume	252 4	68.7	172.7	176.6	201.9	176.9	64.9	114.8	123.8	141 5

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1958 - 1960[1]

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MONTH/YEAR	"DENVER" WASTE PAPER TONS when avail.)[2]	KING WASTE PAPER - TOTAL TONS[3]	KING WASTE PAPER - %BOOK[3][4]	KING WASTE PAPER - BOOK TONS	KING - D.I. PULP PROD. - RETENTION RATE (70%)[5]	KING - D.I. PULP PROD. - RETENTION RATE (80%)[5]	BRYANT WASTE PAPER - TOTAL TONS[3]	BRYANT WASTE PAPER %BOOK[3][4]	BRYANT WASTE PAPER - BOOK TONS	BRYANT - D.I. PULP PROD. - RETENTION RATE (70%)[5]	BRYANT - D.I. PULP PROD. - RETENTION RATE (80%)[5]
December 1960											
12/1		258.5	67.3	174.0			144.9	62.6	90.7		
12/2		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/3		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/4		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/5		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/6		276.8	67.7	187.4			153.4	62.0	95.1		
12/7		268 1	61 0	163.5			165.2	62.0	102.4		
12/8		224 6	57 2	128.5			146.7	62.0	91.0		
12/9		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/10		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/11		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/12		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/13		257.9	65.0	167.6			180.5	N/A*	N/A*		
12/14		272.4	68.2	185.8			176.2	N/A*	N/A*		
12/15		260.4	67.1	174.7			180.3	N/A*	N/A*		
12/16		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/17		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/18		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/19		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/20		202.1	68.6	138.6			179.6	N/A*	N/A*		
12/21		267.9	69.5	186.2			207.0	N/A*	N/A*		
12/22		250.6	72.1	180.7			141 8	57 1	81 0		
12/23		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/24		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/25		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/26		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/27		249.9	69.3	173.2			134.5	56.2	75.6		
12/28		289.5	69.1	200.0			162.8	56.4	91.8		
12/29		224.5	65.4	146.8			196.6	61.4	120.7		
12/30		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
12/31		N/A*	N/A*	N/A*			N/A*	N/A*	N/A*		
	Total Tons	3303 2		2207.1			2169.5		748.3		
	Average Daily Volume	235.9	66.7	157.6	165.2	188.8	155.0	60.0	83.1	108.5	124 0

CONFIDENTIAL BUSINESS INFORMATION

APPENDIX 7C-1
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Summary of Wastepaper Input
1958 - 1960[1]

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Defense Communication

MONTH/YEAR	"DENVER" WASTE PAPER TONS when avail.)[2]	KING WASTE PAPER - TOTAL TONS[3]	KING WASTE PAPER - %BOOK[3][4]	KING WASTE PAPER - BOOK TONS	KING - D.I. PULP PROD. - RETENTION RATE (70%)[5]	KING - D.I. PULP PROD. - RETENTION RATE (80%)[5]	BRYANT WASTE PAPER - TOTAL TONS[3]	BRYANT WASTE PAPER %BOOK[3][4]	BRYANT WASTE PAPER - BOOK TONS	BRYANT - D.I. PULP PROD. - RETENTION RATE (70%)[5]	BRYANT - D.I. PULP PROD. - RETENTION RATE (80%)[5]

NOTE Disregard version of Table 7C-1 that was previously provided That prior version suffered from a computer error which resulted in inaccurate calculations

[1] Source Allied Waste Tank Documents (Bates Nos SA035108 117 SA035119 124 SA035151 152 SA035155 SA035160-169 SA035171 173 SA035175-180 SA035182 183 SA035334 335 SA035339 SA035341 346 SA035349 354 SA035418-419 SA035421 SA035424 426 SA035429 SA035431 SA035434 436 SA035438-443 SA035445 446)
Although these reports run from 1958 through 1963 they do not contain wastepaper input data for any time after 12/60

[2] Denver wastepaper tons is the amount of wastepaper that went into the King Mill Denver Flotation Process (Deposition of Wayne Kendrick 4/24/97 p 134 135)

[3] Bold typeface indicates no assumptions were made regarding column headings on the source documents Regular typeface indicates data for which the column headings are missing on the source documents therefore it is merely assumed to be tons book etc

[4] Book refers to wastepaper input in the nature of both book and magazine (Deposition of Wayne Kendrick p 136)

[5] MHI does not have specific or consistent documentation available showing the average amount of deinked pulp produced at each of the mills on a tons per day basis Pulp production is often calculated as a certain percentage of total wastepaper used also known as retention rate " Retention rate at the Allied Mills may have varied based on the nature of the wastepaper used See SA 027717 726 SA00088154 164 SA026433 435 MDNR003697 3700 Deposition of Ernest J Gilman 1/18/93 page 35 Deposition of Jack Gilman 1/19/93 page 305 Deposition of Jack Gilman 2/9/93 pages 628 630 SA027717 718

This table represents a summary of the average amount of wastepaper used between September 1958 and December 1960 For purposes of this table we have calculated deinked pulp production using the 70% and 80% retention rates

*N/A means not available and indicates that the source data was either missing or illegible
Note daily average values are based on running day averages

CONFIDENTIAL BUSINESS INFORMATION

TABLE 13C-1

Appendix 13c-1
Allied Mills
Third Party Data on Paper and De-Ink Pulp Production

Mill	Year	Date	Paper Production (ton/day)	De-Ink Pulp (ton/day)	SOURCE
Bryant	1955	Jul-20-55	196 2		SA 039019 (WRC)
Bryant	1955	Jul-21-55	174 5		SA 039019 (WRC)
Bryant	1955	Jul-22-55	171 3		SA 039019 (WRC)
Bryant	1955	Jul-23-55	173 3		SA 039019 (WRC)
Bryant	1955	Jul-25-55	189 7		SA 039019 (WRC)
Bryant	1955	Jul-26-55	183		SA 039019 (WRC)
Bryant	1957	May-27-57	150		SA 039032 (WRC)
Bryant	1957	May-28-57	186		SA 039032 (WRC)
Bryant	1961	Dec	175		SA 033306
Bryant	1962		200		SA 033542
Bryant	1967	May-13-67	211 5	91 6	MDNR 003652-56 (WRC)
Bryant	1967	May-14-67	216	87	MDNR 003652-56 (WRC)
Bryant	1968	Jun-04-68	209 2	109 9	SA 029206-15 (WRC)
Bryant	1968	Jun-05-68	172 9	94 5	SA 029206-15 (WRC)
Bryant	1969		200		SA 029323
Bryant	1976		134		SA 033982, SA 033954
Bryant	1977	July-Oct	151		SA 033982, SA 033954
Bryant	1982	1-Mar-82	220		SA 027590
Bryant	1982	25-Oct-82	220		no bates number
Bryant	1984	18-Sep-84	220		SA 030433
King	1955		192 32		064086 (WRC)
King	1956	Jan-10-56	195		063792 - 063796 (WRC)
King	1956	Jan-11-56	208		063792 - 063796 (WRC)
King	1956	Jan-12-56	200		063792 - 063796 (WRC)
King	1956	Jan-13-56	199		063792 - 063796 (WRC)
King	1956	Jan-14-56	196		063792 - 063796 (WRC)
King	1956	Jan-16-56	157		063792 - 063796 (WRC)
King	1957	May	166		SA 028997
King	1961	Dec	200		SA 033306
King	1963			175	NCASI 000156
King	1963			210	NCASI 000124
King	1967	May-13-67	234		MDNR 003652-56 (WRC)
King	1967	May-14-67	145 8		MDNR 003652-56 (WRC)
King	1968	Jun-04-68	209		SA 029223-30 (WRC)
King	1968	Jun-05-68	159		SA 029223-30 (WRC)
Monarch	1953	Nov-03-53	93 2		SA 039024-28 (WRC)
Monarch	1953	Nov-04-53	119 6		SA 039024-28 (WRC)
Monarch	1955	Jul-28-55	100		063803 - 063808 (WRC)
Monarch	1955	Jul-29-55	100		063803 - 063808 (WRC)
Monarch	1955	Jul-30-55	108		063803 - 063808 (WRC)
Monarch	1955	Aug-01-55	107		063803 - 063808 (WRC)
Monarch	1955	Aug-02-55	118		063803 - 063808 (WRC)
Monarch	1955	Aug-03-55	86		063803 - 063808 (WRC)
Monarch	1956	Jan-10-56	113		063797 - 063802 (WRC)
Monarch	1956	Jan-11-56	102		063797 - 063802 (WRC)
Monarch	1956	Jan-12-56	110		063797 - 063802 (WRC)
Monarch	1956	Jan-13-56	95		063797 - 063802 (WRC)
Monarch	1956	Jan-14-56	98		063797 - 063802 (WRC)
Monarch	1956	Jan-16-56	83		063797 - 063802 (WRC)
Monarch	1961	Dec	40		SA 033306
Monarch	1967	May-13-67	82 5		MDNR 003652-56 (WRC)
Monarch	1967	May-14-67	51		MDNR 003652-56 (WRC)
Monarch	1968	Jun-04-68	35 5		SA 029223-30 (WRC)
Monarch	1968	Jun-05-68	64 7		SA 029223-30 (WRC)

Appendix 13c-1
Allied Mills
Third Party Data on Paper and De-Ink Pulp Production

Mill	Year	Date	Paper Production (ton/day)	De-Ink Pulp (ton/day)	SOURCE
Monarch	1969		42		SA 029327
Monarch	1970	April	40		SA 46157
Monarch	1976		36		SA 033982, SA 033954
Monarch	1977	July-Oct	37		SA 033982, SA 033954
Rex	1955	Jul-20-55	12 96		064084 - 064087 (WRC)
Rex	1955	Jul-21-55	28 2		064084 - 064087 (WRC)
Rex	1955	Jul-22-55	22 1		064084 - 064087 (WRC)
Rex	1955	Jul-23-55	19 4		064084 - 064087 (WRC)
Rex	1955	Jul-25-55	19 9		064084 - 064087 (WRC)
Rex	1955	Jul-26-55	21 9		064084 - 064087 (WRC)
Rex	1955	Sep-6-55	21 3		064084 - 064087 (WRC)
Rex	1955	Sep-7-55	21 3		064084 - 064087 (WRC)
Rex	1957	May-21-57	22 7		064097 - 064099 (WRC)
Rex	1957	May-23-57	20 2		064097 - 064099 (WRC)
Rex	1959	Jun-23-59	24 8		064094 - 064096 (WRC)
Rex	1959	Jun-24-59	30 4		064094 - 064096 (WRC)
Rex	1961	Jun-27-61			064091 - 064092 (WRC)

CONFIDENTIAL BUSINESS INFORMATION

TABLE 13C-2

Summary of Lockwood and Post Directories Paper Production Capacity Data

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

	Allied - All divisions					Bryant Division				Monarch Division		King Division		Rex Mill	
	Production Capacity					Production Capacity				Production Capacity		Production Capacity		Production Capacity,	
	Uncoated and other papers		Coated papers [c]	Deinked pulp	Mills included	Total paper	Type of paper	Coated	Deinked pulp	Total paper	Deinked pulp	Total paper	Deinked pulp	Total paper	Type of paper
	tons/d	Notes	tons/d	tons/d		tons/d		tons/d	tons/d	tons/d	tons/d	tons/d	tons/d	tons/d	
1954	375	1			MK	225#	2					170		30	3
1955	375	1			MK	225#	2					170		30	3
1956	375	1			MK	225#	2	100				200		30	3
1957	300	U	200		BMK	Allied Paper started operating Bryant Mill								30	3
1958	300	U	200	100	BMK									30	3
1959	300	U	200	100	BMK									30	3
1960	300	U	200	100	BMK									30	3
1961	300	U	200	100	BMK									30	3
1962	300	U	400	100	BMK									30	3
1963	300	U	400	100	BMK									30	3
1964	300	U	400	100	BMK									30	3
1965	400	4	75		BMK				150				200	30	5
1966	400	4	75		BMK				150				200	30	5
1967	400	4	75		BMK				150				200	30	5
1968	450	4	75		BMKR				150						
1969	450	4	175*		BMK				150					18	Sold Mill
1970	450	6	175*		BMK				150					18	IDLE
1971	450	6	175*		BM				150			IDLE		Not listed in Lockwood Post directories after 1970	
1972															
1973	450	6	175*		M	IDLE						DISMANTLED			
1974	450	6	175*		M										
1975	450	6	175*		M										
1976	450	6	175*		M										
1977	450	6	175*		M										
1978	450	6	175*		M										
1979	450	6	175*		M										
1980	450	6	175*		M										
1981	450	6	175*		M										
1982	350	6	175*		M					DISMANTLED					
1983	350	6	175*		M										
1984	240	6	175*		M										
1985	240	6	175*		M										

Notes

Blanks indicate information not available in Lockwood Post directories

* Coated and blade coated papers

\# Waste paper pulp

B Bryant Mill (formerly St Regis), mill used wastepaper pulp

M Monarch

K King

R Rex

c 1952-1965 Lithographed label, dull finish folding enamel, insert, cover featherweight, varnish label blanks, postcard gloss ink paper, C1S and C2S enamel, and inserts,
1966 onwards- Litho and C2S offset and letterpress, folding enalmel cover varnish, label postcard gloss ink papers electrostatic base stock master paper and specialties

U Uncoated papers Machine finish English finish duplicator Catalogue Bible French folio Offset Map Eggshell Writing tablet Mimeograph Poster Lithograph Label Music Drawing Box cover Lining and specialties

1 Machine finish English finish Super-calendered Catalogue Bible French folio Offset Map Eggshell Bond Envelope Writing tablet Mimeograph Poster Lithograph Label Music Drawing Box cover Lining

2 Machine finish Eggshell roto coated and super-calendered litho Label Music off-set Catalog Bible writing and specialties

3 1952-1961 Coated book papers offset English finish book
1962 onwards - included coated and enameled offset litho and cover papers

4 Uncoated machine finish English finish Eggshell, antique and wove finish, book publishing papers, Map, Writing tablet duplicator bond envelope index Mimeograph register bond carbonizing tissue poster Label Music, Drawing, Box cover litho-coating stock, Bible, dictionary, encyclopedia and specialties

5 Bond, mimeo, duplicator, offset, envelope, drawing and ruled papers Colored school construction papers

6 Adding machine, bible, black, bond, coated and uncoated book, endleaf, box covering, bristol, carbonizing, coating base, construction cover, direct process, drawing, duplicator, envelope, foil mounting, folder, gift wrapping, greeting card, cumming, label, ledger, manifold, manila, map, mimeo, offset, onionskin, opaque, papeterie, place-mat, postcard, poster, register, sensitizing, shelf, tablet, text, vellum, xerographic

CONFIDENTIAL BUSINESS INFORMATION

APPENDIX 8a – 1

MICHIGAN DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION BUREAU
POINT SOURCE STUDIES SECTION

Report of an
Industrial Wastewater Survey
Conducted at
ALLIED PAPER CORPORATION
All Outfalls No. 390222
NPDES Permit No. MI0000779
Kalamazoo County
Kalamazoo, Michigan
June 24-25, 1980

Survey Summary

Wastewater monitoring was performed during one twenty-four hour survey period starting Tuesday, June 24-25, 1980.

The results of this survey are compared to the final limitations in the facilities' National Pollutant Discharge Elimination System (NPDES) Permit, No. MI0000799 in Table 3. Based on this comparison, the company exceeded the daily maximum loading limitation for BOD_5. The other parameters met the permit limitations.

The results of this survey are also compared to the company's Monthly Operating Report (MOR) results for June, 1980 in Table 3. The results are similar except for the lower BOD_5 loadings reported by the company. The company's BOD_5 loadings on June 24 and 25 were 40% and 54% of the survey results, respectively. This difference cannot be attributed to differences in flows as these were similar.

The composite sample collected at outfall 390006 (002) was split with the company for comparison of laboratory analyses. The results are shown in Table 4. The company reported a BOD_5 concentration 57% of the EPB laboratory's result and also reported a higher suspended solids concentration.

The results obtained in this survey are compared to the results of the previous survey conducted in March, 1979 in Table 5. The results are similar.

The sludge leachate (groundwater seepage) was sampled. The results are shown in Table 2.

Plant Processes

Allied Paper Corporation operates two mills in Kalamazoo. The Monarch Mill uses two Fourdrinier machines to produce bible paper and specialty grades. The Bryant Mill produces bible paper and other specialty papers on five Fourdrinier machines. The Fourdrinier machines were all operating during the survey.

Under normal production, the mills produce 285 tons of product per day. Pulp utilized at the mills has previously been treated by the Kraft process at other locations.

The mills employ a total of 485 people. Monarch Mill operation was on a 24-hour per day, 6 days per week schedule during the survey, while the Bryant Mill operated 7 days per week. Production was considered normal during the survey.

Water, Wastewater & Treatment

Portage Creek supplies the process water used at both mills. Water used at the Bryant Mill is chlorinated and passed through sand filters prior to its use. Water used at the Monarch Mill is passed through sand filters and then chlorinated prior to its use. Potable water for the mill is obtained from the City of Kalamazoo. Domestic wastes are discharged to the city's sanitary sewer system.

Schematics of the wastewater treatment system and plant configeration are shown in Figure 1 and 2. Wastewater received at the 100-foot circular Bryant clarifier originates from excess white water, filter backwash, and from the lime-soda ash softening process used for boiler feed water. Alum and a polymer are added to improve settling in the Bryant clarifier. The Bryant clarifier effluent is either discharged to the city sanitary sewer system or to the Monarch clarifier. The company maximizes the loading which can be placed on the Monarch clarifier without exceeding permit limitations for discharging to Portage Creek. Flow is automatically apportioned via a computerized system utilizing a total organic carbon analyzer.

The 90-foot circular Monarch clarifier receives Bryant clarifier effluent, as well as excess white water, filter backwash, and zeolite waste from the boiler feed water system at the Monarch Mill. Alum and a coagulation agent are added to the Monarch clarifier to improve settling. Monarch clarifier effluent discharges to Portage Creek via outfall 390006 (002).

Sludge from both clarifiers is disposed of on plant property.

Survey Procedure

The flows and samples were obtained as follows:

Outfall	Flow Measurement	Sampling
390004 (001) Bryant Mill	Company installed 46.5" rectangular weir. Staff installed water level recorder.	Scoop type composite, individual grabs.
390006 (002) Monarch Mill	Company installed 47.75" full channel weir. Staff installed water level recorder.	Scoop type composite, individual grabs.
Sludge Leachate	None	Individual grab.

A water level recorder provides a continuous account of the liquid level or head above the crest of a weir. A head versus time graph is obtained for the duration of the survey period. The total volume of wastewater over the weir during the survey period is computed from the graph.

An automatic sampler composites samples at timed intervals. Samples may be proportional to the instantaneous flow over the weir.

An individual grab is a single instantaneous sample.

Samples were analyzed by the Environmental Protection Bureau Laboratories located in Lansing.

Samples were preserved according to Table 6. The results of the physical, chemical and bacteriological analyses are presented in Tables 1 & 2.

Allied Paper Corporation - Kalamazoo

Table 1 Analyses of composite samples.

Outfalls		390004 (001)		390006 (002)	
Survey Period	From	6-24-80 - 1520		6-24-80 - 1615	
	To	6-25-80 - 1520		6-25-80 - 1615	
Computed flow rate* (M^3/day)		10,500		5,910	
Highest flow rate (M^3/day)		19,300 - 6-25-80 @ 1123		11,200 - 6-25-80 @ 1420	
Lowest flow rate (M^3/day)		476 - 6-25-80 @ 0115		4,150 - 6-25-80 @ 1522	
		mg/l	kg/day	mg/l	kg/day
Suspended solids		46	480	< 2	--
Dissolved solids		650	6,800	460	2,700
Settleable solids		4	40	< 2	--
COD		300	3,000	66	390
TOC		59	620	19	110
BOD_5		130	1,400	44	260
$CBOD_5$		120	1,300	37	220
$CBOD_{20}$		> 140	> 1,500	46	270
Nitrite & nitrate nitrogen-N					
nitrogen-N		5.2	55	1.0	5.9
Ammonia nitrogen-N		0.17	1.8	0.06	0.4
Kjeldahl nitrogen-N		4.0	42	0.92	5.4
Orthophosphates-P		0.08	0.8	< 0.01	--
Total phosphorus-P		0.13	1.4	0.02	0.1

* Flow rates used in the computation of kg/day.
To obtain MGD multiply M^3/day by 0.0002642
To obtain lbs/day multiply kg/day by 2.205

Allied Paper Corporation - Kalamazoo

Table 2 Analyses of grab samples.

Date	Time	Flow[1] M^3/day	Temp.[2] °C	pH[2] S.U.	Residual[2] chlorine mg/l	O&G I.R. mg/l	O&G Grav. mg/l	Susp. solids mg/l	Total diss. solids mg/l	Settle. solids mg/l	COD mg/l	TOC mg/l	BOD_5 mg/l	Carb. BOD_5 mg/l
390004 (001)														
6-24-80	1530	10,000	31.0	7.3	U	2	6	30	550	< 2	260	50	140	120
6-24-80	2245	9,300	31.5	7.2	U	2	4	28	800	< 2	260	53	170	130
6-25-80	0820	9,600	32.5	--	U	2	< 2	42	690	< 2	280	52	> 170	130
390006 (002)														
6-24-80	1630	4,800	30.5	7.4	U	1	5	9	510	8	59	17	36	31
6-24-80	2310	5,200	30.5	7.5	U	1	< 2	10	520	5	62	18	32	30
6-25-80	0850	5,300	31.0	--	U	1	< 2	9	530	3	63	19	41	32
Sludge Leachate														
6-24-80	2255	--	15.5	7.2	--	< 1	< 2	23	480	16	20	--	1.6	2.0
6-25-80	0830	--	15.0	--	--	4	< 2	100	510	80	40	--	4.4	1,0

Date	Time	Carb. BOD_{20} mg/l	Nitrite & nitrate nitrogen mg/l	Ammonia nitrogen mg/l	Kjeldahl nitrogen mg/l	Ortho-phosphates-P mg/l	Total phosphorus-P mg/l
390004 (001)							
6-24-80	1530	> 140	2.3	0.18	3.7	0.05	0.18
6-24-80	2245	> 140	8.0	0.09	3.7	0.05	0.11
6-25-80	0820	> 150	6.2	0.10	3.5	0.11	0.12
390006 (002)							
6-24-80	1630	55	0.62	0.02	1.0	0.01	0.03
6-24-80	2310	51	0.87	0.04	1.1	< 0.01	0.02
6-25-80	0850	54	1.2	0.06	0.95	< 0.01	0.02
Sludge Leachate							
6-24-80	2255	2.9	0.03	0.43	0.79	0.03	0.09
6-25-80	0830	3.0	0.03	0.42	1.2	0.04	0.24

1 - Flow at time of grab sampling.
2 - Values determined in the field at time of sampling.

Allied Paper Corporation - Kalamazoo

Table 3 Comparison of survey results with the facility's NPDES Permit and Monthly Operating Report.

Parameter (Unit)	NPDES Permit Final Limitations		June Monthly Operating Report				Survey Results[1]
	Daily Average	Daily Maximum	Monthly Average	Monthly Maximum	6-24-80	6-25-80	
390006 (002)							
Flow (M^3/day)	--	--	5,299	6,533	5,348	6,533	5,910
Settleable solids (ml/l)	--	--	0.09	0.10	0.1	0.1	--
(mg/l)	--	--	--	--	--	--	< 2 (8, 5, 3)
Oil & Grease (visual 0 - 4)	No visible film		0	0	0	0	--
(mg/l)	--	--	--	--	--	--	(5, <2, <1
BOD_5 (kg/day)	--	177	140	175	103	141	260
Total suspended solids (kg/day)	--	230	25	89.8	21	52.2	--
(mg/l)	--	--	--	--	--	--	< 2 (9, 10, 9)
pH (S.U.)	not <6.5 nor >9.5		min. 6.5	7.8	7.0	7.0	(7.4, 7.5

1 - Survey results are for the composite sample. Grab sample ranges are shown in parentheses ( ).
To obtain MGD multiply M^3/day by 0.0002642
To obtain lbs/day multiply kg/day by 2.205

TABLE 14A-1

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND DEFENSE
COMMUNICATION

Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids and BOD

Mill	Year	Month	WW Flow	Influent (lbs/day)			Effluent (lbs/day)			Removal Efficiency		
			(MGD)	SS	DS	BOD	SS	DS	BOD	SS	DS	BOD
Bryant	1955	7	6.25	100,304		23,862	46,589		15,108	54%		37%
Bryant	1955	10	6.77				53,475		16,838			
Bryant	1956	9				30,700			16,100			48%
Bryant	1956	10	5 75	74,300			37,000			50%		
Bryant	1957	1	6.17	85,400	65,000		48,200			44%		
Bryant	1957	2	5.46	82,853	66,100	17,190	45,674	57,155	14,207	45%	14%	17%
Bryant	1957	3	5.22	89,834		21,223	39,780	54,408	16,681	56%		21%
Bryant	1957	5	5.38	91,300	44,050	19,875	32,807		13,012	64%		35%
Bryant	1957	6	5.28	69,885	24,162		20,068			71%		
Bryant	1957	7	6.47	107,467	44,983		37,819			65%		
Bryant	1957	11							15,710			
Bryant	1957	12	7.41	86,300	72,900		56,100			35%		
Bryant	1958	1	7.39	102,104	89,412	29,143	62,726		19,084	39%		35%
Bryant	1958	2	7.52	103,167	106,760	32,617	86,933		27,325	16%		16%
Bryant	1958	3	7.63	125,900	102,000	31,800	85,100		24,850	32%		22%
Bryant	1958	5	6.82	100,119	103,436	25,375	46,963		20,800	53%		18%
Bryant	1958	6	6.95	105,640	89,729	33,565	32,905		21,181	69%		37%
Bryant	1958	7	6.04	101,718	93,182	34,083	33,554		24,217	67%		29%
Bryant	1958	8	6.27	102,858	82,942	34,883	27,576		20,146	73%		42%
Bryant	1958	9	6.07	112,720	88,348	37,400	32,147			71%		
Bryant	1958	10	6.26	102,850	78,383	33,038	32,667			68%		
Bryant	1958	11	6.12	116,780	86,623	33,069	34,515			70%		
Bryant	1958	12	5 99	107,029	79,926	33,836	23,806	11,390		78%	86%	
Bryant	1959	1	5.60	67,881	50,536	14,700	20,105	10,900	10,433	70%	78%	29%
Bryant	1959	2	5 01	65,070	59,693	23,300	18,043		15,125	72%		35%
Bryant	1959	3	7.14	101,773	88,196		34,428			66%		
Bryant	1959	4	6.57	99,736	85,450	28,800	59,743		21,000	40%		27%
Bryant	1959	5	6.29	132,713	85,838	31,780	26,700		20,860	80%		34%
Bryant	1959	6	5.38	85,069	69,969	31,733	15,023		14,733	82%		54%
Bryant	1959	7	5.39	87,625	76,492	25,333	16,270		13,700	81%		46%
Bryant	1959	8	5.87	85,867	80,983	36,600	17,850		18,890	79%		48%
Bryant	1959	9	5.20	90,433	68,942	21,825	17,189		13,700	81%		37%
Bryant	1959	10	5.51	82,208	53,850	24,000	21,482		13,500	74%		44%
Bryant	1959	11	4.55	69,354	44,000	25,450	12,031		13,650	83%		46%
Bryant	1959	12	4.55	66,956	39,222	20,450	12,190		12,250	82%		40%
Bryant	1960	1	6.33	106,009	83,091	31,400	43,971		20,233	59%		36%
Bryant	1960	2	6.33	104,250	85,700	34,800	30,350		24,650	71%		29%

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AN' IFIDENTIAL
SETTLEMENT AND DEFENSE
COMMUNICATION

Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids and BOD

Mill	Year	Month	WW Flow	Influent (lbs/day)			Effluent (lbs/day)			Removal Efficiency		
			(MGD)	SS	DS	BOD	SS	DS	BOD	SS	DS	BOD
Bryant	1960	3	4.68	89,786	58,286	29,600	12,467		14,150	86%		52%
Bryant	1960	4	3.81	49,725	45,192	16,567	8,533		9,367	83%		43%
Bryant	1960	5	4.77	56,900	42,592	25,650	4,615		14,000	92%		45%
Bryant	1960	6	5.74	77,271	64,386	27,020	8,264		13,120	89%		51%
Bryant	1960	7	6.14	81,167	65,117	31,025	9,840		16,375	88%		47%
Bryant	1960	8	5.42	84,746	63,100	20,675	9,862		7,800	88%		62%
Bryant	1960	9	4.56	104,200	68,058	31,600	14,508		17,900	86%		43%
Bryant	1960	10	4.73	77,522	58,744	19,513	16,805		13,857	78%		29%
Bryant	1960	11	4.67	148,500	71,600	31,333	22,644		19,467	85%		38%
Bryant	1960	12	4.51	109,046	61,077	27,750	12,231		16,325	89%		41%
Bryant	1961	1							16,500			
Bryant	1961	6	3.87	56,727		25,119	28,221		14,170	50%		44%
Bryant	1961	7	2.25	70,708			7,848			89%		
Bryant	1961	8	1.20	33,840			5,400			84%		
Bryant	1962	10	4.18				19,120		13,540			
Bryant	1962	11	4.4				43,750					
Bryant	1962	12	4.8				15,200					
Bryant	1963	4	4.63	49,960		6,940	1,585		1,302	97%		81%
Bryant	1963	5	4.51	40,765		7,126	1,147		1,534	97%		78%
Bryant	1963	12	4.50	42,100		7,125	1,090		1,090	97%		85%
Bryant	1965	6	3.15	50,114	33,829	9,546	8,733	44,657	8,214	83%	-32%	14%
Bryant	1965	7	3.25	53,700	42,133	12,967	9,133	34,767	8,600	83%	17%	34%
Bryant	1965	8	2.86	53,500	55,000	13,200	6,700	50,000	9,100	87%	9%	31%
Bryant	1965	9	2.82	51,811	43,767	12,563	17,256	37,733	7,563	67%	14%	40%
Bryant	1965	10	3.17	65,460	49,240	12,213	27,260	43,970	9,888	58%	11%	19%
Bryant	1965	11	3.61	83,086	60,086	17,071	24,429	61,086	15,057	71%	-2%	12%
Bryant	1965	12	3.95	101,463	79,475	18,638	13,563	81,638	13,525	87%	-3%	27%
Bryant	1966	3	4.92	78,742	73,547	25,795	20,533	79,052	16,538	74%	-7%	36%
Bryant	1966	4	5.33	85,771	70,148	23,343	11,900	91,828	15,775	86%	-31%	32%
Bryant	1966	5	4.75	69,277	54,105	28,486	8,109	54,445	11,427	88%	-1%	60%
Bryant	1966	6	3.70	44,055	35,336	12,591	4,518	39,845	13,343	90%	-13%	-6%
Bryant	1966	7	3.54	55,315	37,905	13,747	4,465	39,515	8,974	92%	-4%	35%
Bryant	1966	8	3.69	56,482	39,650	15,073	5,622	38,483	9,339	90%	3%	38%
Bryant	1966	9	3.95	65,075	44,656	15,056	4,000	43,369	9,369	94%	3%	38%
Bryant	1966	10	3.76	64,247	41,841	15,024	2,906	39,559	10,082	95%	5%	33%
Bryant	1966	11	3.83	35,942	31,742	12,108	3,492	29,200	8,733	90%	8%	28%
Bryant	1966	12	3.90	59,290	33,280	12,000	4,332	30,990	7,844	93%	7%	35%

CONFIDENTIAL BUSINESS INFORMATION

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Allied [illegible]ant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids and BOD

Mill	Year	Month	WW Flow	Influent (lbs/day)			Effluent (lbs/day)			Removal Efficiency		
			(MGD)	SS	DS	BOD	SS	DS	BOD	SS	DS	BOD
Bryant	1967	1	3.91	54,259	35,800		4,906	33,665		91%	6%	
Bryant	1967	2	4.11	48,209	36,327		4,645	33,900		90%	7%	
Bryant	1967	3	3.90	54,464	36,750		4,687	33,543		91%	9%	
Bryant	1967	4	3.82	54,021	31,316	12,160	3,760	27,650	7,660	93%	12%	37%
Bryant	1967	5	4.11				7,127		9,015			
Bryant	1967	6	3.77	61,250	35,536		3,358	33,895		95%	5%	
Bryant	1967	7	3.88	48,706	33,024		3,789	28,742		92%	13%	
Bryant	1967	8	3.94	55,738	33,600		4,226	29,813		92%	11%	
Bryant	1967	9	3.80	63,205	36,900		5,040	30,550		92%	17%	
Bryant	1967	10	3.85	53,325	31,005		4,286	26,700		92%	14%	
Bryant	1967	11	3.60	44,155	30,895	14,375	2,320	25,025	7,600	95%	19%	47%
Bryant	1967	12	4.08	59,443	37,093	11,100	5,660	34,315	11,567	90%	7%	-4%
Bryant	1968	1	3.69	56,811	31,395		3,327	29,136		94%	7%	
Bryant	1968	2	3.91	62,056	41,394		3,640	32,495		94%	21%	
Bryant	1968	3	3.66	59,543	39,205		3,167	33,967		95%	13%	
Bryant	1968	4	3.64	55,091	38,768		2,714	33,941		95%	12%	
Bryant	1968	5	3.64	65,100	36,412		2,261	32,267		97%	11%	
Bryant	1968	6	3.03	49,847	32,047		2,653	26,460	6,912	95%	17%	
Bryant	1968	7	2.09	37,289	28,322		2,681	24,390		93%	14%	
Bryant	1968	8	2.36	46,650	24,825		2,596	21,759	10,008	94%	12%	
Bryant	1968	9	2.51	45,371	26,979		2,333	22,578		95%	16%	
Bryant	1968	10	2.35	43,155	23,910		2,217	21,013		95%	12%	
Bryant	1968	11	2.23	36,882	22,747		3,040	19,195		92%	16%	
Bryant	1968	12	2.19	36,350	23,350	10,300	2,350	19,690	4,178	94%	16%	59%
Bryant	1969	1	2.42	41,080	29,645	14,200	2,048	24,800	6,594	95%	16%	54%
Bryant	1969	2	2.51	43,000	29,500		2,900	25,525		93%	13%	
Bryant	1969	3	2.43	42,490	27,770		2,995	23,600		93%	15%	
Bryant	1969	4	2.73	40,232	26,705		3,082	23,882		92%	11%	
Bryant	1969	5	2.72	39,586	26,433		2,148	23,529		95%	11%	
Bryant	1969	6	2.78	40,800	26,810		1,900	23,071		95%	14%	
Bryant	1969	7	2.42	44,400	26,214		1,736	21,945		96%	16%	
Bryant	1969	8	1.57	34,348	27,200		919	24,105		97%	11%	
Bryant	1969	9	1.46	30,314	27,624		657	24,481		98%	11%	
Bryant	1969	10	1.38	30,582	34,991		874	29,648		97%	15%	
Bryant	1969	11	1.44	35,760	37,025		1,033	31,340		97%	15%	
Bryant	1969	12	1.56	32,786	37,207		463	30,961		99%	17%	
Bryant	1970	1	1.36	33,847	31,724	13,167	513	29,919	7,336	98%	6%	44%

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Allied ant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids and BOD

Mill	Year	Month	WW Flow	Influent (lbs/day)			Effluent (lbs/day)			Removal Efficiency		
			(MGD)	SS	DS	BOD	SS	DS	BOD	SS	DS	BOD
Bryant	1970	2	1.46	33,132	29,165	14,170	567	30,400	7,010	98%	-4%	51%
Bryant	1970	3	1.40	30,514	31,914	16,857	645	30,363	9,650	98%	5%	43%
Bryant	1970	4	1.55	38,850	36,150	19,275	946	35,363	11,363	98%	2%	41%
Bryant	1970	5	1.67	35,300	50,850	14,000	524	40,400	10,238	99%	21%	27%
Bryant	1970	6	1.78	43,233	48,067	11,600	860	36,088	10,363	98%	25%	11%
Bryant	1970	7	1.73	53,400	54,700	28,300	699	48,275	12,713	99%	12%	55%
Bryant	1970	8	1.75	38,150	53,800	20,750	668	53,675	9,025	98%	0%	57%
Bryant	1970	9	1.71	49,880	58,120	18,200	1,110	45,543	10,500	98%	22%	42%
Bryant	1970	10	1.63	45,900	55,486	15,714	817	47,100	11,300	98%	15%	28%
Bryant	1970	11	1.62	43,614	50,471	13,600	777	35,729	11,457	98%	29%	16%
Bryant	1970	12	1.45	45,488	53,725	11,925	902	45,738	8,750	98%	15%	27%
Bryant	1971	1	0.90	38,480	35,060	7,860	811	27,383	6,267	98%	22%	20%
Bryant	1971	2	0.84	27,800	33,600	7,488	619	26,075	5,125	98%	22%	32%
Bryant	1971	3	1.00	24,700	30,650	5,800	498	25,450	5,163	98%	17%	11%
Bryant	1971	4	0.91	31,475	15,675	3,550	410	10,575	2,725	99%	33%	23%
Bryant	1971	5	0.86				1,212					
Bryant	1971	6	1.69	49,000	36,000	18,500	920	30,400	5,450	98%	16%	71%
Bryant	1971	7	0.92	22,750	19,433	7,875	1,019	18,800	3,500	96%	3%	56%
Bryant	1971	8	1.67	43,378	48,689	15,222	2,127	36,236	6,873	95%	26%	55%
Bryant	1971	9	1.58	34,886	29,957	16,771	1,214	37,075	7,969	97%	-24%	52%
Bryant	1971	10	1.40	35,663	29,850	10,825	936	20,650	4,875	97%	31%	55%
Bryant	1971	11	1.30	36,420	30,620	6,580	1,156	22,560	4,460	97%	26%	32%
Bryant	1971	12	0.91	6,720	7,900	2,360	322	7,040	500	95%	11%	79%
Bryant	1972	1					225					
Bryant	1972	2					34					
Bryant	1972	3	0.59				48					
Bryant	1972	4	0.67				30					
Bryant	1972	5	0.59				250					
Bryant	1972	6	0.68				187					
Bryant	1972	7	0.89				266					
Bryant	1972	8	1.36				320					
Bryant	1972	9	1.36				412					
Bryant	1972	10	2.15				435					
Bryant	1972	11	1.15				240					
Bryant	1972	12	1.09				137					
Bryant	1973	1	0.80				400					
Bryant	1973	2	0.93				212					

CONFIDENTIAL BUSINESS INFORMATION

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Allied Bryant Mill Clarifier
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids and BOD

Mill	Year	Month	WW Flow	Influent (lbs/day)			Effluent (lbs/day)			Removal Efficiency		
			(MGD)	SS	DS	BOD	SS	DS	BOD	SS	DS	BOD
Bryant	1973	3	0 93				215					
Bryant	**1974**	**3**	**0.796**	**10,723**		**853**	**130**		**328**	**99%**		**62%**
Bryant	**1974**	**4**	**0.871**	**8,403**		**1,022**	**109**		**435**	**99%**		**57%**
Bryant	1977	7	2 32				1,335	11,224	1,935			
Bryant	1978	1	2 71									
Bryant	1978	2	3 58									
Bryant	1979	3	1 93									
Bryant	1979	5					133					
Bryant	1980	6	2 77				1,062	15,009	3,002			
Bryant	1981	1							1,404			
Bryant	1982	3	1 51				352	9,041	1,632			
Bryant	1982	10	1 85				523	8,916	1,291			

Notes See appendices for data sources
Blanks indicate no monitoring data
SS = Suspended solids, DS = Dissolved solids, BOD = Biolgical Oxygen Demand, WW = Wastewater
Removal efficiency = (Influent - Effluent) / Influent x 100
Negative efficiency could be due to typographical errors in original data, clarifier overloading, or uncertainties in the measurements

Note Summaries here reflect updated data in Appendix 14a-A

Shaded cell with bold text indicates November 2001 revision

CONFIDENTIAL BUSINESS INFORMATION

TABLE 14A-2

PRIVILEGED AND C NTIAL
SETTLEMENT AND JO FENSE
COMMUNICATION

Allied Kin Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids and BOD

Mill	Year	Month	WW Flow	Influent (lbs/day)			Effluent (lbs/day)			Removal Efficiency		
			(MGD)	SS	DS	BOD	SS	DS	BOD	SS	DS	BOD
King	**1955**		**6.50**				**33,653**		**15,491**			
King	1956	1	6 54	**120,762**		**21,407**	34,971		**15,492**	**71%**		**28%**
King	1956	6				**16,400**			**10,700**			**35%**
King	1956	10	6 13	58,300			18,050			**69%**		
King	1957	1	8 46	90,333	109,775							
King	1957	2	8.18	93,237	130,834		33,394			**64%**		
King	1957	3	7.33	100,957	95,200		28,075			**72%**		
King	1957	5	**7.19**	**93,381**	80,588	**25,050**	**29,318**		**15,948**	**69%**		**36%**
King	1957	6	7.60	120,175	89,335		27,838			**77%**		
King	1957	7	7.34	110,200	81,762		37,440			**66%**		
King	**1957**	**11**	**7.15**	**113,670**		**23,150**	**36,750**		**17,410**	**68%**		**25%**
King	1957	12	7.46									
King	1958	1	7 09	108,111	99,535	**27,507**	28,124		**16,871**	**74%**		**39%**
King	1958	2	7.30	101,575	110,410	37,150	29,748		17,818	**71%**		**52%**
King	1958	3	6 87	86,863	107,620	29,800	21,524		13,380	**75%**		**55%**
King	1958	5	**5.95**	77,191	82,265	21,087	**24,109**		16,972	**69%**		**20%**
King	1958	6	5 87	71,589	88,112	25,130	24,679		15,904	**66%**		**37%**
King	1958	7	5 80	76,917	91,480	33,300	24,490		20,725	**68%**		**38%**
King	1958	8	**5.74**	94,191	97,127	31,370	37,026		23,340	**61%**		**26%**
King	1958	9	6.65	121,367	102,291		30,807			**75%**		
King	1958	10	6.37	98,833	92,629	30,567	25,328		23,488	**74%**		**23%**
King	1958	11	5.73	93,427	87,354	26,575	34,695		18,715	**63%**		**30%**
King	1958	12	6.68	99,409	122,600	39,875	79,050		36,075	**20%**		**10%**
King	1959	1	6.03	91,957	109,666	29,125	18,456		15,875	**80%**		**45%**
King	1959	2	6.63	86,321	99,347	35,800	42,321		35,200	**51%**		**2%**
King	**1959**	**3**	**6.27**	**114,816**	**100,261**		**24,613**			**79%**		
King	1959	4	5 92	104,133	99,750		34,320			**67%**		
King	1959	5	6 36	122,444	226,222		40,478			**67%**		
King	1959	6	6 56	139,500	109,222		80,010			**43%**		
King	1959	7	6 57	114,100	112,310		86,370			**24%**		
King	1959	8	6.47	105,771			33,388			**68%**		
King	1959	9	6.75	119,692	92,190		39,840			**67%**		
King	1959	11	6.89	132,500	111,550	46,700	57,550		40,000	**57%**		**14%**
King	1959	12	6.96	115,663	99,013	39,100	47,251		30,400	**59%**		**22%**
King	1960	1	7.10	97,050	97,325	29,667	77,940		35,933	**20%**		**-21%**
King	1960	2	6.92	109,683	108,558	34,250	97,208		38,850	**11%**		**-13%**
King	1960	3	6.97	125,738	127,678	49,900	64,038		37,050	**49%**		**26%**

CONFIDENTIAL BUSINESS INFORMATION

Ta a-2
Allied King Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids and BOD

Mill	Year	Month	WW Flow	Influent (lbs/day)			Effluent (lbs/day)			Removal Efficiency		
			(MGD)	SS	DS	BOD	SS	DS	BOD	SS	DS	BOD
King	1960	4	6.53	110,875	103,200	35,400	57,350		27,200	48%		23%
King	1960	5	6.31	107,627	109,000	37,500	50,950		26,450	53%		29%
King	1960	6	6 33	115,208	106,477	33,580	47,793		26,600	59%		21%
King	1960	7	6 30	111,033	100,967	29,600	48,943		22,067	56%		25%
King	1960	8	6.69	115,820	109,000	31,700	51,567		25,433	55%		20%
King	1960	9	7.32	103,200	106,200	29,033	56,518		23,450	45%		19%
King	1960	10	7.14	156,131	112,192	40,138	81,233		28,120	48%		30%
King	1960	11	7.16	183,467	122,600	47,440	124,425		34,000	32%		28%
King	1960	12	7.36	238,080	122,733	51,100	159,417		48,900	33%		4%
King	**1961**								**28,400**			
King	1961	6	7.40	**162,713**		**43,144**	**102,928**		**28,351**	37%		34%
King	1961	7	7.02	127,372			65,373			49%		
King	1961	8	6.50	302,900			59,605			80%		
King	**1962**	**10**	**3.95**				**21,392**		**11,807**			
King	**1962**	**11**	**6.09**	**119,333**			**13,973**			88%		
King	1963	1	7 37	163,717		**40,690**	55,000		**21,692**	66%		47%
King	1963	3	6 94	156,529		36,200	40,133		22,175	74%		39%
King	1963	4	6.75	152,060		25,760	61,773		17,652	59%		31%
King	1963	5	7.16	169,805		36,223	69,537		19,518	59%		46%
King	1963	6	7.38	165,885		26,127	69,285		17,127	58%		34%
King	**1963**	**7**	**7.44**	**166,109**			**65,285**			61%		
King	**1963**	**8**	**7.36**	**152,469**			**59,223**			61%		
King	**1963**	**9**	**7.07**	**161,118**			**38,073**			76%		
King	**1963**	**10**	**6.96**	**163,951**			**40,095**			76%		
King	**1963**	**11**	**6.94**	**206,831**			**60,380**			71%		
King	**1963**	**12**	**7.00**	**167,200**			**45,800**			73%		
King	1965	4	5.49	84,000		15,160	14,660		10,120	83%		33%
King	1965	5	5 53	58,786	61,914	10,514	11,529	52,757	6,186	80%	15%	41%
King	1965	6	4.98	36,000	36,129	6,822	1,275	33,600	1,808	96%	7%	74%
King	1965	7	4.80	30,692	37,058	7,785		31,750	2,918		14%	63%
King	1965	8	4.64	37,271	31,921	6,229		26,014	2,530		19%	59%
King	1965	9	4.68	24,289	32,367	4,519		28,567	2,056		12%	54%
King	1965	10	4.57	29,210	33,630	6,050		32,100	2,750		5%	55%
King	1965	11	4.38	28,200	34,671	6,400	4,000	31,557	2,429	86%	9%	62%
King	1965	12	4.22	25,460	33,080	4,960		32,360	3,300		2%	33%
King	1966	3	4.05	24,522	39,011	7,056	3,488	37,267	5,017	86%	4%	29%
King	1966	4	3.26	20,305	28,895	3,622	1,616	**26,919**	1,986	92%	7%	45%

CONFIDENTIAL BUSINESS INFORMATION

Table a-2
Allied King Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids and BOD

Mill	Year	Month	WW Flow	Influent (lbs/day)			Effluent (lbs/day)			Removal Efficiency		
			(MGD)	SS	DS	BOD	SS	DS	BOD	SS	DS	BOD
King	1966	5	3.93	19,886	**31,755**	3,797	1,378	29,164	2,031	**93%**	**8%**	**47%**
King	1966	6	3.09	23,057	29,648	4,685	743	26,443	2,265	**97%**	**11%**	**52%**
King	1966	7	3.13	13,750	29,625	4,400	633	26,500	2,300	**95%**	**11%**	**48%**
King	1966	8	2 94	21,675	33,650	4,950	1,000	28,950	3,425	**95%**	**14%**	**31%**
King	1966	9	2.55	32,333	27,980	3,520	1,930	22,520	2,640	**94%**	**20%**	**25%**
King	1966	10	2 47	21,322	27,167	5,033	1,314	**21,700**	2,278	**94%**	**20%**	**55%**
King	1966	11	2.02	18,833	18,867	3,467	800	16,267	2,667	**96%**	**14%**	**23%**
King	1966	12	0.58	5,067	5,433	865	267	4,800	546	**95%**	**12%**	**37%**
King	1967	1	0.84	23,163	24,025		1,456	8,022		**94%**	**67%**	
King	1967	2	0.60	20,283	27,317		692	5,200		**97%**	**81%**	
King	1967	3	0.62	26,758	26,433		413	6,025		**98%**	**77%**	
King	1967	4	0.53	25,755	25,409		500	4,891		**98%**	**81%**	
King	1967	5	**0.77**	402			**401**		**890**	**0%**		
King	1967	6	0.92	16,189	17,888		1,091	9,944		**93%**	**44%**	
King	1967	7	0.58	19,342	23,800		669	4,517		**97%**	**81%**	
King	1967	8	0.81	27,775	26,375		393	7,342		**99%**	**72%**	
King	1967	9	1.31	20,070	28,970		1,613	12,330		**92%**	**57%**	
King	1967	10	1.94	20,925	27,867		1,389	16,483		**93%**	**41%**	
King	1967	11	2.79	19,345	23,818		700	21,464		**96%**	**10%**	
King	1967	12	2.73	19,291	25,455		1,456	22,691		**92%**	**11%**	
King	1968	1	2.75	18,246	26,185		642	24,015	**2,190**	**96%**	**8%**	
King	1968	2	3.42	26,200	30,360		851	27,120		**97%**	**11%**	
King	1968	3	3.22	22,115	30,592		820	27,823		**96%**	**9%**	
King	1968	4	2.86	24,933	27,733		867	22,808		**97%**	**18%**	
King	1968	5	3.81	44,664	35,673		882	33,155		**98%**	**7%**	
King	1968	6	3.07	38,775	33,450		740	27,925	**1,604**	**98%**	**17%**	
King	1968	7	3.72	37,373	35,173		1,864	27,342		**95%**	**22%**	
King	1968	8	3 51	35,823	28,392		1,289	26,546		**96%**	**7%**	
King	1968	9	3 17	39,082	27,227		1,044	22,720		**97%**	**17%**	
King	1968	10	3.31	36,327	31,200		1,325	25,233		**96%**	**19%**	
King	1968	11	2.82	33,292	24,567		1,011	21,308		**97%**	**13%**	
King	1968	12	3.53	37,727	30,291		886	26,736		**98%**	**12%**	
King	1969	1	2.76	39,514	32,750		855	22,350		**98%**	**32%**	
King	1969	2	3.07	46,575	34,800		1,033	23,475		**98%**	**33%**	
King	1969	3	2.68	32,192	31,738		950	21,431		**97%**	**32%**	
King	1969	4	2.62	30,275	26,200		800	18,758		**97%**	**28%**	
King	1969	5	2.80	34,033	30,142		570	22,417		**98%**	**26%**	

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND C NTIAL
SETTLEMENT AND JO .FENSE
COMMUNICATION

Allied Ki .il Clarifier
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids and BOD

Mill	Year	Month	WW Flow	Influent (lbs/day)			Effluent (lbs/day)			Removal Efficiency		
			(MGD)	SS	DS	BOD	SS	DS	BOD	SS	DS	BOD
King	1969	6	2 89	30,069	28,046		475	22,508		98%	20%	
King	1969	7	3 40	32,350	30,167		658	27,008		98%	10%	
King	1969	8	3 40	35,823	28,492		440	23,408		99%	18%	
King	1969	9	3 32	27,367	26,200		533	23,258		98%	11%	
King	1969	10	3 61	40,286	28,857		757	25,479		98%	12%	
King	1969	11	3 49	39,582	29,818		664	25,718		98%	14%	
King	1969	12	3 72	43,382	32,136		822	28,200		98%	12%	
King	1970	1	3 58	50,536	30,927	5,667	738	28,455	2,878	99%	8%	49%
King	1970	2	3 54	39,209	28,873	6,350	683	24,491	1,038	98%	15%	84%
King	1970	3	2 76	26,533	20,400	6,100	600	19,700	1,300	98%	3%	79%
King	1970	4	3 31	30,878	23,627	5,383	460	22,310	1,700	99%	6%	68%
King	1970	5	3.22	36,225	26,333	4,967	675	22,075	1,104	98%	16%	78%
King	1970	6	2 99	31,717	22,850	3,333	667	20,680	2,420	98%	9%	27%
King	1970	7	3 03	34,000	25,360	3,544	540	23,280	750	98%	8%	79%
King	1970	8	3 32	38,250	26,714	3,900	660	23,286	980	98%	13%	75%
King	1970	9	3 14	34,511	24,533	2,795	875	20,500	775	97%	16%	72%
King	1970	10	2 92	33,986	21,950	4,914	475	19,467	729	99%	11%	85%
King	1970	11	3 06	39,767	23,000	5,517	700	20,917	850	98%	9%	85%
King	1970	12	3 26	40,700	28,773	4,311	822	22,750	733	98%	21%	83%
King	1971	1	3 26	50,567	28,067	6,250	567	23,900	1,100	99%	15%	82%

Notes See appendices for data sources
Blanks indicate no monitoring data
SS = Suspended solids, DS = Dissolved solids, BOD = Biolgical Oxygen Demand, WW = Wastewater
Removal efficiency = (Influent - Effluent) / Influent x 100
Negative efficiency could be due to typographical errors in original data, clarifier overloading, or uncertainties in the measurements

Note Summaries here reflect updated data in Appendix 14a-B

CONFIDENTIAL BUSINESS INFORMATION

TABLE 14A-3

PRIVILEGED AND C[illegible]NTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Allied Monarch Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids and BOD

Mill	Year	Month	WW Flow	Influent (lbs/day)			Effluent (lbs/day)			Removal Efficiency		
			(MGD)	SS	DS	BOD	SS	DS	BOD	SS	DS	BOD
Monarch	**1955**		**5.63**				**25,011**		**13,671**			
Monarch	**1955**	**7**	**5.50**	**37,384**		**16,738**	**15,319**		**9,768**	**59%**		**42%**
Monarch	**1955**	**8**	**5.52**	**45,895**		**12,165**	**16,306**		**10,006**	**64%**		**18%**
Monarch	1956	1	3.28	**37,298**		**9,912**	**17,024**		**8,892**	**54%**		**10%**
Monarch	**1956**	**10**	**5.25**	**49,900**			**19,200**			**62%**		
Monarch	1956	12	4.73	44,800	59,800		19,750			**56%**		
Monarch	1957	1	4.34	41,817	43,600		23,379			**44%**		
Monarch	1957	3	2.12	37,267	15,053		4,620			**88%**		
Monarch	1957	5	4.30	41,600	33,150		19,000			**54%**		
Monarch	1957	12	4.50	41,700	61,100		8,840			**79%**		
Monarch	1958	1	4.97	58,455	61,791		12,511	60,800		**79%**	**2%**	
Monarch	1959	12	1.94	31,725	7,825	5,770	2,613		1,795	**92%**		**69%**
Monarch	1960	1	1.87	32,000	6,940	7,683	611	5,500	1,215	**98%**	**21%**	**84%**
Monarch	1960	2	1.50	29,800	4,050		310		66	**99%**		
Monarch	1960	3	0.70	10,485	2,563	2,480	851		390	**92%**		**84%**
Monarch	1960	4	0.65	19,433	3,317	2,475	329		285	**98%**		**88%**
Monarch	1960	5	0.74	8,013	2,325	3,100	400		250	**95%**		**92%**
Monarch	1960	6	0.86	7,770	3,520	2,467	437		255	**94%**		**90%**
Monarch	1960	7	0.73	7,590	2,479	1,917	261		353	**97%**		**82%**
Monarch	1960	8	0.89	14,071	2,300	4,550	1,376		180	**90%**		**96%**
Monarch	1960	9	0.48	7,110	1,630	2,000	456		137	**94%**		**93%**
Monarch	1960	10	0.56	16,545	4,015	1,843	332		234	**98%**		**87%**
Monarch	1960	11	0.62	4,735	4,220	840	320		214	**93%**		**75%**
Monarch	1960	12	0.67	6,170	4,469	1,275	163		348	**97%**		**73%**
Monarch	1961	1							**780**			
Monarch	1961	6	**1.51**				**207**		**778**			
Monarch	1963	3	**1.53**	**4,545**		**2,263**	**917**		**330**	**80%**		**85%**
Monarch	1963	4	1.43	3,670		995						
Monarch	1963	5	1.81	17,955								
Monarch	1965	6	1.80	13,494	8,886	3,237		6,257	275		**30%**	**92%**
Monarch	1965	7	1.73	15,425	7,409	2,594	1,200	5,137	223	**92%**	**31%**	**91%**
Monarch	1965	8	1.88	19,186	7,507	3,407		5,814	265		**23%**	**92%**
Monarch	1965	9	1.86	13,867	7,633	2,506		5,989	216		**22%**	**91%**
Monarch	1965	10	1.90	16,810	7,590	2,700	2,500	6,160	381	**85%**	**19%**	**86%**
Monarch	1965	11	1.86	19,214	7,743	2,700	583	5,757	456	**97%**	**26%**	**83%**
Monarch	1965	12	1.90	19,363	7,138	2,557	1,900	6,538	576	**90%**	**8%**	**77%**
Monarch	1966	3	1.67	12,122	9,144	2,778	536	8,672	421	**96%**	**5%**	**85%**

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND C NTIAL
SETTLEMENT AND JO ENSE
COMMUNICATION

Allied Mona Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids and BOD

Mill	Year	Month	WW Flow	Influent (lbs/day)			Effluent (lbs/day)			Removal Efficiency		
			(MGD)	SS	DS	BOD	SS	DS	BOD	SS	DS	BOD
Monarch	1966	4	1.65	13,033	9,314	2,096	818	8,257	424	94%	11%	80%
Monarch	1966	5	1.71	13,509	8,936	2,659	1,551	7,418	270	89%	17%	90%
Monarch	1966	6	1.75	13,395	9,582	2,952	457	7,277	130	97%	24%	96%
Monarch	1966	7	1.44	16,900	7,700	2,700	725	4,460	233	96%	42%	91%
Monarch	1966	8	1.60	15,980	7,240	3,180	700	4,500	181	96%	38%	94%
Monarch	1966	9	1 72	14,600	12,633	5,100	200	8,500	150	99%	33%	97%
Monarch	1966	10	1 52	11,625	7,300	2,700	350	3,175	163	97%	57%	94%
Monarch	1966	11	1.82	9,367	4,767	2,150	100	3,067	130	99%	36%	94%
Monarch	1966	12	1.45	9,250	5,450	1,400	383	4,200	215	96%	23%	85%
Monarch	1967	1	1.45	8,450	5,425		600	4,200		93%	23%	
Monarch	1967	2	1.48	7,733	5,300		417	4,500		95%	15%	
Monarch	1967	3	1.61	6,800	4,625		300	4,275		96%	8%	
Monarch	1967	4	1.71	13,525	4,975		100	4,733		99%	5%	
Monarch	**1967**	**5**	**1.99**				**372**		**384**			
Monarch	1967	6	1.85	11,650	7,488		1,013	7,258		91%	3%	
Monarch	1967	7	1.79	10,925	6,450		250	4,525		98%	30%	
Monarch	1967	8	1.58	9,660	6,000		550	3,700		94%	38%	
Monarch	1967	9	1 81	13,575	5,900		725	4,850		95%	18%	
Monarch	1967	10	1 97	17,480	4,880		575	4,220		97%	14%	
Monarch	1967	11	1.98	12,600	4,475		300	4,333		98%	3%	
Monarch	1967	12	2.00	15,150	9,825		550	8,575		96%	13%	
Monarch	1968	1	2.01	16,100	5,680		460	4,680		97%	18%	
Monarch	1968	2	1.90	14,575	5,925		300	3,575		98%	40%	
Monarch	1968	3	1.82	9,475	4,925		300	3,825		97%	22%	
Monarch	1968	4	1.77	8,910	5,280		300	3,520		97%	33%	
Monarch	1968	5	2.32	14,833	10,267		600	8,167		96%	20%	
Monarch	1968	6	2.32	16,300	10,140		**703**	5,760	**646**	96%	43%	
Monarch	1968	7	2.27	20,075	5,525		684	5,700		97%	-3%	
Monarch	1968	8	2.08	15,325	9,700		473	7,825	**456**	97%	19%	
Monarch	1968	9	1.86	12,150	6,200		450	4,650		96%	25%	
Monarch	1968	10	1.97	14,040	8,030		650	6,350		95%	21%	
Monarch	1968	11	1.84	13,600	6,150		1,667	3,750		88%	39%	
Monarch	1968	12	1.71	6,420	4,580		550	3,720		91%	19%	
Monarch	1969	1	1.71	5,200	3,575		400	2,125		92%	41%	
Monarch	1969	2	1.71	4,775	4,250		300	2,125		94%	50%	
Monarch	1969	3	1.71	5,825	4,375			3,650			17%	
Monarch	1969	4	1.75	6,350	3,575		300	2,850		95%	20%	

CONFIDENTIAL BUSINESS INFORMATION

Ta a-3
Allied Monarch Mill Clarifier.
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids and BOD

Mill	Year	Month	WW Flow	Influent (lbs/day)			Effluent (lbs/day)			Removal Efficiency		
			(MGD)	SS	DS	BOD	SS	DS	BOD	SS	DS	BOD
Monarch	1969	5	1.82	4,420	3,550		300	2,680		**93%**	**25%**	
Monarch	1969	6	1.75	5,275	4,950			4,550			**8%**	
Monarch	1969	7	2.54	4,100	4,725		1,325	10,817		**68%**	**-129%**	
Monarch	1969	8	3.22	4,400	4,000		919	9,919		**79%**	**-148%**	
Monarch	1969	9	3.24	5,075	4,125		605	9,476		**88%**	**-130%**	
Monarch	1969	10	3 01	6,160	4,240		757	8,309		**88%**	**-96%**	
Monarch	1969	11	2.99	10,225	8,775		1,411	8,653		**86%**	**1%**	
Monarch	1969	12	3.22	9,800	5,400		753	11,100		**92%**	**-106%**	
Monarch	1970	1	2.98	10,367	7,367	1,533	835	16,041	807	**92%**	**-118%**	**47%**
Monarch	1970	2	2.97	5,400	**13,850**	1,650	560	13,040	1,840	**90%**	**6%**	**-12%**
Monarch	1970	3	3.14	18,665	17,960	8,400	581	14,329	4,267	**97%**	**20%**	**49%**
Monarch	1970	4	3.65	20,559	21,153	6,630	946	**18,113**	3,420	**95%**	**14%**	**48%**
Monarch	1970	5	3.77	19,957	23,000	5,131	791	19,005	2,994	**96%**	**17%**	**42%**
Monarch	1970	6	3.41	20,614	21,152	6,312	1,200	**18,409**	3,239	**94%**	**13%**	**49%**
Monarch	1970	7	2.89	17,940	17,353	4,740	618	**14,162**	2,233	**97%**	**18%**	**53%**
Monarch	1970	8	2.89	20,433	14,460	3,764	438	11,407	805	**98%**	**21%**	**79%**
Monarch	1970	9	**3.26**	20,387	**16,244**	4,031	**626**	12,944	**1,381**	**97%**	**20%**	**66%**
Monarch	1970	10	3.53	22,623	17,495	5,250	616	15,241	1,659	**97%**	**13%**	**68%**
Monarch	1970	11	**3.64**	25,342	14,611	5,634	606	12,232	1,789	**98%**	**16%**	**68%**
Monarch	1970	12	3.08	18,267	14,563	3,625	544	10,847	1,217	**97%**	**26%**	**66%**
Monarch	1971	1	3.34	**24,400**	18,475	5,113	649	15,685	1,711	**97%**	**15%**	**67%**
Monarch	1971	2	3.79	25,073	18,867	4,773	554	15,840	1,420	**98%**	**16%**	**70%**
Monarch	1971	3	3.39	27,285	18,068	6,110	541	15,380	1,565	**98%**	**15%**	**74%**
Monarch	1971	4	3.55	26,310	18,860	6,030	888	16,770	1,620	**97%**	**11%**	**73%**
Monarch	1971	5	3.89	25,700	21,250	6,033	600	15,838	1,963	**98%**	**25%**	**67%**
Monarch	1971	6	3.76	26,150	16,640	7,070	467	14,970	1,830	**98%**	**10%**	**74%**
Monarch	1971	7	**3.65**	**20,711**	17,363	4,975	1,250	15,060	1,867	**94%**	**13%**	**62%**
Monarch	1971	8	3.86	**27,437**	18,317	5,747	775	14,582	1,127	**97%**	**20%**	**80%**
Monarch	1971	9	3.79	29,250	20,785	6,242	671	15,085	1,297	**98%**	**27%**	**79%**
Monarch	1971	10	3.80	26,617	**18,467**	5,814	300	**16,850**	1,419	**99%**	**9%**	**76%**
Monarch	1971	11	3.61			5,883	383		1,325			**77%**
Monarch	1971	12	3.64			5,583	250		1,555			**72%**
Monarch	1972	1	3.60				268					
Monarch	1972	2	3.07				364					
Monarch	1972	3	3.06				290					
Monarch	1972	4	3.04				134					
Monarch	1972	5	3.25				295					

CONFIDENTIAL BUSINESS INFORMATION

Allied Monarch Mill Clarifier
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids and BOD

PRIVILEGED AND C NTIAL
SETTLEMENT AND JOI DEFENSE
COMMUNICATION

Mill	Year	Month	WW Flow	Influent (lbs/day)			Effluent (lbs/day)			Removal Efficiency		
			(MGD)	SS	DS	BOD	SS	DS	BOD	SS	DS	BOD
Monarch	1972	6	3 08				223					
Monarch	1972	7	3 00				350					
Monarch	1972	8	3 00				283					
Monarch	1972	9	2 92				228					
Monarch	1972	10	2 80				217					
Monarch	1972	11	2 89				405					
Monarch	1972	12	2 98				335					
Monarch	1973	1	2 97				250					
Monarch	1973	2	3 02				392					
Monarch	1973	3	3 09				411					
Monarch	1975	5	**3.07**				**390**	10,162	**755**			
Monarch	1976	8	**3.96**				**127**	**15,081**	**515**			
Monarch	1977	7	**2.44**				**353**	**11,886**	**320**			
Monarch	1977	8	2 51				172		**398**			
Monarch	1977	9	2 63				122		342			
Monarch	1977	10	2 68				97		364			
Monarch	1978	1					297					
Monarch	1978	2	**3 96**				**347**	**16,164**	**1,385**			
Monarch	1978	5	2 68				178		404			
Monarch	1978	6	2 95				121		355			
Monarch	1978	7	2 69				44		321			
Monarch	1979	3	**2.39**				**316**	**7,749**	**480**			
Monarch	1979	4	2 51				210		496			
Monarch	1979	5	2 32				219		**453**			
Monarch	1979	10					108					
Monarch	1980	6	**1.39**				**64**	**5,968**	**335**			
Monarch	1980	10					189					
Monarch	**1981**	**1**	**0.66**				**258**	**3,244**	**341**			
Monarch	1981	5					302					
Monarch	1981	10					**423**		**536**			
Monarch	**1982**	**3**	**0 32**				**53**	**1,969**	**373**			
Monarch	1982	5					143					
Monarch	1982	10	**0.42**				**93**	**2,098**	**350**			
Monarch	1983	1	0 47									
Monarch	1983	2	0 48									
Monarch	1983	3	0 62									
Monarch	1983	4	0 62									

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND C NTIAL
SETTLEMENT AND JOI DEFENSE
COMMUNICATION

Allied Monarch Mill Clarifier
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids and BOD

Mill	Year	Month	WW Flow	Influent (lbs/day)			Effluent (lbs/day)			Removal Efficiency		
			(MGD)	SS	DS	BOD	SS	DS	BOD	SS	DS	BOD
Monarch	1983	5	0 52									
Monarch	1983	6	0 46									
Monarch	1983	7	0 44									
Monarch	1984	1	0 60				117		497			
Monarch	1984	2	0 56				129		494			
Monarch	1984	3	0 49				102		494			
Monarch	1984	4	0 50				116		487			
Monarch	1984	10	0 33				102		441			
Monarch	1984	11	0 30				125		500			
Monarch	1984	12	0 31				109		482			
Monarch	1985	1	0 30				170		498			
Monarch	1985	2	0 39				257		662			
Monarch	1985	3	0 44				266		774			
Monarch	1985	4	0 40				153		1,053			
Monarch	1985	5	0 20				46		357			
Monarch	1985	6	0 21				50		360			
Monarch	1985	7	0 19				29		333			
Monarch	1985	8	0 21				49		363			

Notes See appendices for data sources
Blanks indicate no monitoring data
SS = Suspended solids DS = Dissolved solids, BOD = Biolgical Oxygen Demand, WW = Wastewater

Removal efficiency = (Influent - Effluent) / Influent x 100
Negative efficiency could be due to typographical errors in original data, clarifier overloading, or uncertainties in the measurements

Note Summaries here reflect updated data in Appendix 14a-C

CONFIDENTIAL BUSINESS INFORMATION

APPENDIX 14A-A

Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Jul-20-55	6.9		108,642		61,414	SA 039019 (WRC)
Jul-21-55	6.7		109,161		41,602	SA 039019 (WRC)
Jul-22-55	6.9		121,780		66,589	SA 039019 (WRC)
Jul-23-55	6.7		113,447		68,371	SA 039019 (WRC)
Jul-24-55	3.1		27,054		5,272	SA 039019 (WRC)
Jul-25-55	7.0		110,312		45,234	SA 039019 (WRC)
Jul-26-55	6.4		111,730		37,642	SA 039019 (WRC)
Fall 55	6.8				53,475	KA04600383
Oct 56	5.8		74,300		37,000	KA050001172; SA029197
Jan-16-57	5.8					Note 1
Jan-17-57	8.3					Note 1
Jan-18-57	5.3					Note 1
Jan-19-57	7.5					Note 1
Jan-21-57	6.6					Note 1
Jan-22-57	5.8					Note 1
Jan-23-57	3.7					Note 1
Jan-24-57	5.8					Note 1
Jan-25-57	6.8					Note 1
Jan-26-57	6.7					Note 1
Jan-31-57	5.6	65,000	85,400		48,200	Note 1
Feb-01-57	5.6	66,100	91,400		66,000	Note 1
Feb-02-57	4.2		58,800			Note 1
Feb-04-57	5.6		68,800		33,400	Note 1
Feb-05-57	5.8		82,500		63,400	Note 1
Feb-06-57	5.6		98,700		60,300	Note 1
Feb-07-57	5.4				55,250	Note 1
Feb-08-57	5.7				77,700	Note 1
Feb-11-57	5.8		98,800	52,700	22,100	Note 1
Feb-12-57	6.2		63,500	62,350	73,800	Note 1
Feb-13-57	5.8		96,700	57,660	29,800	Note 1
Feb-14-57	5.6		82,800	70,500	64,000	Note 1
Feb-15-57	6.2		113,000	66,700	84,400	Note 1
Feb-16-57	5.8		104,000			Note 1
Feb-18-57	5.4					Note 1
Feb-19-57	5.6		112,200			Note 1
Feb-20-57	5.5		91,700			Note 1
Feb-21-57	4.9		82,000	45,000	15,950	Note 1
Feb-22-57	3.9		59,700	30,800	10,350	Note 1
Feb-23-57	5.6					Note 1
Feb-25-57	4.9		50,000	73,600	11,450	Note 1
Feb-26-57	5.3		64,600	46,600	21,700	Note 1
Feb-27-57	5.7		98,600	57,100	37,100	Note 1
Feb-28-57	5.6		56,400	65,700	49,750	Note 1
Mar-01-57	5.5		63,800	64,400	47,800	Note 1
Mar-04-57			132,300	45,800	10,100	Note 1
Mar-05-57	5.4		95,500	63,300	43,200	Note 1
Mar-06-57	5.4		92,500	63,300	57,000	Note 1
Mar-07-57	5.2		88,000	56,000	46,500	Note 1
Mar-08-57	4.7		84,100	49,100	40,800	Note 1
Mar-09-57	5.0					Note 1
Mar-11-57	4.1		44,900	38,300	9,540	Note 1
Mar-12-57	5.1		93,500	60,900	34,000	Note 1
Mar-13-57	5.6		92,800	60,800	58,050	Note 1

CONFIDENTIAL BUSINESS INFORMATION

Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Mar-14-57	5.1		87,000	50,980	28,000	Note 1
Mar-15-57	5.5			59,700	57,800	Note 1
Mar-16-57	5.5		90,000	64,750	64,750	Note 1
Mar-25-57	4.6		78,200	32,500	6,120	Note 1
Mar-26-57	5.4		89,900	44,900	33,200	Note 1
Mar-27-57	5.1		89,450	44,600	27,600	Note 1
Mar-28-57	5.6		126,200	65,500	40,200	Note 1
Mar-29-57	6.0		89,200	60,110	71,600	Note 1
May-06-57	5.3	30,800	60,300		28,300	Note 1
May-07-57	5.5	38,200	67,600		45,700	Note 1
May-08-57	5.6				53,700	Note 1
May-09-57	5.7	56,400	102,500		52,800	Note 1
May-10-57	5.6	43,700	129,500		47,700	Note 1
May-11-57	5.4				36,200	Note 1
May-13-57	5.1	55,400	77,100		15,400	Note 1
May-14-57	5.6	45,700	176,500		12,100	Note 1
May-15-57	5.5	45,200	116,300		38,200	Note 1
May-16-57	5.5		110,000		46,300	Note 1
May-17-57	5.5	41,200	83,000		43,600	Note 1
May-18-57	5.1	29,000	45,600		16,900	Note 1
May-20-57	4.4		47,500		16,050	Note 1
May-21-57	5.2	34,300	65,200		32,700	Note 1
May-22-57	4.3	28,200	64,500		28,500	Note 1
May-23-57	5.8	40,600	102,800		24,000	Note 1
May-24-57	5.7	37,600	82,400		37,900	Note 1
May-25-57	5.0	20,300	60,700		5,420	Note 1
May-27-57	5.2	43,200	70,700		17,200	Note 1
May-27-57	5.4		76,796		21,208	SA 039032 (WRC)
May-28-57	5.7	63,900	103,500		44,600	Note 1
May-28-57	5.8		111,314		48,397	SA 039032 (WRC)
May-29-57	5.8	57,630	162,000		30,700	Note 1
May-30-57	5.5	55,020	95,400		38,500	Note 1
May-31-57	5.6	70,600	88,700		38,100	Note 1
Jun-01-57	6.2					Note 1
Jun-03-57		33,800	116,000		25,500	Note 1
Jun-04-57		32,900	94,500		12,550	Note 1
Jun-05-57		40,900	87,600		55,300	Note 1
Jun-06-57		17,150	64,900		20,700	Note 1
Jun-07-57		19,700	59,400		16,130	Note 1
Jun-08-57		25,800	60,000		21,000	Note 1
Jun-10-57	4.5	9,360	47,700		10,010	Note 1
Jun-11-57	5.4	30,700	66,700		13,350	Note 1
Jun-12-57	5.4	20,300	61,000		15,100	Note 1
Jun-13-57	5.0		60,400		20,150	Note 1
Jun-14-57	5.3					Note 1
Jun-15-57	5.2	25,500	48,800		9,890	Note 1
Jun-17-57		8,480	66,500		23,600	Note 1
Jun-18-57		25,350	75,000		17,600	Note 1
Jul-01-57	6.1	20,250	106,000		20,400	Note 1
Jul-02-57	6.9	25,600	105,800		29,100	Note 1
Jul-09-57	6.1	27,650	89,900		6,530	Note 1
Jul-10-57	6.6	59,800	126,500		68,400	Note 1
Jul-11-57	6.6				40,700	Note 1

CONFIDENTIAL BUSINESS INFORMATION

Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Jul-12-57	6.6	82,000	112,100		44,900	Note 1
Jul-13-57	6.6	54,600	104,500		54,700	Note 1
Dec-30-57	7.2	52,400	89,600		41,900	Note 1
Dec-31-57	7.7	93,400	83,000		70,300	Note 1
Jan-01-58	7.7	74,700	95,400			Note 1
Jan-02-58	7.4	46,700	113,700			Note 1
Jan-03-58	7.2	51,000	73,000			Note 1
Jan-04-58	7.5	46,500	155,500			Note 1
Jan-06-58	7.6					Note 1
Jan-07-58	6.4	95,400	87,400			Note 1
Jan-08-58	7.6	95,500	96,000		27,600	Note 1
Jan-09-58	7.1	94,600	85,800		29,000	Note 1
Jan-10-58	7.4	98,600	101,300		30,200	Note 1
Jan-11-58	7.5				98,400	Note 1
Jan-13-58	7.5	93,600	160,000			Note 1
Jan-14-58	7.6	92,400			80,200	Note 1
Jan-15-58	7.5	115,800			88,900	Note 1
Jan-16-58	7.5	68,300	128,900		67,200	Note 1
Jan-17-58	7.5	143,300	147,000		81,000	Note 1
Jan-18-58	7.5	96,500	71,000			Note 1
Jan-20-58	7.6	69,500	98,600		43,000	Note 1
Jan-21-58	7.5	93,700	91,200		67,400	Note 1
Jan-22-58	7.4	99,400	83,000		68,200	Note 1
Jan-23-58	5.7	81,300	64,000		54,400	Note 1
Jan-24-58	7.7	86,100	100,800		75,300	Note 1
Jan-25-58	7.6	85,500	92,500		87,400	Note 1
Jan-27-58	7.4	80,400	91,500		28,500	Note 1
Jan-28-58	7.6	108,000	97,600		48,200	Note 1
Jan-29-58	7.6	107,000	104,000		73,000	Note 1
Jan-30-58	7.6	98,000	111,300		69,500	Note 1
Jan-31-58	7.6	113,500	98,900		74,400	Note 1
Feb-01-58	7.6	114,000	113,800			Note 1
Feb-03-58	7.4	80,000	107,100			Note 1
Feb-04-58	7.6	101,000	88,200		78,100	Note 1
Feb-05-58	7.6				66,800	Note 1
Feb-06-58	7.6	120,000	105,600			Note 1
Feb-07-58	7.5	110,000	102,800			Note 1
Feb-08-58	7.6	111,000	85,500			Note 1
Feb-24-58	7.2	95,900	115,800			Note 1
Feb-25-58	7.5	106,500			97,500	Note 1
Feb-26-58	7.6				134,000	Note 1
Feb-27-58	7.1	115,700	107,500		67,100	Note 1
Feb-28-58	8.0	113,500	102,200		78,100	Note 1
Mar-01-58	7.7					Note 1
Mar-03-58	7.8	84,900	92,800			Note 1
Mar-04-58	7.5	99,400	117,500		85,100	Note 1
Mar-05-58	7.7	115,000	133,300			Note 1
Mar-06-58	7.5	108,700	160,000			Note 1
May-12-58	6.2		71,750			Note 1
May-13-58	7.2		105,800			Note 1
May-14-58	7.3	103,500	105,900			Note 1
May-15-58	7.3	101,000	94,200			Note 1
May-16-58	7.1					Note 1

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Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
May-17-58	7.3					Note 1
May-19-58	7.3	91,700	98,100		26,600	Note 1
May-20-58	7.4	111,000	116,000		33,500	Note 1
May-21-58	7.1	112,100	96,800		31,900	Note 1
May-22-58	7.3	104,000	96,700		37,900	Note 1
May-23-58	7.6	119,500	106,700		81,400	Note 1
May-26-58	6.3	92,600	97,000		53,000	Note 1
May-27-58	6.2	126,000	108,200		68,600	Note 1
May-28-58	6.0	67,900	109,800			Note 1
May-29-58	5.8	108,500	94,600		42,800	Note 1
May-30-58	5.7					Note 1
Jun-02-58	7.3	78,900	97,200			Note 1
Jun-03-58	7.4	74,200	100,000			Note 1
Jun-04-58	7.6	107,700	92,580			Note 1
Jun-05-58	7.6	69,400	101,300			Note 1
Jun-06-58	6.9	109,500	117,200		57,500	Note 1
Jun-09-58	7.3	91,200	99,500		31,500	Note 1
Jun-10-58	7.5	100,000	104,800		19,990	Note 1
Jun-11-58	7.4	37,100	112,500		65,400	Note 1
Jun-12-58	7.4	85,700	140,300		29,400	Note 1
Jun-13-58	7.4	111,000	106,300		34,600	Note 1
Jun-16-58	6.4	82,300	105,000		29,700	Note 1
Jun-17-58	6.6	99,800	118,200		42,000	Note 1
Jun-18-58	6.5	94,200	103,200		45,200	Note 1
Jun-19-58	6.8	104,300	104,500		37,100	Note 1
Jun-20-58	6.6	87,400	117,000		31,700	Note 1
Jun-23-58	6.5	108,200	127,000		25,400	Note 1
Jun-24-58	6.4	96,400	98,000		26,200	Note 1
Jun-25-58	6.5	97,500	111,000		24,350	Note 1
Jun-26-58	6.5	97,100	83,600		22,200	Note 1
Jun-27-58	7.6	107,700	121,000		24,700	Note 1
Jun-28-58	6.0	44,700	58,250		12,450	Note 1
Jul-07-58	6.1	82,000	113,200		25,100	Note 1
Jul-08-58	6.1	101,000	132,000		26,800	Note 1
Jul-09-58	6.0	110,800	109,200		48,800	Note 1
Jul-10-58	6.2	98,000	83,200		32,550	Note 1
Jul-11-58	6.2	93,000	97,700		42,400	Note 1
Jul-12-58	6.6	98,000	104,000		25,800	Note 1
Jul-14-58	5.0	54,300	81,500		24,600	Note 1
Jul-15-58	6.1				21,950	Note 1
Jul-16-58	5.4	71,800	76,600		34,100	Note 1
Jul-17-58	4.4					Note 1
Jul-18-58	6.7					Note 1
Jul-19-58	6.5					Note 1
Jul-28-58	6.3	96,500			24,000	Note 1
Jul-29-58	6.1	86,400	95,000		37,600	Note 1
Jul-30-58	6.5		111,300		35,000	Note 1
Jul-31-58	6.5	133,200	115,200		57,500	Note 1
Aug-01-58	6.4	101,200	132,000			Note 1
Aug-02-58	6.4				42,200	Note 1
Aug-04-58	6.2	75,100	111,300		23,900	Note 1
Aug-05-58	6.3		111,000		22,200	Note 1
Aug-06-58	6.3	94,500			31,500	Note 1

CONFIDENTIAL BUSINESS INFORMATION

Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Aug-07-58	6.6				31,800	Note 1
Aug-08-58	6.2	93,500	110,000			Note 1
Aug-09-58	6.4	98,600				Note 1
Aug-11-58	6.5	83,700	111,500		29,700	Note 1
Aug-12-58	6.1	94,100	100,700		19,850	Note 1
Aug-13-58	6.5	88,500	96,300		14,080	Note 1
Aug-14-58	6.1		82,100		17,080	Note 1
Aug-15-58	6.5	64,800			40,500	Note 1
Aug-16-58	6.4				18,100	Note 1
Aug-25-58	5.2	73,600			22,950	Note 1
Aug-26-58	6.1	76,500	98,400		37,150	Note 1
Aug-27-58	6.0	70,400	65,000		36,200	Note 1
Aug-28-58	6.4	63,750	84,500		18,600	Note 1
Aug-29-58	6.3		131,500		35,400	Note 1
Sep-02-58	6.2	75,800	101,000		24,800	Note 1
Sep-03-58	6.3	103,200	127,000		20,100	Note 1
Sep-04-58	5.7	89,100	118,500		22,700	Note 1
Sep-05-58	6.3	86,600	92,700		26,600	Note 1
Sep-06-58		75,000			23,000	Note 1
Sep-08-58	6.5	70,600	126,000		28,900	Note 1
Sep-09-58	5.3	88,400	112,900		30,550	Note 1
Sep-10-58	5.3					Note 1
Sep-11-58	6.0	108,200	128,000		53,800	Note 1
Sep-12-58	5.9	95,600			52,500	Note 1
Sep-13-58	6.0					Note 1
Sep-22-58	6.0	86,900	103,800		38,200	Kendrick Exhibit #565 (SA 035446)
Sep-23-58	6.7	66,720			31,200	Kendrick Exhibit #565 (SA 035446)
Sep-24-58	6.1	102,000	111,300		36,150	Kendrick Exhibit #565 (SA 035446)
Sep-25-58	6.2	76,900			50,300	Kendrick Exhibit #565 (SA 035446)
Sep-26-58	6.3	110,200	106,000		32,500	Kendrick Exhibit #565 (SA 035446)
Sep-27-58	6.4					Kendrick Exhibit #565 (SA 035446)
Sep-29-58	6.2				27,550	Note 1
Sep-30-58	6.0	90,000			15,500	Note 1
Oct-01-58	6.8	70,300			48,400	Note 1
Oct-02-58	6.7	84,000			46,000	Note 1
Oct-03-58	6.3	73,700			30,000	Note 1
Oct-04-58	6.3					Note 1
Oct-27-58	5.7	86,300	108,900			Note 1
Oct-28-58	6.1	63,880	100,000		22,200	Note 1
Oct-29-58	6.1	81,500	94,600		26,500	Note 1
Oct-30-58	6.1	89,000	107,900		22,900	Note 1
Nov-03-58	6.4	88,600	125,000		16,100	Note 1
Nov-04-58	6.3	86,600	118,500		18,850	Note 1
Nov-05-58	6.2	85,600	127,500		49,750	Note 1
Nov-06-58	6.6	88,300	135,500		50,200	Note 1
Nov-10-58	5.8	67,600	85,000		19,800	Note 1
Nov-11-58	6.3	91,000	105,200		18,750	Note 1
Nov-12-58	6.9	77,200			33,200	Note 1
Nov-13-58	6.7	74,500	167,000		47,500	Note 1
Nov-14-58	6.7	89,300	101,500		37,900	Note 1
Nov-15-58	6.6					Note 1
Nov-17-58	5.4	76,500	106,200			Note 1
Nov-18-58	6.2	118,700	114,600			Note 1

Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Nov-19-58	6.0	94,900	112,000		46,100	Note 1
Nov-20-58	5.9	98,400	103,200		42,300	Note 1
Nov-21-58	5.9	103,000	127,100		36,300	Note 1
Nov-22-58	6.0					Note 1
Nov-24-58	7.1	94,800	141,100		31,950	Note 1
Nov-25-58	5.1	50,970	82,300			Note 1
Nov-26-58	5.8					Note 1
Nov-27-58	5.8					Note 1
Nov-28-58	5.6					Note 1
Nov-29-58	5.6					Note 1
Dec-01-58	5.7	75,700	112,500			Note 1
Dec-02-58	5.8	82,400	124,200		11,630	Note 1
Dec-03-58	6.2	98,500	131,200		44,000	Note 1
Dec-04-58	6.3	83,400	107,300		55,950	Note 1
Dec-05-58	6.2	109,000	108,900			Note 1
Dec-06-58	6.3					Note 1
Dec-08-58	5.7	70,850	119,000		12,500	Note 1
Dec-09-58	6.6	100,000	120,500		18,500	Note 1
Dec-10-58	6.7	82,600	118,000			Note 1
Dec-11-58	7.0	79,500	109,800			Note 1
Dec-12-58	6.0					Note 1
Dec-13-58	6.0					Note 1
Dec-15-58	5.2	87,400	105,800		28,000	Note 1
Dec-16-58	6.0	85,000	99,100		29,000	Note 1
Dec-17-58	5.9	58,400	94,000		19,800	Note 1
Dec-18-58	5.8	72,400	89,000		7,740	Note 1
Dec-19-58	5.5	73,100	100,500			Note 1
Dec-20-58	4.7					Note 1
Dec-22-58	5.6	78,800	89,800		18,500	Note 1
Dec-23-58	5.8					Note 1
Dec-26-58	5.5					Note 1
Dec-27-58	5.5					Note 1
Dec-29-58	5.8	63,400	92,100		21,400	Note 1
Dec-30-58	5.6	58,300	97,800	11,390	18,650	Note 1
Dec-31-58	8.5					Note 1
Jan-02-59	6.0					Note 1
Jan-05-59	5.3					Note 1
Jan-06-59	5.8	62,700	101,675		28,120	Note 1
Jan-07-59	5.7	52,177	91,040	10,900	49,332	Note 1
Jan-08-59	5.5	41,400	82,800		13,800	Note 1
Jan-09-59	5.3	53,440	75,884		11,260	Note 1
Jan-12-59	5.2	86,600	84,000		11,260	Note 1
Jan-13-59	5.2	43,200	77,500		6,050	Note 1
Jan-14-59	5.9	64,200	82,100		20,700	Note 1
Jan-15-59	5.5	50,200	74,700			Note 1
Jan-16-59	5.1	54,900	84,500			Note 1
Jan-19-59	5.7	57,400	38,800		12,400	Note 1
Jan-20-59	5.9	40,500	55,900			Note 1
Jan-21-59	5.9	49,000	53,500			Note 1
Jan-22-59	5.9	34,400	50,000			Note 1
Jan-23-59	5.9	54,000	64,700		12,750	Note 1
Jan-24-59	5.8	48,200	59,500			Note 1
Jan-26-59	5.2	48,000	59,000		14,800	Note 1

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Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Jan-27-59	5.7	51,700	67,800		13,200	Note 1
Jan-28-59	5.8	43,200	72,300		17,300	Note 1
Jan-29-59	5.9	59,240	67,600		63,400	Note 1
Jan-30-59	5.3	26,500	41,000		7,100	Note 1
Jan-31-59	5.4	40,300	41,200			Note 1
Feb-02-59	5.0	37,800	42,800			Note 1
Feb-03-59	5.0	48,750	54,700			Note 1
Feb-04-59	5.5	63,700	67,500			Note 1
Feb-05-59	4.2	53,000	50,000			Note 1
Feb-06-59	3.2	39,900	53,700			Note 1
Feb-07-59	2.6	23,700	36,800			Note 1
Feb-09-59	5.0	58,400	54,200		15,800	Note 1
Feb-10-59	5.0	62,500	46,000		20,000	Note 1
Feb-11-59	5.5	73,500	80,000		40,400	Note 1
Feb-12-59	5.6	64,800	67,600		13,900	Note 1
Feb-13-59	5.5	78,000	54,100		13,750	Note 1
Feb-16-59	5.0	58,500	55,000		11,650	Note 1
Feb-17-59	5.3	61,000	67,700		12,300	Note 1
Feb-18-59	5.3	56,800	71,000		5,250	Note 1
Feb-19-59	5.3	56,800	76,500		28,800	Note 1
Feb-20-59	5.0	71,000	84,100		30,800	Note 1
Feb-21-59	5.4	58,500	64,000			Note 1
Feb-23-59	5.0	62,500	83,400		16,700	Note 1
Feb-24-59	5.6	88,100	76,700		18,600	Note 1
Feb-25-59	5.6	88,700	96,500		20,300	Note 1
Feb-26-59	5.2	55,800	82,500		11,200	Note 1
Feb-27-59	5.6	51,500	79,500		11,200	Note 1
Feb-28-59	5.1		52,300			Note 1
Mar-02-59	5.2	39,000	63,300		8,650	Note 1
Mar-03-59	5.1	55,300	46,800		14,500	Note 1
Mar-04-59	5.1	56,700	54,700		11,900	Note 1
Mar-05-59	6.9	81,500	100,000		18,700	Note 1
Mar-06-59	7.2	100,450	130,000		24,400	Note 1
Mar-07-59	6.8	73,500	100,250			Note 1
Mar-09-59	5.9	54,200	95,000		6,900	Note 1
Mar-10-59	5.7	81,000	87,500		16,100	Note 1
Mar-11-59	8.3	100,350	100,700		24,800	Note 1
Mar-12-59	8.4	110,900	130,200		28,000	Note 1
Mar-13-59	8.4	98,000	120,700		143,000	Note 1
Mar-14-59	9.1	143,000	100,400			Note 1
Mar-16-59	8.3	75,500	78,500		17,900	Note 1
Mar-17-59	8.4	130,900	130,500		30,500	Note 1
Mar-18-59	8.4	62,700	113,000		4,000	Note 1
Mar-19-59	8.4	91,000	116,000		47,300	Note 1
Mar-20-59	8.7	145,000	142,000		111,000	Note 1
Mar-21-59	8.8	131,000	146,000			Note 1
Mar-23-59	7.8	124,000	134,000		31,200	Note 1
Mar-24-59	6.5	75,800	84,500		60,500	Note 1
Mar-25-59	6.5	86,500	93,200		22,700	Note 1
Mar-26-59	6.5	54,100	94,300		20,500	Note 1
Mar-27-59	6.5	65,000	95,500		30,400	Note 1
Mar-28-59	6.5					Note 1
Mar-30-59	6.5	81,300	85,500		27,200	Note 1

CONFIDENTIAL BUSINESS INFORMATION

Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Mar-31-59	6.5					Note 1
Apr-01-59	6.6	87,500	121,000		101,000	Note 1
Apr-02-59	6.5	119,000	87,000		87,000	Note 1
Apr-03-59	6.5					Note 1
Apr-04-59	6.5					Note 1
Apr-07-59	6.9	91,500	100,000		115,000	Note 1
Apr-08-59	6.9	62,500	88,000		47,700	Note 1
Apr-09-59	6.5	81,500	91,300		113,000	Note 1
Apr-14-59	7.3	85,500	123,000		44,000	Note 1
Apr-15-59	6.5	91,500	108,000		28,000	Note 1
Apr-16-59	7.2	83,700	89,500		52,600	Note 1
Apr-21-59	6.8	79,500	102,000		15,900	Note 1
Apr-22-59	6.7	97,000	75,500		48,400	Note 1
Apr-23-59	6.5	59,600	91,000		74,500	Note 1
Apr-28-59	6.1	102,000	141,000		48,000	Note 1
Apr-29-59	6.9	104,000	102,000		28,800	Note 1
Apr-30-59	4.8	51,500	77,000		32,500	Note 1
May-05-59	6.5	98,000	111,000		21,700	Note 1
May-06-59	6.2	93,000	52,700		20,600	Note 1
May-07-59	6.1	66,000	78,500		20,400	Note 1
May-12-59	6.7					Note 1
May-13-59	6.9	92,500	95,000		43,700	Note 1
May-14-59	6.8	85,000	115,000		55,500	Note 1
May-19-59	6.9				14,900	Note 1
May-20-59	6.7				24,500	Note 1
May-21-59	6.6	88,500	402,000		27,700	Note 1
May-26-59	6.5	81,500	120,000		18,500	Note 1
May-27-59	6.2	82,200	87,500		19,500	Note 1
May-28-59	3.3					Note 1
Jun-02-59	5.9	54,200	81,600		4,900	Note 1
Jun-03-59	6.1	60,800	82,000		14,200	Note 1
Jun-04-59	6.1	86,500	114,000		23,500	Note 1
Jun-09-59	4.6	53,000	52,400		14,400	Note 1
Jun-10-59	4.6	50,000	60,500		11,500	Note 1
Jun-11-59	5.5	64,300	75,200		22,900	Note 1
Jun-16-59	6.4	111,000	138,000		14,900	Note 1
Jun-17-59	6.3	78,600	96,500		10,500	Note 1
Jun-18-59	4.5	71,500	95,500		12,000	Note 1
Jun-23-59	4.5	74,500	62,700		17,100	Note 1
Jun-24-59	5.6	79,500	94,000		14,000	Note 1
Jun-25-59	6.0	79,700	88,500		24,900	Note 1
Jun-30-59	4.0	46,000	65,000		10,500	Note 1
Jul-01-59	6.1	70,500	90,000			Note 1
Jul-02-59	6.1					Note 1
Jul-07-59	3.7	70,500	51,400			Note 1
Jul-08-59	5.3	78,400	109,500		9,600	Note 1
Jul-09-59	4.5	59,800	74,500		18,700	Note 1
Jul-14-59	5.0	82,700	96,000		21,400	Note 1
Jul-15-59	5.3	84,200	106,000		29,200	Note 1
Jul-16-59	5.1	88,600	102,000		13,400	Note 1
Jul-21-59	5.1	81,500	71,000		12,000	Note 1
Jul-22-59	6.1	76,000	91,400		10,100	Note 1
Jul-23-59	6.0	90,000	67,000		10,000	Note 1

CONFIDENTIAL BUSINESS INFORMATION

Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Jul-28-59	5.3	61,700	95,500		20,300	Note 1
Jul-29-59	6.3	74,000	97,200		18,000	Note 1
Jul-30-59	5.7					Note 1
Aug-04-59	5.9					Note 1
Aug-05-59	5.9					Note 1
Aug-06-59	6.0					Note 1
Aug-11-59	5.7				12,300	Note 1
Aug-12-59	6.1	80,600	78,800		20,200	Note 1
Aug-13-59	6.1	71,000	108,000		28,300	Note 1
Aug-18-59	5.5				9,100	Note 1
Aug-19-59	4.3	65,000	59,700		10,800	Note 1
Aug-20-59	6.5					Note 1
Aug-25-59	6.1	84,100	85,500		12,200	Note 1
Aug-26-59	6.4	82,200	95,500		17,000	Note 1
Aug-27-59	6.2	103,000	87,700		32,900	Note 1
Sep-01-59	6.1	56,000	87,500		21,300	Note 1
Sep-02-59	6.1	75,500	91,500			Note 1
Sep-03-59	5.9	78,100	119,000			Note 1
Sep-09-59	3.6	87,200	118,000			Note 1
Sep-10-59	3.2	60,800	84,600		12,200	Note 1
Sep-15-59	5.7	66,200	91,000		17,000	Note 1
Sep-16-59	5.5	77,600	77,600		21,900	Note 1
Sep-17-59	5.8	92,000	103,000		25,200	Note 1
Sep-22-59	4.9	37,700	77,000		3,700	Note 1
Sep-23-59	5.3	71,000	75,000		11,600	Note 1
Sep-24-59	5.7	71,000	77,500		25,500	Note 1
Sep-29-59	5.3					Note 1
Sep-30-59	4.7	54,200	83,500		16,300	Note 1
Oct-01-59	5.3	44,400	81,000		4,400	Note 1
Oct-06-59	5.6	55,900	70,000		7,500	Note 1
Oct-07-59	5.6	74,500	64,300		36,300	Note 1
Oct-08-59	5.7	37,900	77,700		16,100	Note 1
Oct-13-59	5.7	61,700	93,800			Note 1
Oct-14-59	5.5	50,700	87,500		26,600	Note 1
Oct-15-59	5.4					Note 1
Oct-20-59	5.3	52,500	133,000		46,300	Note 1
Oct-21-59	5.7	47,200	52,000		23,600	Note 1
Oct-22-59	5.5	68,000	108,000		28,100	Note 1
Oct-27-59	4.7	51,300	69,500		17,300	Note 1
Oct-28-59	5.8	43,600	77,500		11,600	Note 1
Oct-29-59	5.9	58,500	72,200		18,500	Note 1
Nov-03-59	6.0	55,300	118,500		14,100	Note 1
Nov-04-59	5.7	75,500	83,000		21,700	Note 1
Nov-05-59	4.5	48,800	61,000		20,300	Note 1
Nov-10-59	4.4	33,200	72,500		15,500	Note 1
Nov-11-59	4.7	46,200	56,200		8,500	Note 1
Nov-12-59	3.5					Note 1
Nov-17-59	4.3	39,500	74,200		10,100	Note 1
Nov-18-59	3.7	31,000	46,000		2,500	Note 1
Nov-19-59	3.9	32,000	51,700		6,580	Note 1
Nov-24-59	4.7	34,500	61,090		9,000	Note 1
Dec-01-59	4.6	34,700	46,300		3,900	Note 1
Dec-02-59	4.7					Note 1

CONFIDENTIAL BUSINESS INFORMATION

Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Dec-03-59	3.8	44,200	63,000		10,000	Note 1
Dec-08-59	3.3	30,400	47,500		3,800	Note 1
Dec-09-59	3.9	36,200	48,000		5,900	Note 1
Dec-10-59	3.7	18,300	48,300		9,200	Note 1
Dec-15-59	4.0	33,600	107,200		12,100	Note 1
Dec-16-59	4.7	42,700	75,500		4,600	Note 1
Dec-17-59	6.7	50,400	91,000		15,000	Note 1
Dec-22-59	3.9					Note 1
Dec-23-59	5.5					Note 1
Dec-29-59	5.0	62,500	75,800		21,600	Note 1
Dec-30-59	5.0				35,800	Note 1
Dec-31-59	5.0					Note 1
Jan-05-60	5.5					Note 1
Jan-06-60	6.0	65,000	103,000		15,000	Note 1
Jan-07-60	6.0	75,000	108,000		19,000	Note 1
Jan-12-60	6.5	86,600	85,600		11,900	Note 1
Jan-13-60	6.5	75,800	90,000		23,800	Note 1
Jan-14-60	6.5	81,300	108,100			Note 1
Jan-19-60	6.5	92,000	112,500			Note 1
Jan-20-60	6.5	70,200	102,800			Note 1
Jan-21-60	6.5	43,200	104,000			Note 1
Jan-26-60	6.5	140,800	113,700		121,000	Note 1
Jan-27-60	6.5	97,500	109,400		28,100	Note 1
Jan-28-60	6.5	86,600	129,000		89,000	Note 1
Feb-02-60	6.5	97,500	106,000		72,600	Note 1
Feb-03-60	6.5	65,000	89,000		23,800	Note 1
Feb-04-60	6.5	65,000	113,700		29,000	Note 1
Feb-09-60	6.5					Note 1
Feb-10-60	6.5					Note 1
Feb-11-60	6.5					Note 1
Feb-17-60	6.5					Note 1
Feb-18-60	6.5					Note 1
Feb-19-60	6.5					Note 1
Feb-23-60	6.0	100,000	106,000		6,000	Note 1
Feb-24-60	5.8	91,000	106,200		36,400	Note 1
Feb-25-60	5.8	95,700	104,600		14,300	Note 1
Mar-01-60	2.8	43,700	68,300		4,700	Note 1
Mar-02-60	4.0	56,700	68,000		2,800	Note 1
Mar-03-60	4.0	36,700	84,000		6,000	Note 1
Mar-08-60	5.0	83,500	101,800		13,300	Note 1
Mar-09-60	5.5	87,000	82,600		21,200	Note 1
Mar-10-60	5.0	54,000	71,000		17,500	Note 1
Mar-15-60	4.0	29,900	13,300		2,500	Note 1
Mar-16-60	5.0					Note 1
Mar-17-60	5.0	45,700	99,000			Note 1
Mar-22-60	5.0	58,400	151,500		22,500	Note 1
Mar-23-60	5.0	66,600	105,000		21,700	Note 1
Mar-24-60	5.0	41,700	103,200			Note 1
Mar-29-60	5.0	54,100	143,000			Note 1
Mar-30-60	5.0	79,000	111,300			Note 1
Mar-31-60	5.0	79,000	55,000			Note 1
Apr-05-60	5.0	62,500	57,500		5,800	Note 1
Apr-06-60	3.6	38,900	39,500		10,200	Note 1

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Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Apr-07-60	3.7	42,500	55,500		10,300	Note 1
Apr-12-60	3.6	47,200	42,000		10,200	Note 1
Apr-13-60	4.1	37,600	66,200		6,100	Note 1
Apr-14-60	3.7	34,000	39,500		2,500	Note 1
Apr-19-60	3.6	45,000	59,700		10,800	Note 1
Apr-20-60	3.8	41,700	49,300		6,400	Note 1
Apr-21-60	3.6	35,900	53,800		15,500	Note 1
Apr-26-60	3.4	64,600	39,400		11,200	Note 1
Apr-27-60	3.9	48,700	37,000		7,800	Note 1
Apr-28-60	3.7	43,700	57,300		5,600	Note 1
May-03-60	3.5	34,900	43,700		5,200	Note 1
May-04-60	3.6	27,100	37,300		3,600	Note 1
May-05-60	4.0	33,600	51,000		7,400	Note 1
May-10-60	3.8	34,500	39,200		1,200	Note 1
May-11-60	3.7	37,200	44,000		3,700	Note 1
May-12-60	3.8	28,200	33,800		3,100	Note 1
May-17-60	3.5	38,300	48,500		7,700	Note 1
May-18-60	3.8	40,700	42,500		3,000	Note 1
May-19-60	3.8	18,900	38,500		600	Note 1
May-24-60	6.9	63,500	107,200		6,900	Note 1
May-25-60	6.8	67,600	90,300		600	Note 1
May-26-60	7.3	85,600	96,500		11,000	Note 1
May-31-60	7.5	43,600	67,200		6,000	Note 1
Jun-01-60	5.5	59,200	83,600		9,100	Note 1
Jun-02-60	6.2	57,300	102,000		8,300	Note 1
Jun-07-60	6.5	80,800	87,200		9,700	Note 1
Jun-08-60	6.6	65,600	84,200		6,500	Note 1
Jun-09-60	6.7	55,700	83,500		10,000	Note 1
Jun-14-60	6.6	76,600	70,200		12,000	Note 1
Jun-15-60	6.3	57,400	67,800		12,500	Note 1
Jun-16-60	6.3	68,500	95,000		4,200	Note 1
Jun-21-60	7.7	77,200	79,700		10,300	Note 1
Jun-22-60	5.5	57,600	79,100		8,300	Note 1
Jun-23-60	6.1	60,800	79,000		12,200	Note 1
Jun-28-60	4.0	66,000	72,000		2,000	Note 1
Jun-29-60	3.6	63,000	46,800		4,800	Note 1
Jun-30-60	2.9	55,700	51,700		5,800	Note 1
Jul-05-60	6.5	65,000	66,200		6,500	Note 1
Jul-06-60	6.4	63,800	109,800		13,800	Note 1
Jul-07-60	6.3	57,600	88,200		10,500	Note 1
Jul-12-60	6.4	90,000	84,800		18,000	Note 1
Jul-13-60	5.9	68,600	76,500		7,800	Note 1
Jul-14-60	5.6	55,600	64,000		8,300	Note 1
Jul-19-60	6.6	77,200	107,000		15,400	Note 1
Jul-20-60	6.2	61,800	95,000		11,300	Note 1
Jul-21-60	5.4	63,100	73,000		4,500	Note 1
Jul-26-60	6.4	64,000	75,600		4,300	Note 1
Jul-27-60	5.9	73,500	78,400		7,840	Note 1
Jul-28-60	6.2	41,200	55,500			Note 1
Aug-02-60	5.6	60,300	81,600		6,100	Note 1
Aug-03-60	5.8	33,800	81,000		6,700	Note 1
Aug-04-60	6.0	50,000	69,000		8,000	Note 1
Aug-09-60	4.1	51,700	55,700		2,000	Note 1

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Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Aug-10-60	5.5	54,800	80,300		8,200	Note 1
Aug-11-60	5.9					Note 1
Aug-16-60	5.5	50,200	93,300		13,700	Note 1
Aug-17-60	4.9	101,800	116,000		7,400	Note 1
Aug-18-60	6.2	103,100	136,200		14,500	Note 1
Aug-23-60	5.8	57,800	57,800		12,500	Note 1
Aug-24-60	5.7	62,200	74,600		11,500	Note 1
Aug-25-60	6.0	59,800	92,000		13,900	Note 1
Aug-30-60	4.8	67,800	85,500		10,400	Note 1
Aug-31-60	4.2	67,000	78,700		13,300	Note 1
Sep-01-60	4.1	72,000	116,000		6,200	Note 1
Sep-06-60	4.4	58,500	92,500		10,200	Note 1
Sep-07-60	4.5	71,500	100,000		5,300	Note 1
Sep-08-60	4.4	69,600	100,500		7,300	Note 1
Sep-13-60	3.3				5,500	Note 1
Sep-14-60	4.5	75,000	180,000		15,800	Note 1
Sep-15-60	4.2	65,800	95,000		2,700	Note 1
Sep-20-60	4.9	65,000	77,700		9,700	Note 1
Sep-21-60	5.3	97,000	107,000		15,000	Note 1
Sep-22-60	5.1	63,700	71,400		21,200	Note 1
Sep-27-60	5.4	71,600	100,000		33,000	Note 1
Sep-28-60	4.8	55,800	118,000		42,200	Note 1
Sep-29-60	4.6	51,200	92,300		14,500	Note 1
Oct-04-60	5.7	71,300	126,200		25,600	Note 1
Oct-05-60	5.4	58,700	81,100		14,000	Note 1
Oct-06-60	6.9					Note 1
Oct-11-60	4.6	50,000	95,000		36,000	Note 1
Oct-12-60	4.8	64,700	78,400		44,500	Note 1
Oct-13-60	3.8	51,300	33,500		9,000	Note 1
Oct-18-60	4.4	44,000	23,500		3,670	Note 1
Oct-19-60	5.0	75,300	112,000		9,200	Note 1
Oct-20-60	5.4	80,600	102,600		32,200	Note 1
Oct-25-60	4.2				4,240	Note 1
Oct-26-60	3.5				2,920	Note 1
Oct-27-60	3.0	32,800	45,400		3,530	Note 1
Nov-01-60	4.7	67,000	98,700		7,100	Note 1
Nov-02-60	4.3	71,400	80,000		2,900	Note 1
Nov-03-60	3.1	38,600	53,000		4,100	Note 1
Nov-08-60	5.3				55,800	Note 1
Nov-09-60	5.4	85,400	158,000		18,900	Note 1
Nov-10-60	5.5	96,400	170,000		55,900	Note 1
Nov-15-60	5.0	66,700	202,500		5,000	Note 1
Nov-23-60	2.4					Note 1
Nov-29-60	5.7	76,000	275,000		37,100	Note 1
Nov-30-60	5.3	71,300	150,800		17,000	Note 1
Dec-01-60	4.8	60,100	93,800		9,600	Note 1
Dec-06-60	5.0	70,300	121,500		5,800	Note 1
Dec-07-60	5.2	69,400	121,300		25,200	Note 1
Dec-08-60	5.3	66,800	128,300		16,000	Note 1
Dec-13-60	5.4	72,500	146,000		10,000	Note 1
Dec-14-60	4.5	52,500	111,800		12,000	Note 1
Dec-15-60	5.4	89,700	158,900		13,500	Note 1
Dec-20-60	3.1	44,500	81,700		9,400	Note 1

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Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Dec-21-60	4.6	64,600	116,300		36,500	Note 1
Dec-22-60	3.1	41,900	72,800		3,100	Note 1
Dec-27-60	4.2	48,800	93,400		2,100	Note 1
Dec-28-60	3.7	51,900	79,300		4,300	Note 1
Dec-29-60	4.3	61,000	92,500		11,500	Note 1
Jun-27-61	3.9		92,425		44,441	SA 038997-039000 (WRC)
Jun-28-61			21,030		12,000	Note 1
Jul-07-61	1.1		41,470		2,024	SA035188
Jul-11-61	2.9		96,860			SA035187
Jul-12-61	3.0		86,100		17,520	SA035187
Jul-20-61	2.0		58,400		4,000	SA035196
Aug-04-61	1.2		33,840		5,400	SA035184
Oct-03-62	4.7					NCASI000194
Oct-04-62	4.7				17,100	NCASI000194
Oct-05-62	4.4				14,050	NCASI000194
Oct-10-62	4.6				9,860	NCASI000194
Oct-11-62	3.4				3,390	NCASI000194
Oct-18-62	4.7				3,080	NCASI000194
Oct-19-62	4.4				38,400	NCASI000194
Oct-24-62	3.3				28,700	NCASI000194
Oct-25-62	3.3				30,100	NCASI000194
Oct-26-62	4.5				27,400	NCASI000194
Nov-28-62	4.4				43,750	NCASI 000141
Dec-03-62	4.8				15,200	NCASI 000141
Apr-22-63	4.5		3,100		377	SA028970; SA028973
Apr-23-63	4.5		55,500		1,000	SA028970; SA028973
Apr-24-63	4.8		60,000		1,390	SA028970; SA028973
Apr-25-63	4.6		66,500		3,860	SA028970; SA028973
Apr-30-63	4.7		64,700		1,300	Note 1
May-01-63	4.7		66,600		2,350	Note 1
May-02-63	4.8		51,000		1,320	Note 1
May-03-63	4.8		50,000		1,330	Note 1
May-06-63	4.6		59,500		4,970	Note 1
May-07-63	4.7		43,200		1,810	Note 1
May-08-63	4.8		37,800		1,080	Note 1
May-09-63	4.8		50,400		1,080	Note 1
May-13-63	4.3		34,200		250	Note 1
May-14-63	4.3		20,800		250	Note 1
May-15-63	4.3		36,800			Note 1
May-16-63	4.3		17,200		466	Note 1
May-17-63	4.3		34,000		250	Note 1
May-20-63	4.4		41,900		735	Note 1
May-21-63	4.4		46,200		257	Note 1
May-22-63	4.4		41,700		732	Note 1
May-23-63	4.4		43,300		734	Note 1
May-24-63	4.4		18,400		734	Note 1
Dec-10-63	4.5		42,100		1,090	SA 033416-19 (WRC)
Jun-21-65	2.9	36,000	41,200	80,000	3,600	Note 1
Jun-22-65	2.9	21,600	10,200	50,200	3,800	Note 1
Jun-23-65	3.3	41,000	27,800	46,500	1,600	Note 1
Jun-24-65	3.3	35,600	25,200	38,400		Note 1
Jun-28-65	3.3	32,800	36,600	35,600	19,700	Note 1
Jun-29-65	3.3	38,100	36,800	30,200	12,600	Note 1

CONFIDENTIAL BUSINESS INFORMATION

Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Jun-30-65	3.2	31,700	173,000	31,700	11,100	Note 1
Jul-01-65	3.1	45,900	71,300	43,300	17,400	Note 1
Jul-07-65	3.3	38,000	50,200	24,000	6,000	Note 1
Jul-08-65	3.4	42,500	39,600	37,000	4,000	Note 1
Aug-31-65	2.9	55,000	53,500	50,000	6,700	Note 1
Sep-01-65	2.9	64,500	61,000	47,500	6,200	Note 1
Sep-02-65	3.0	46,700	52,500	44,400	16,700	Note 1
Sep-07-65	2.9	50,000	86,700	47,700	23,800	Note 1
Sep-08-65	3.0	44,400	62,300	41,800	24,700	Note 1
Sep-09-65	2.8	42,000	45,500	34,800	9,800	Note 1
Sep-13-65	2.8	35,000	37,400	32,400	16,900	Note 1
Sep-14-65	2.9	40,700	66,700	40,700	21,200	Note 1
Sep-16-65	2.4	33,600	22,500	25,700	11,300	Note 1
Sep-20-65	3.0	37,000	31,700	24,600	24,700	Note 1
Oct-05-65	3.0	66,700	51,700	39,400	11,600	Note 1
Oct-06-65	2.9	42,700	72,500	39,800	50,000	Note 1
Oct-07-65	3.0	44,400	79,000	44,400	23,200	Note 1
Oct-12-65	3.0	51,700	65,500	46,600	15,800	Note 1
Oct-13-65	3.0	42,000	40,500	39,300	31,200	Note 1
Oct-14-65	3.3	38,200	39,400	35,600	23,400	Note 1
Oct-19-65	3.3	46,400	91,500	43,700	28,000	Note 1
Oct-20-65	3.3	38,300	33,800	38,300	20,700	Note 1
Oct-27-65	3.6	64,300	98,200	60,000	30,700	Note 1
Oct-28-65	3.5	57,700	82,500	52,600	38,000	Note 1
Nov-02-65	3.5	80,000	89,500	64,600	8,400	Note 1
Nov-03-65	3.6	47,500	105,000	44,400	32,600	Note 1
Nov-04-65	3.6	65,000	115,600	53,600	24,300	Note 1
Nov-09-65	3.7	55,800	60,300	52,700	42,000	Note 1
Nov-10-65	3.8	61,000	56,400	48,100	30,100	Note 1
Nov-11-65	3.3	52,000	51,800	49,200	19,200	Note 1
Nov-30-65	3.7	59,300	103,000	115,000	14,400	Note 1
Dec-01-65	3.6	72,000	98,100	72,000	10,800	Note 1
Dec-02-65	3.9	96,600	97,000	64,500	9,100	Note 1
Dec-07-65	4.2	70,000	124,000	70,000	11,200	Note 1
Dec-08-65	3.1	46,300	87,100	48,600	10,700	Note 1
Dec-09-65	4.0	63,000	93,600	92,500	22,600	Note 1
Dec-14-65	4.2	109,000	87,500	119,000	9,100	Note 1
Dec-15-65	4.3	82,300	126,000	93,400	27,800	Note 1
Dec-16-65	4.3	96,600	98,400	93,100	7,200	Note 1
Mar-01-66	3.8	50,700	64,600	69,600	19,600	Note 1
Mar-02-66	4.2	66,600	68,700	73,700	9,900	Note 1
Mar-03-66	4.1	69,899	75,400	71,500	13,900	Note 1
Mar-08-66	4.2	48,400	87,600	65,700	15,200	Note 1
Mar-09-66	4.2			70,500	13,400	Note 1
Mar-10-66	4.2	63,500	96,500	60,000	17,600	Note 1
Mar-11-66	3.7			59,100	23,700	Note 1
Mar-14-66	5.6	74,200	96,500	84,200	32,600	Note 1
Mar-15-66	4.9	69,400	69,000	77,700	19,600	Note 1
Mar-16-66	5.3	70,200	92,000	83,500	6,100	Note 1
Mar-17-66	5.3	66,500	59,500	57,500	2,700	Note 1
Mar-18-66	5.2	60,100	79,600	73,000	18,000	Note 1
Mar-21-66	5.5	72,700	50,100	72,700	24,600	Note 1
Mar-22-66	5.2	82,000	86,400	77,000	24,300	Note 1

CONFIDENTIAL BUSINESS INFORMATION

Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Mar-23-66	5.8	87,000	78,400	96,500	36,000	Note 1
Mar-24-66	5.5	77,600	75,000	82,200	37,500	Note 1
Mar-25-66	5.2	68,700	83,000	64,700	38,700	Note 1
Mar-28-66	5.3	93,200	89,500	88,600	18,700	Note 1
Mar-29-66	5.7	108,500	62,600	123,000	21,700	Note 1
Mar-30-66	5.7	85,000	73,700	99,300	10,400	Note 1
Mar-31-66	4.8	83,200	108,000	110,100	27,000	Note 1
Apr-01-66	5.2	86,000	107,000	95,000	30,200	Note 1
Apr-04-66	6.1	71,600	79,000		6,100	Note 1
Apr-05-66	5.4	73,200	91,500	151,000	2,700	Note 1
Apr-06-66	5.3	75,000	91,000		8,000	Note 1
Apr-07-66	5.3	109,000	109,000	149,000	20,200	Note 1
Apr-08-66	5.2	73,800	91,600	79,500	12,200	Note 1
Apr-11-66	5.6	41,700	98,200	195,000	10,200	Note 1
Apr-12-66	5.5	65,000	83,000	55,000	4,500	Note 1
Apr-13-66	5.2	60,500	110,000		5,200	Note 1
Apr-14-66	5.3	88,500	87,800	167,000	10,600	Note 1
Apr-15-66	4.9	83,000	69,000	87,000	8,200	Note 1
Apr-18-66	5.0	75,100	84,400	53,400	10,900	Note 1
Apr-19-66	5.2	69,000	124,000	64,600	16,300	Note 1
Apr-20-66	5.2	56,000	62,000	90,500	6,000	Note 1
Apr-21-66	5.5	63,500	71,000	67,000	21,000	Note 1
Apr-22-66	6.0	70,500	64,400	75,200	29,100	Note 1
Apr-25-66	5.5	68,800	89,000	68,300	10,000	Note 1
Apr-26-66	5.1	55,600	86,400	64,300	13,600	Note 1
Apr-27-66	5.2	56,000	61,200	56,000	2,600	Note 1
Apr-28-66	5.8	67,100	60,500	67,100	12,500	Note 1
Apr-29-66	4.5	64,200	81,200	68,000	9,800	Note 1
May-02-66	5.1	63,000	37,000	63,000	2,500	Note 1
May-03-66	5.0	62,700	64,600	54,400	3,300	Note 1
May-04-66	5.6	51,000	51,200	55,700	6,600	Note 1
May-05-66	5.1	47,400	71,600	51,000	7,600	Note 1
May-06-66	5.2	56,800	94,500	56,800	10,500	Note 1
May-09-66	5.0	62,000	158,000	66,300	14,000	Note 1
May-10-66	5.0	62,500	78,500	62,500	3,400	Note 1
May-11-66	5.4	67,300	77,400	67,300	12,700	Note 1
May-12-66	5.5	64,200	54,700	59,700	11,000	Note 1
May-13-66	5.2	56,700	71,500	56,700	15,700	Note 1
May-16-66	5.7	43,200	47,500	53,000	15,200	Note 1
May-17-66	3.7	36,700	41,000	33,500	1,200	Note 1
May-18-66	4.3	46,600	60,800	46,600	3,600	Note 1
May-19-66	4.6	50,000	49,000	61,800	11,500	Note 1
May-20-66	5.2	43,000	61,500	43,000	6,900	Note 1
May-23-66	4.2	69,500	99,300	65,200	18,300	Note 1
May-24-66	4.6	97,000	87,500	69,000	6,800	Note 1
May-25-66	4.7	51,000	84,500	62,500	8,600	Note 1
May-26-66	3.7	37,200	113,500	40,300	10,000	Note 1
May-27-66	3.7	43,500	59,400	43,500	1,900	Note 1
May-30-66	3.7	40,500	15,600	40,500	5,000	Note 1
May-31-66	4.2	38,500	45,500	45,500	2,100	Note 1
Jun-01-66	3.9	58,500	40,200	48,800	10,100	Note 1
Jun-02-66	3.7	56,100	43,600	43,600	5,800	Note 1
Jun-03-66	4.2	35,000	48,400	45,500	6,300	Note 1

CONFIDENTIAL BUSINESS INFORMATION

Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Jun-06-66	3.6	15,200	34,300	36,100	5,100	Note 1
Jun-07-66	3.5	32,200	46,700	35,000	3,800	Note 1
Jun-08-66	3.5	26,200	27,400	35,000	7,000	Note 1
Jun-09-66	3.5	20,300	19,900	38,000	2,300	Note 1
Jun-10-66	4.1	40,100	47,000	46,600	3,400	Note 1
Jun-13-66	3.5	26,300	31,500	38,000	5,800	Note 1
Jun-14-66	3.5	20,400	23,600	43,700	5,100	Note 1
Jun-15-66	3.6	30,100	51,800	38,100	4,200	Note 1
Jun-16-66	3.6	30,000	16,200	36,100	4,200	Note 1
Jun-17-66	3.5	38,000	25,700	41,000	2,300	Note 1
Jun-20-66	3.7	40,400	50,500	37,300	1,900	Note 1
Jun-21-66	3.5	35,000	54,000	35,000	1,800	Note 1
Jun-22-66	3.5	38,000	57,200	33,000	4,700	Note 1
Jun-23-66	3.7	37,300	64,600	37,300	2,500	Note 1
Jun-24-66	3.7	40,300	73,200	37,300	3,100	Note 1
Jun-27-66	4.0	36,200	60,000	42,800	2,700	Note 1
Jun-28-66	3.8	45,000	48,700	41,700	4,500	Note 1
Jun-29-66	3.8	35,200	46,700	41,700	6,400	Note 1
Jun-30-66	3.8	41,600	58,000	45,000	6,400	Note 1
Jul-02-66		39,600	68,000	46,300	6,000	Note 1
Jul-05-66	3.6	42,200	67,500	39,100	4,200	Note 1
Jul-06-66	3.5	26,400	39,300	35,000	3,500	Note 1
Jul-07-66	3.7	46,600	53,500	40,500	2,500	Note 1
Jul-08-66	3.8	35,200	57,500	35,200	2,600	Note 1
Jul-11-66	3.8	38,400	54,000	32,000	2,600	Note 1
Jul-12-66	3.6	33,100	54,700	36,100	4,200	Note 1
Jul-13-66	3.7	34,300	95,500	43,600	3,100	Note 1
Jul-14-66	3.7	24,800	10,600	40,400	300	Note 1
Jul-15-66	3.4	22,600	5,100	28,200	100	Note 1
Jul-18-66	2.8	40,200	44,700	38,000	4,300	Note 1
Jul-19-66	2.8	57,000	77,600	50,000	2,400	Note 1
Jul-20-66	2.7	43,300	53,300	45,700	5,700	Note 1
Jul-21-66	3.7	34,200	58,200	31,100	9,900	Note 1
Jul-22-66	3.7	37,300	62,700	37,300	6,900	Note 1
Jul-25-66	3.6	42,000	52,700	42,000	6,000	Note 1
Jul-26-66	3.7	44,000	64,700	44,000	6,200	Note 1
Jul-27-66	3.6	36,200	86,000	39,000	7,200	Note 1
Jul-28-66	3.8	38,500	68,200	41,800	5,700	Note 1
Jul-29-66	3.6	42,200	32,500	45,000	5,900	Note 1
Aug-01-66	3.8	35,400	44,500	33,600	3,800	Note 1
Aug-02-66	3.8			41,700	4,500	Note 1
Aug-03-66	4.2	47,200	48,500	42,000	5,300	Note 1
Aug-04-66	4.1	53,800	74,000	49,500	4,800	Note 1
Aug-05-66	2.8	33,400	48,500	45,200	3,200	Note 1
Aug-08-66	3.0	24,600	52,600	27,200	2,700	Note 1
Aug-09-66	3.3	35,800	61,500	35,800	2,900	Note 1
Aug-10-66	3.5	38,000	66,900	38,000	4,100	Note 1
Aug-11-66	3.7	30,800	37,200	33,900	2,800	Note 1
Aug-12-66	3.0	42,300	59,800	42,300	2,000	Note 1
Aug-15-66	3.7	45,700	58,200	45,700	3,000	Note 1
Aug-16-66	3.9	45,700	67,300	35,900	3,300	Note 1
Aug-17-66	3.9	38,800	46,700	35,400	2,600	Note 1
Aug-18-66	3.7	37,800	52,300	37,300	5,600	Note 1

Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Aug-19-66	3.7	34,300	50,200	31,100	2,500	Note 1
Aug-22-66	4.1	44,600	79,700	37,700	4,800	Note 1
Aug-23-66	4.0	44,600	67,300	44,600	4,200	Note 1
Aug-24-66	3.7	40,400	46,700	43,400	6,000	Note 1
Aug-25-66	3.6	44,800	48,600	44,800	3,600	Note 1
Aug-26-66	3.5	41,500	65,000	38,400	47,300	Note 1
Aug-29-66	3.4	36,200	58,400	33,600	3,904	Note 1
Aug-30-66	3.6	46,500	58,000	39,400	4,200	Note 1
Aug-31-66	4.6	30,100	50,700	28,600	2,200	Note 1
Sep-01-66	3.7	40,500	100,200	40,500	4,000	Note 1
Sep-02-66	3.6	35,700	65,000	32,800	4,800	Note 1
Sep-06-66	4.1	48,000	71,500	48,000	5,500	Note 1
Sep-07-66	3.6	40,200	74,600	44,100	5,400	Note 1
Sep-08-66	4.2	38,700	70,000	42,300	7,000	Note 1
Sep-09-66	4.2	42,300	38,600	35,400	4,300	Note 1
Sep-12-66	4.2	49,300	70,500	53,000	2,800	Note 1
Sep-13-66	4.3	39,600	100,400	36,000	3,800	Note 1
Sep-14-66	4.2	48,000	50,800	52,700	2,800	Note 1
Sep-15-66	3.8	47,700	49,100	44,500	1,300	Note 1
Sep-21-66	3.8	44,400	55,900	41,100	5,100	Note 1
Sep-26-66	3.9	45,600	51,000	42,200	2,000	Note 1
Sep-27-66	3.9	52,200	77,500	45,600	2,000	Note 1
Sep-28-66	3.8	41,400	54,000	47,700	2,600	Note 1
Sep-29-66	3.6	39,200	49,500	42,200	4,800	Note 1
Sep-30-66	3.9	61,700	62,600	45,800	5,800	Note 1
Oct-03-66	3.9	39,100	51,500	35,800	2,600	Note 1
Oct-04-66	3.8	40,200	85,100	40,200	4,300	Note 1
Oct-05-66	3.7	40,400	54,300	44,500	1,900	Note 1
Oct-06-66	3.8	44,500	78,300	35,000	4,400	Note 1
Oct-10-66		44,800	68,500	38,100	3,800	Note 1
Oct-14-66	3.7	37,100	31,600	37,100	1,800	Note 1
Oct-17-66	3.5	34,300	70,000	28,600	2,900	Note 1
Oct-18-66	3.7	49,100	52,600	45,800	2,500	Note 1
Oct-19-66	4.2	50,600	60,400	42,000	2,800	Note 1
Oct-20-66	3.9	45,500	64,000	52,100	700	Note 1
Oct-21-66	3.5	38,300	57,000	35,300	1,200	Note 1
Oct-24-66	3.8	44,500	73,600	38,100	1,300	Note 1
Oct-25-66	3.5	38,300	43,000	35,300	1,700	Note 1
Oct-26-66	3.8	41,200	79,200	38,100	4,500	Note 1
Oct-27-66	3.7	43,200	97,000	43,200	5,000	Note 1
Oct-28-66	3.7	40,100	66,100	43,200	4,900	Note 1
Oct-31-66	3.7	40,100	60,000	40,100	3,100	Note 1
Nov-01-66	3.7	34,900	57,000	33,900	1,900	Note 1
Nov-02-66	3.6	29,500	46,000	27,100	5,400	Note 1
Nov-03-66	3.8	31,700	43,200	31,700	3,800	Note 1
Nov-11-66	3.8	31,700	35,000	31,700	2,500	Note 1
Nov-14-66	3.9	22,800	32,700	22,800	4,600	Note 1
Nov-15-66	3.7	24,800	15,500	18,500	3,100	Note 1
Nov-16-66	3.8	31,600	23,000	31,800	1,300	Note 1
Nov-17-66	3.8	31,800	25,400	31,800	5,000	Note 1
Nov-21-66	4.1	44,400	60,300	41,000	3,400	Note 1
Nov-28-66	3.9	38,600	40,500	32,100	3,800	Note 1
Nov-29-66	3.8	33,000	32,700	28,400	3,200	Note 1

CONFIDENTIAL BUSINESS INFORMATION

Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Nov-30-66	3.9	26,100	20,000	19,600	3,900	Note 1
Dec-01-66	4.0	40,100	45,500	36,700	2,000	Note 1
Dec-02-66	3.9	42,300	76,200	35,900	5,800	Note 1
Dec-05-66	4.0	30,100	70,000	30,100	2,700	Note 1
Dec-06-66	4.0	25,000	52,200	30,100	7,300	Note 1
Dec-07-66	4.1	30,800	61,700	30,800	3,400	Note 1
Dec-08-66	4.0	30,200	67,300	26,600	3,300	Note 1
Dec-09-66	3.8	31,700	60,800	28,400	1,300	Note 1
Dec-12-66	3.7	30,900	81,000	24,700	6,200	Note 1
Dec-13-66	3.7	34,000	52,500	31,000	3,700	Note 1
Dec-14-66	3.8	31,700	36,600	31,700		Note 1
Dec-15-66	3.8	38,100	55,700	34,800	6,300	Note 1
Dec-16-66	3.8	41,000	62,700	37,700	3,100	Note 1
Dec-19-66	3.9	39,100	78,000	35,800	6,500	Note 1
Dec-20-66	3.9	26,100	42,300	26,100	3,900	Note 1
Dec-21-66	3.8	27,800	26,000	27,800	5,700	Note 1
Dec-22-66	3.9	29,100	35,400	26,100	5,900	Note 1
Dec-23-66	3.9	32,600	21,600	32,600	3,300	Note 1
Dec-27-66	4.0	36,700	64,000	33,300	3,400	Note 1
Dec-28-66	3.9	35,700	127,000	27,000	3,900	Note 1
Dec-29-66	3.9	32,600	69,300	32,600	4,600	Note 1
Jan-03-67	3.7	37,100	22,300	37,100	3,100	Note 1
Jan-04-67	3.9	32,600	64,400	29,200	4,500	Note 1
Jan-05-67	4.0	36,800	45,500	33,500	3,300	Note 1
Jan-06-67	3.9	32,600	32,600	29,200	4,600	Note 1
Jan-09-67	4.0	36,800	82,000	33,400	6,000	Note 1
Jan-10-67	3.7	34,000	39,000	27,700	4,300	Note 1
Jan-11-67	3.9	35,900	38,500	35,900	4,600	Note 1
Jan-12-67	4.0	36,700	51,700	33,400	4,700	Note 1
Jan-13-67	4.0	40,100	48,700	40,100	4,700	Note 1
Jan-16-67	4.0	43,500	75,700	36,700	4,700	Note 1
Jan-17-67	3.7	34,000	64,800	34,000	6,200	Note 1
Jan-18-67	4.0	33,400	61,000	33,400	6,700	Note 1
Jan-19-67	3.9	39,100	86,400	39,100	6,500	Note 1
Jan-20-67	3.9	42,300	57,200	42,300	7,200	Note 1
Jan-23-67	3.9	35,700	56,000	32,500	3,900	Note 1
Jan-24-67	3.9	32,600	40,400	32,600	5,200	Note 1
Jan-25-67	3.8	25,400	56,200	22,200	3,200	Note 1
Feb-14-67	3.8	41,000	54,800	31,700	3,200	Note 1
Feb-15-67	3.8	38,100	62,200	38,100	3,200	Note 1
Feb-16-67	4.1	31,500	51,400	31,500	1,400	Note 1
Feb-17-67	4.1	30,800	38,500	30,800	4,800	Note 1
Feb-20-67	4.2	38,600	42,200	35,200	3,500	Note 1
Feb-21-67	4.2	35,200	24,500	31,600	5,600	Note 1
Feb-22-67	4.2	49,000	64,000	45,600	6,400	Note 1
Feb-23-67	4.2	45,600	64,500	49,000	6,300	Note 1
Feb-24-67	4.1	41,200	37,900	30,800	7,700	Note 1
Feb-27-67	4.1	20,500	39,800	20,500	4,100	Note 1
Feb-28-67	4.2	28,100	50,500	28,100	4,900	Note 1
Mar-01-67	4.2	28,000	50,000	28,000	4,200	Note 1
Mar-02-67	4.1	37,800	52,800	35,000	4,100	Note 1
Mar-03-67	4.2	35,100	55,500	35,100	1,400	Note 1
Mar-06-67	4.2	35,000	55,500	35,000	3,500	Note 1

CONFIDENTIAL BUSINESS INFORMATION

Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Mar-07-67	4.1	41,200	54,200	34,400	5,600	Note 1
Mar-08-67	4.2	45,700	45,000	35,000	3,500	Note 1
Mar-09-67	4.2	49,100	52,200	42,100	7,000	Note 1
Mar-10-67	4.2	38,700	65,100	38,700	3,500	Note 1
Mar-13-67	3.9	39,200	56,700	35,900	5,200	Note 1
Mar-14-67	4.0	30,100	47,500	30,100	5,300	Note 1
Mar-15-67	4.0	46,700	84,200	20,100	6,000	Note 1
Mar-16-67	3.7	34,000	50,700	27,700	7,400	Note 1
Mar-17-67	3.9			35,800	5,200	Note 1
Mar-20-67	3.8	31,400	49,600	28,200	5,600	Note 1
Mar-21-67	3.8	31,800	47,700	31,800	5,100	Note 1
Mar-22-67	3.8	28,200	48,500	28,200	3,800	Note 1
Mar-23-67	3.8	37,700	47,700	34,400	5,000	Note 1
Mar-24-67	3.7	37,100	61,600	40,000	5,600	Note 1
Mar-27-67	3.8	31,800	51,000	31,800	6,300	Note 1
Mar-28-67	3.8	25,500	81,600	22,200	3,800	Note 1
Mar-29-67	3.3	41,700	47,600	30,500	4,400	Note 1
Mar-30-67	3.3	41,700	50,500	41,700	2,800	Note 1
Mar-31-67	3.5	41,000	43,000	49,800	3,500	Note 1
Apr-03-67	3.8	31,800	54,700	31,800	7,000	Note 1
Apr-04-67	3.7	24,800	55,000	24,800	1,800	Note 1
Apr-05-67	3.9	22,800	45,600	22,800	2,000	Note 1
Apr-06-67	3.8	35,000	38,700	25,500	1,000	Note 1
Apr-07-67	3.8	28,500	66,200	28,500	7,600	Note 1
Apr-10-67	3.8	41,200	50,700	38,100	2,500	Note 1
Apr-11-67	3.8	31,800	49,000	28,600	1,900	Note 1
Apr-12-67	3.9	19,500	54,600	19,500	3,900	Note 1
Apr-13-67	3.9	26,000	37,500	22,800	3,200	Note 1
Apr-14-67	3.9	39,100	64,500	32,500	2,700	Note 1
Apr-17-67	3.8	35,000	53,000	28,600	3,200	Note 1
Apr-18-67	3.8	25,400	35,700	22,200	3,800	Note 1
Apr-19-67	3.6	36,200	51,000	33,200	3,600	Note 1
Apr-20-67	3.7	34,100	42,700	34,100	2,400	Note 1
Apr-21-67	3.6	39,300	47,000	35,200	1,800	Note 1
Apr-24-67	3.8	38,100	47,700	38,100	5,100	Note 1
Apr-25-67	3.8	41,200	79,200	31,700	4,400	Note 1
Apr-26-67	3.8	15,900	100,200	12,700	6,300	Note 1
Apr-27-67	3.9	29,300	53,400	16,300	6,500	Note 1
Apr-28-67	3.9			26,000	4,500	Note 1
May-13-67	4.8				8,140	MDNR 003652-56 (WRC)
May-14-67	3.4				6,114	MDNR 003652-56 (WRC)
Jun-05-67	3.5	41,100	68,900	38,000	2,650	Note 1
Jun-06-67	3.6	42,400	64,500	45,300	5,600	Note 1
Jun-07-67	3.7			31,000	4,350	Note 1
Jun-08-67	3.8	19,100	19,100	25,400	3,200	Note 1
Jun-12-67	3.8	38,200	81,500	38,200	2,600	Note 1
Jun-13-67	3.5			29,400	2,700	Note 1
Jun-14-67	3.9	14,700	108,000	20,100	3,300	Note 1
Jun-15-67	3.8	38,200	63,600	39,800	5,100	Note 1
Jun-16-67	3.8	43,000	86,000	31,100	3,200	Note 1
Jun-19-67	3.8	57,300	54,600	57,300	3,200	Note 1
Jun-20-67	3.8	44,400	51,400	38,200	1,200	Note 1
Jun-21-67	3.7			34,000	2,500	Note 1

CONFIDENTIAL BUSINESS INFORMATION

Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Jun-22-67	3.8	44,300	54,500	41,100	1,900	Note 1
Jun-23-67	3.8			41,100	2,500	Note 1
Jun-26-67	3.9	32,600	41,400	26,100	3,300	Note 1
Jun-27-67	3.8	22,200	53,200	19,100	6,300	Note 1
Jun-28-67	3.7	34,000	52,200	31,000	3,700	Note 1
Jun-29-67	3.9	26,000	58,600	26,000	4,600	Note 1
Jun-30-67	3.8			31,800	1,900	Note 1
Jul-05-67	3.8	34,900	88,400	34,900	4,400	Note 1
Jul-06-67	3.9	42,300	50,000	35,800	2,600	Note 1
Jul-07-67	3.9	32,500	52,900	32,500	1,300	Note 1
Jul-10-67	3.9	19,500	39,100	16,300	5,800	Note 1
Jul-11-67	3.9	16,300	20,800	13,000	1,300	Note 1
Jul-12-67	3.8	38,100	21,600	28,600	1,400	Note 1
Jul-13-67	3.9			35,800	4,100	Note 1
Jul-14-67	3.7	29,600	26,300	20,000	6,200	Note 1
Jul-17-67	3.7			18,600	7,400	Note 1
Jul-18-67	3.9	22,700	53,400	22,700	5,900	Note 1
Jul-19-67	3.9	29,300	36,400	26,000	3,900	Note 1
Jul-20-67	4.0	43,600	87,400	37,000	4,000	Note 1
Jul-21-67	3.9	35,700	40,400	29,300	2,000	Note 1
Jul-24-67	3.8	31,800	56,200	31,800	4,500	Note 1
Jul-25-67	3.7	43,200	23,600	34,000	2,500	Note 1
Jul-26-67	3.9	32,600	59,200	29,200	5,200	Note 1
Jul-27-67	4.0	40,100	56,200	40,100	2,100	Note 1
Jul-28-67	4.0	37,500	53,100	31,900	3,600	Note 1
Jul-31-67	3.8	31,700	63,000	28,600	3,800	Note 1
Aug-01-67	4.0	33,500	59,000	30,000	1,000	Note 1
Aug-02-67	4.0	30,200	72,200	30,200	2,100	Note 1
Aug-03-67	4.0	31,700	60,500	26,800	6,000	Note 1
Aug-04-67	3.9	26,100	58,600	19,600	5,800	Note 1
Aug-07-67	3.9	39,100	60,500	32,700	1,500	Note 1
Aug-08-67	4.0	30,200	64,000	30,200	4,200	Note 1
Aug-09-67	4.0	33,500	60,800	30,100	4,800	Note 1
Aug-10-67	3.8	31,700	52,700	28,500	4,400	Note 1
Aug-11-67	4.0	30,100	65,300	30,100	3,300	Note 1
Aug-14-67	3.8	31,700	64,300	31,700	2,600	Note 1
Aug-15-67	3.8	31,700	41,200	25,500	5,100	Note 1
Aug-16-67	3.8	28,600	49,500	25,500	5,100	Note 1
Aug-17-67	3.7	30,800	55,600	30,800	3,700	Note 1
Aug-18-67	4.0			46,700	5,300	Note 1
Aug-21-67	3.9	39,100	36,600	26,000	1,300	Note 1
Aug-22-67	4.0	33,500	71,000	30,000	3,400	Note 1
Aug-23-67	4.0			33,500	5,300	Note 1
Aug-24-67	3.9	32,600	38,400	29,300	5,200	Note 1
Aug-25-67	4.0	33,400	26,800	23,400	4,700	Note 1
Aug-28-67	3.8	41,200	56,300	38,200	5,100	Note 1
Aug-29-67	4.0	40,100	55,400	30,100	5,300	Note 1
Aug-30-67	4.0	43,400	59,700	26,800	3,300	Note 1
Aug-31-67	4.0	33,400	62,100	30,000	8,700	Note 1
Sep-01-67	3.8	34,900	59,000	31,700	7,400	Note 1
Sep-05-67	3.9	39,200	65,200	32,600	5,900	Note 1
Sep-06-67	4.0	43,500	48,700	26,700	6,000	Note 1
Sep-07-67	4.0	36,800	38,800	16,700	6,000	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Sep-08-67	4.0	37,200	41,200	25,400	5,400	Note 1
Sep-11-67	4.0	40,200	66,200	33,400	4,100	Note 1
Sep-12-67	4.0	41,000	65,000	34,300	2,700	Note 1
Sep-13-67	4.0	43,400	64,600	40,100	6,000	Note 1
Sep-14-67	4.2	35,200	76,200	35,200	7,600	Note 1
Sep-15-67	4.1	41,100	81,600	37,700	5,500	Note 1
Sep-18-67	3.3	27,800	69,000	27,800	3,400	Note 1
Sep-19-67	3.3	30,700	78,500	27,800	2,200	Note 1
Sep-20-67	3.2	13,600	62,700	10,900	2,200	Note 1
Sep-21-67	3.4	31,500	65,600	25,800	2,800	Note 1
Sep-22-67	3.2	31,600	47,300	31,600	2,100	Note 1
Sep-25-67	3.8	44,300	80,200	38,100	7,600	Note 1
Sep-26-67	3.8	63,600	45,700	38,200	1,900	Note 1
Sep-27-67	3.8	31,800	69,900	28,600	7,600	Note 1
Sep-28-67	3.9	35,800	78,700	35,800	8,500	Note 1
Sep-29-67	3.9	34,800	60,000	32,600	5,900	Note 1
Oct-02-67	3.9	32,600	70,600	29,300	3,300	Note 1
Oct-03-67	3.8	22,300	77,500	19,000	3,200	Note 1
Oct-04-67	3.8	22,200	60,500	22,200	2,500	Note 1
Oct-05-67	4.0	33,400	43,600	26,800	3,300	Note 1
Oct-06-67	4.1	30,800	52,700	30,800	3,400	Note 1
Oct-09-67	3.9	32,600	65,500	26,000	4,500	Note 1
Oct-10-67	3.8	31,800	70,900	28,600	12,000	Note 1
Oct-11-67	3.8	41,200	66,000	38,100	5,700	Note 1
Oct-12-67	3.8	38,100	54,500	31,800	2,600	Note 1
Oct-13-67	3.8	41,100	31,800	25,400	3,800	Note 1
Oct-16-67	3.8	31,700	42,700	22,200	1,300	Note 1
Oct-17-67	3.6	30,200	37,400	21,200	1,800	Note 1
Oct-18-67	3.8	25,400	53,500	16,000	4,400	Note 1
Oct-19-67	3.8	31,800	23,500	25,300	5,100	Note 1
Oct-20-67	3.8	31,800	59,000	31,800	5,700	Note 1
Oct-23-67	3.9			29,300	5,900	Note 1
Oct-24-67	3.8			31,800	3,800	Note 1
Oct-25-67	3.8	28,600	34,200	25,400	5,100	Note 1
Oct-26-67	3.9	29,400	55,600	26,000	5,900	Note 1
Oct-27-67	3.9	31,100	47,600	26,400	4,100	Note 1
Oct-30-67	3.8	22,200	60,400	22,200	4,400	Note 1
Oct-31-67	3.8	31,800	59,000	31,800	2,500	Note 1
Nov-01-67	3.8	13,000	27,200	9,500	1,900	Note 1
Nov-02-67	3.7	21,700	48,800	21,700	2,500	Note 1
Nov-03-67	3.6	21,200	47,000	21,200	1,200	Note 1
Nov-06-67	3.6	21,000	52,600	21,000	3,000	Note 1
Nov-07-67	3.7	37,200	50,500	33,900	2,500	Note 1
Nov-08-67	3.7	15,400	39,600	9,300	1,800	Note 1
Nov-09-67	3.6	27,100	28,800	21,100	3,000	Note 1
Nov-10-67	3.6	33,200	57,200	30,200	4,200	Note 1
Nov-13-67	3.7	36,700	48,300	36,700	3,100	Note 1
Nov-14-67	3.6	39,200	45,800	33,200	3,600	Note 1
Nov-15-67	3.2	44,600	51,000	18,400	3,200	Note 1
Nov-16-67	3.1	38,200	29,100	23,000	1,000	Note 1
Nov-17-67	3.5	35,300	55,200	29,400	1,200	Note 1
Nov-20-67	3.6	26,400	46,200	24,100	1,800	Note 1
Nov-21-67	3.6	36,200	45,700	27,100	700	Note 1

CONFIDENTIAL BUSINESS INFORMATION

Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Nov-22-67	3.5	23,600	42,000	14,800	1,200	Note 1
Nov-27-67	3.7	40,200	40,000	34,100	6,200	Note 1
Nov-28-67	3.5	44,200	50,600	41,200	1,200	Note 1
Nov-29-67	3.3	36,000	38,900	33,400	1,700	Note 1
Nov-30-67	4.1	27,500	38,600	17,200	1,400	Note 1
Dec-01-67	4.0	36,800	41,000	23,400	3,300	Note 1
Dec-04-67	4.0	33,400	44,000	26,800	4,100	Note 1
Dec-05-67	4.0	30,200	66,100	30,200	4,700	Note 1
Dec-06-67	4.0	30,000	62,700	23,500	6,700	Note 1
Dec-07-67	3.9	39,200	56,600	35,900	6,600	Note 1
Dec-08-67	4.1	47,800	35,800	41,100	2,100	Note 1
Dec-11-67	4.2			38,600	3,500	Note 1
Dec-12-67	4.2	24,600	47,700	21,200	3,600	Note 1
Dec-13-67	4.3	43,200	94,200	43,200	4,400	Note 1
Dec-14-67	4.3	36,000	73,200	32,400	7,900	Note 1
Dec-15-67	4.3	28,700	53,500	25,200	7,300	Note 1
Dec-18-67	4.2			49,100	4,200	Note 1
Dec-19-67	4.3	46,700	63,200	36,000	7,900	Note 1
Dec-20-67	4.1	37,800	56,900	30,800	4,800	Note 1
Dec-21-67	4.4	32,900	59,300	29,600	8,100	Note 1
Dec-22-67	3.9	52,000	78,000	45,500	3,300	Note 1
Dec-26-67	3.5			32,400	6,500	Note 1
Dec-27-67	3.9			42,200	3,900	Note 1
Dec-28-67	3.8			34,900	10,800	Note 1
Dec-29-67	3.8			44,300	9,500	Note 1
Jan-02-68	3.5			32,400	4,100	Note 1
Jan-03-68	3.5	23,500	42,400	17,600	1,800	Note 1
Jan-04-68	3.4	28,700	33,700	20,100	1,700	Note 1
Jan-05-68	3.3	41,700	35,600	33,400	2,200	Note 1
Jan-08-68	3.7	37,200	51,800	27,800	4,900	Note 1
Jan-09-68	3.5	29,400	46,600	23,600	1,800	Note 1
Jan-10-68	3.5	23,600	53,400	20,600	4,700	Note 1
Jan-11-68	3.7			49,400	3,100	Note 1
Jan-12-68	3.7			37,200	2,500	Note 1
Jan-15-68	3.8	25,400	36,800	19,000	3,800	Note 1
Jan-16-68	3.6	26,400	52,000	21,100	2,400	Note 1
Jan-17-68	3.7	24,700	83,200	21,600	3,100	Note 1
Jan-18-68	3.7	49,600	61,900	49,600	5,600	Note 1
Jan-19-68	3.7	40,200	53,200	37,200	3,700	Note 1
Jan-22-68	3.6	36,200	60,800	36,200	1,800	Note 1
Jan-23-68	3.7	27,900	55,000	24,700	600	Note 1
Jan-24-68	3.9	19,600	63,200	19,600	700	Note 1
Jan-25-68	3.6	36,300	55,600	33,200	3,000	Note 1
Jan-26-68	3.8	38,100	56,500	34,800	2,600	Note 1
Jan-29-68	3.7	37,100	77,600	31,000	6,200	Note 1
Jan-30-68	4.1	20,700	84,600	20,700	4,200	Note 1
Jan-31-68	4.0	30,200	75,500	30,200	8,700	Note 1
Feb-01-68	4.0	26,800	31,600	20,000	4,000	Note 1
Feb-02-68	4.0			21,700	4,760	Note 1
Feb-05-68	4.0	36,800	69,000	26,600	8,000	Note 1
Feb-06-68	4.0	26,800	70,200	20,100	5,300	Note 1
Feb-07-68	3.9	49,000	61,400	36,000	3,900	Note 1
Feb-08-68	3.9	42,700	63,500	37,100	5,900	Note 1

CONFIDENTIAL BUSINESS INFORMATION

Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Feb-09-68	4.1	39,100	56,400	31,400	4,900	Note 1
Feb-14-68	3.7	49,500	57,400	37,200	2,500	Note 1
Feb-15-68	3.6	36,300	66,000	30,000	4,200	Note 1
Feb-16-68	3.7	43,400	55,000	34,000	1,900	Note 1
Feb-19-68	3.8	44,300	82,200	34,900	2,500	Note 1
Feb-20-68	3.8	38,299	61,200	38,200	1,300	Note 1
Feb-21-68	3.7	55,500	77,900	37,200	1,900	Note 1
Feb-22-68	4.0	40,100	68,400	30,000	3,400	Note 1
Feb-23-68	4.1	48,200	64,200	41,100	4,100	Note 1
Feb-26-68	3.9	45,700	67,700	42,400	2,600	Note 1
Feb-27-68	4.0	40,100	60,100	30,100	2,700	Note 1
Feb-28-68	4.0	40,100	71,000	36,700	2,000	Note 1
Feb-29-68	3.9	42,400	33,800	32,700	3,300	Note 1
Mar-01-68	3.9	39,200	77,300	35,800	2,600	Note 1
Mar-04-68	3.7	49,500	70,900	37,100	3,700	Note 1
Mar-05-68	3.3	39,000	63,100	39,000	1,700	Note 1
Mar-06-68	3.7	33,900	60,000	30,900	3,100	Note 1
Mar-07-68	3.8	36,100	60,300	31,800	1,900	Note 1
Mar-08-68	3.7	37,200	61,100	34,000	3,100	Note 1
Mar-11-68	3.5	35,300	59,200	29,400	3,500	Note 1
Mar-12-68	3.6	36,200	56,200	30,100	600	Note 1
Mar-13-68	3.5	32,400	55,700	29,400	3,000	Note 1
Mar-14-68	3.6	42,300	60,200	30,100	5,400	Note 1
Mar-15-68	3.7	34,100	71,200	30,900	4,300	Note 1
Mar-18-68	3.7	40,200	57,000	34,000	2,400	Note 1
Mar-19-68	3.8	44,400	51,200	38,100	2,500	Note 1
Mar-20-68	3.7	40,200	53,600	37,200	3,700	Note 1
Mar-21-68	3.7	40,200	45,800	37,200	3,100	Note 1
Mar-22-68	3.0	41,200	58,000	34,900	2,600	Note 1
Mar-25-68	3.8	35,000	62,100	25,500	3,800	Note 1
Mar-26-68	3.8	44,400	53,200	34,900	5,100	Note 1
Mar-27-68	3.7	37,200	58,000	33,900	3,100	Note 1
Mar-28-68	3.6	42,000	60,200	39,000	4,800	Note 1
Mar-29-68	3.7	43,300	56,100	40,100	2,500	Note 1
Apr-01-68	3.5	35,200	53,200	26,400	3,500	Note 1
Apr-02-68	3.3	41,700	19,000	33,400	2,200	Note 1
Apr-03-68	3.7	37,200	47,700	33,900	2,500	Note 1
Apr-04-68	3.7	37,100	42,600	37,100	3,700	Note 1
Apr-05-68	3.7	49,500	58,000	37,200	4,900	Note 1
Apr-08-68	3.7	40,200	47,600	40,200	1,800	Note 1
Apr-09-68	3.6	54,300	59,400	42,300	600	Note 1
Apr-10-68	3.5	44,200	59,500	35,300	1,700	Note 1
Apr-11-68	3.8	35,000	58,700	31,800	700	Note 1
Apr-12-68	3.8	41,400	54,000	41,400	1,800	Note 1
Apr-15-68	3.6	39,200	60,000	38,200	2,400	Note 1
Apr-16-68	3.6	42,200	59,700	27,200	1,100	Note 1
Apr-17-68	3.6	24,100	36,800	18,100	4,200	Note 1
Apr-18-68	3.5	32,400	45,700	26,500	2,900	Note 1
Apr-19-68	3.6	33,300	51,700	33,300	3,000	Note 1
Apr-22-68	3.7	43,200	76,600	37,100	2,600	Note 1
Apr-23-68	3.8	41,100	69,700	41,100	3,800	Note 1
Apr-24-68	3.8	38,200	63,400	34,900	2,500	Note 1
Apr-25-68	3.7	43,200	69,900	37,200	4,300	Note 1

CONFIDENTIAL BUSINESS INFORMATION

Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Apr-26-68	3.6	39,200	50,800	36,200	3,000	Note 1
Apr-29-68	3.5	35,300	60,700	32,200	3,600	Note 1
Apr-30-68	3.4	25,700	67,300	25,700	2,900	Note 1
May-01-68	3.5	32,300	63,400	2,600	3,000	Note 1
May-02-68	3.3	41,700	65,200	39,000	2,200	Note 1
May-03-68	3.4	40,000	48,000	37,100	1,100	Note 1
May-13-68	3.7	37,200	74,100	27,800	1,800	Note 1
May-14-68	3.7	34,000	69,700	30,900	3,100	Note 1
May-15-68	3.6	33,300	74,400	33,300	2,400	Note 1
May-16-68	3.6	33,200	69,200	30,200	1,200	Note 1
May-17-68	3.8	41,200	86,200	35,000	2,600	Note 1
May-20-68	3.8	41,400	65,200	41,400	2,500	Note 1
May-21-68	3.4			40,200	2,900	Note 1
May-22-68	3.7	43,200	46,400	37,100	2,500	Note 1
May-23-68	3.7	34,000	55,500	30,900	2,500	Note 1
May-24-68	3.6	36,200	56,000	33,200	1,600	Note 1
May-27-68	3.8	34,800	61,000	28,700	1,900	Note 1
May-28-68	3.6	30,300	47,900	27,200	2,400	Note 1
May-29-68	3.8	25,500	67,500	25,500	1,300	Note 1
May-30-68	3.5	35,300	49,500	35,300	2,400	Note 1
May-31-68	3.6	45,400	107,500	45,400	3,300	Note 1
Jun-03-68	3.2	26,300	54,700	23,600	2,600	Note 1
Jun-04-68	2.2	18,200	30,000	18,200	1,800	Note 1
Jun-04-68	2.8				2,101	SA 029206-15 (WRC)
Jun-05-68	1.9	24,300	20,700	22,700	1,600	Note 1
Jun-05-68	3.0				2,557	SA 029206-15 (WRC)
Jun-06-68	1.9	25,900	34,100	25,900	2,600	Note 1
Jun-07-68	3.6	48,200	118,200	36,200	2,400	Note 1
Jun-10-68	3.2	37,900	50,200	35,100	4,900	Note 1
Jun-11-68	3.2	43,400	59,400	32,500	2,200	Note 1
Jun-12-68	3.2	34,100	65,400	23,600	2,100	Note 1
Jun-13-68	3.1	25,400	45,000	20,300	3,000	Note 1
Jun-14-68	3.2	44,600	51,000	26,300	1,500	Note 1
Jun-17-68	3.2	32,500	60,400	24,400	2,200	Note 1
Jun-18-68	3.2	29,800	52,000	27,000	2,200	Note 1
Jun-19-68	3.2	27,000	28,000	24,300	1,600	Note 1
Jun-20-68	3.2			36,800	2,600	Note 1
Jun-21-68	3.2	34,300	48,400	31,500	3,100	Note 1
Jun-24-68	3.2	36,900	34,700	21,300	1,100	Note 1
Jun-25-68	3.2	26,300	51,500	20,900	2,100	Note 1
Jun-26-68	3.3			27,100	6,500	Note 1
Jun-27-68	3.3	29,700	43,700	27,100	4,300	Note 1
Jun-28-68	3.3			24,400	3,300	Note 1
Jul-01-68	3.4	22,400	60,400	25,100	5,600	Note 1
Jul-02-68	3.3	27,100	52,500	24,400	4,300	Note 1
Jul-03-68	3.2	29,800	57,500	24,400	6,500	Note 1
Jul-08-68	1.9	31,000	39,200	29,400	4,300	Note 1
Jul-09-68	1.8	38,500	31,500	34,800	3,600	Note 1
Jul-10-68	1.8	40,800	44,500	35,000	4,100	Note 1
Jul-11-68	1.5	38,200	34,200	34,500	3,200	Note 1
Jul-12-68	1.5	34,600	33,500	32,000	1,700	Note 1
Jul-15-68	1.5	23,500	5,700	22,200	1,400	Note 1
Jul-16-68	1.7	21,300	17,700	18,500	800	Note 1

Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Jul-17-68	1.8	25,300	26,700	20,800	1,200	Note 1
Jul-18-68	1.7	25,700	43,800	14,200	1,100	Note 1
Jul-19-68	1.8	28,200	50,400	26,700	1,800	Note 1
Jul-22-68	2.0			20,200	2,400	Note 1
Jul-23-68	2.4			23,500	2,300	Note 1
Jul-24-68	2.3	22,700	35,800	22,700	2,600	Note 1
Jul-25-68	1.9			19,000	1,900	Note 1
Jul-26-68	2.4	34,300	41,300	24,300	2,500	Note 1
Jul-29-68	1.6	15,600	24,100	15,600	1,800	Note 1
Jul-30-68	2.3	24,600	39,600	22,700	1,600	Note 1
Jul-31-68	2.4	26,200	32,800	22,200	1,600	Note 1
Aug-01-68	2.3			24,600	3,000	Note 1
Aug-02-68	2.4			25,400	2,100	Note 1
Aug-05-68	1.9	16,200	22,200	12,900	2,300	Note 1
Aug-06-68	1.9	21,000	27,900	16,200	2,200	Note 1
Aug-07-68	1.9	33,900	14,200	14,500	2,200	Note 1
Aug-08-68	2.1	19,300	28,700	19,300	2,800	Note 1
Aug-09-68	2.2			16,300	1,800	Note 1
Aug-12-68	2.5	29,500	32,400	23,200	1,700	Note 1
Aug-13-68	2.4	28,200	39,500	24,200	1,200	Note 1
Aug-14-68	2.4	24,200	35,900	24,200	1,200	Note 1
Aug-15-68	2.3	22,700	75,700	22,700	1,900	Note 1
Aug-16-68	2.4	22,100	63,100	26,100	2,200	Note 1
Aug-19-68	2.1	19,400	52,200	15,700	2,800	Note 1
Aug-20-68	2.0	25,300	31,200	22,000	2,700	Note 1
Aug-20-68	3.9				6,712	SA 032010-30 (WRC)
Aug-21-68	2.2	25,500	35,200	23,600	1,800	Note 1
Aug-22-68	2.2	22,000	83,700	22,000	1,800	Note 1
Aug-23-68	2.8	32,600	89,000	23,300	1,000	Note 1
Aug-26-68	2.6			28,500	2,200	Note 1
Aug-27-68	2.3			23,900	1,500	Note 1
Aug-28-68	2.2			23,700	1,800	Note 1
Aug-29-68	2.6	28,300	52,700	21,800	8,300	Note 1
Aug-30-68	2.7	27,000	62,800	24,600	4,500	Note 1
Sep-03-68	2.8	27,900	50,400	25,600	1,800	Note 1
Sep-04-68	2.0	23,500	35,000	20,200	1,700	Note 1
Sep-05-68	2.7	24,800	61,200	24,800	1,400	Note 1
Sep-06-68	2.6					Note 1
Sep-09-68	3.0	32,100	61,300	27,200	2,500	Note 1
Sep-10-68	2.6	31,500	29,300	24,700	1,800	Note 1
Sep-11-68	2.4	22,200	38,400	22,200	2,400	Note 1
Sep-12-68	2.3	20,800	40,800	18,900	1,300	Note 1
Sep-13-68	2.5	27,400	41,900	23,200	2,500	Note 1
Sep-16-68	2.4	20,200	40,200	20,200	2,400	Note 1
Sep-17-68	2.4			21,500	1,500	Note 1
Sep-18-68	2.4	30,300	54,600	18,200	3,000	Note 1
Sep-19-68	2.3	30,300	50,500	28,400	2,600	Note 1
Sep-20-68	2.4	32,300	43,900	24,200	2,400	Note 1
Sep-24-68	3.1	28,000	49,500	25,500	2,100	Note 1
Sep-25-68	3.0			14,500	2,000	Note 1
Sep-26-68	2.5			18,900	2,500	Note 1
Sep-27-68	2.2			23,600	2,500	Note 1
Sep-30-68	2.1	26,400	38,200	24,600	5,600	Note 1

Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Oct-01-68	2.4	19,600	40,800	19,600	1,600	Note 1
Oct-02-68	2.4	23,500	55,200	23,500	2,000	Note 1
Oct-03-68	2.8	30,200	44,800	23,200	2,300	Note 1
Oct-04-68	2.8	41,800	63,000	33,100	3,700	Note 1
Oct-07-68	3.0	24,800	51,300	22,300	3,000	Note 1
Oct-08-68	2.9	26,300	30,600	21,600	1,900	Note 1
Oct-09-68	2.8	23,300	65,000	14,000	2,300	Note 1
Oct-10-68	2.7	22,400	43,500	22,400	3,600	Note 1
Oct-11-68	2.8	25,600	63,000	23,200	1,900	Note 1
Oct-14-68	1.6			13,100	3,200	Note 1
Oct-15-68	2.4			24,200	2,900	Note 1
Oct-16-68	2.3	30,300	35,200	26,500	3,600	Note 1
Oct-17-68	2.4	21,200	52,000	24,200	2,000	Note 1
Oct-18-68	2.4	17,600	40,000	23,500	1,900	Note 1
Oct-21-68	1.9	21,700	36,800	14,000	1,200	Note 1
Oct-22-68	1.9	21,100	13,700	21,100	1,000	Note 1
Oct-23-68	1.9	21,700	34,400	18,600	900	Note 1
Oct-24-68	2.2			23,700	1,000	Note 1
Oct-25-68	2.3	20,800	39,300	20,800	1,100	Note 1
Oct-28-68	2.3	20,800	36,200	15,100	3,000	Note 1
Oct-29-68	1.5	13,400	25,000	9,800	1,000	Note 1
Oct-30-68	2.3	22,700	49,500	22,700	2,600	Note 1
Oct-31-68	2.5	29,400	43,800	23,100	3,300	Note 1
Nov-01-68	2.5			25,200	2,900	Note 1
Nov-04-68	2.4	19,600	19,600	19,600	3,500	Note 1
Nov-05-68	2.3	26,400	46,400	24,700	1,900	Note 1
Nov-06-68	2.2	18,200	36,200	18,200	2,900	Note 1
Nov-07-68	2.2	21,900	25,500	14,500	2,900	Note 1
Nov-08-68	2.3	30,300	37,700	15,200	1,900	Note 1
Nov-11-68	2.2	25,500	35,800	14,600	3,600	Note 1
Nov-12-68	2.1	22,700	34,300	19,400	2,800	Note 1
Nov-13-68	2.0	14,300	49,400	12,400	5,000	Note 1
Nov-14-68	2.4	26,200	39,800	20,200	5,200	Note 1
Nov-15-68	2.4	25,400	29,000	21,600	2,700	Note 1
Nov-18-68	2.3	20,800	45,800	17,000	2,300	Note 1
Nov-19-68	2.1	21,100	38,900	21,100	1,400	Note 1
Nov-20-68	2.0	26,700	35,200	23,300	2,000	Note 1
Nov-21-68	2.1			21,000	2,100	Note 1
Nov-22-68	2.1	24,600	42,200	19,300	1,400	Note 1
Nov-25-68	2.2	21,900	38,200	21,900	2,900	Note 1
Nov-26-68	2.2	21,800	36,800	16,400	2,900	Note 1
Nov-28-68	2.3	19,300	36,200	17,300	4,200	Note 1
Nov-29-68	2.5			21,000	6,300	Note 1
Dec-02-68	2.0	20,200	42,000	15,200	4,000	Note 1
Dec-03-68	2.2	25,500	48,800	23,700	2,600	Note 1
Dec-04-68	1.8	24,300	27,500	19,400	1,600	Note 1
Dec-05-68	1.9	21,100	33,600	17,700	1,300	Note 1
Dec-06-68	1.9	21,700	22,900	18,600	1,200	Note 1
Dec-09-68	2.6	30,600	28,200	21,700	3,000	Note 1
Dec-10-68	2.4	22,000	45,700	22,000	2,800	Note 1
Dec-11-68	2.4	17,600	40,000	17,600	1,600	Note 1
Dec-12-68	2.3	30,300	40,000	20,800	3,000	Note 1
Dec-13-68	2.4	20,200	34,800	20,200	2,400	Note 1

CONFIDENTIAL BUSINESS INFORMATION

Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Jan-01-69	2.1	21,100	49,800	19,400	2,100	Note 1
Jan-02-69	1.9			19,500	2,000	Note 1
Jan-03-69	2.4			26,200	2,400	Note 1
Jan-06-69	2.4			33,100	2,000	Note 1
Jan-07-69	2.3	28,300	33,600	24,600	1,100	Note 1
Jan-08-69	2.4	32,200	49,500	28,200	2,400	Note 1
Jan-09-69	2.3	32,000	31,200	32,000	1,900	Note 1
Jan-10-69	2.3	30,200	30,200	22,700	1,500	Note 1
Jan-13-69	2.2	21,800	40,000	20,000	1,000	Note 1
Jan-14-69	2.1	21,000	52,000	21,000	700	Note 1
Jan-15-69	2.6	21,800	33,400	21,300	900	Note 1
Jan-16-69	2.0	21,700	37,600	20,000	1,000	Note 1
Jan-17-69	3.3	44,500	40,000	36,300	500	Note 1
Jan-20-69	1.9	20,200	44,500	15,500	2,500	Note 1
Jan-21-69	2.4	27,400	41,700	23,500	1,700	Note 1
Jan-22-69	2.4	26,200	32,600	24,200	2,000	Note 1
Jan-23-69	2.6	30,400	44,200	23,800	2,800	Note 1
Jan-24-69	2.7	29,300	40,200	27,000	4,900	Note 1
Jan-27-69	2.4	26,200	36,400	22,200	4,400	Note 1
Jan-28-69	2.8	48,600	54,000	34,800	1,900	Note 1
Jan-29-69	2.9	33,600	31,700	23,400	3,300	Note 1
Jan-30-69	2.7	29,200	54,000	24,700	1,800	Note 1
Jan-31-69	2.7	47,200	45,000	27,000	2,300	Note 1
Feb-03-69	2.3	35,800	35,200	18,900	2,600	Note 1
Feb-04-69	2.4			32,300	2,000	Note 1
Feb-05-69	2.6			19,600	2,200	Note 1
Feb-06-69	2.5	31,600	46,200	31,000	3,300	Note 1
Feb-07-69	2.7			22,500	1,800	Note 1
Feb-10-69	2.6			26,200	1,800	Note 1
Feb-11-69	2.6	32,800	55,400	28,200	1,300	Note 1
Feb-12-69	2.5	15,300	57,000	25,300	2,100	Note 1
Feb-13-69	2.5	27,300	43,700	23,100	1,700	Note 1
Feb-14-69	2.6			32,700	2,200	Note 1
Feb-17-69	2.5	37,600	45,400	25,200	4,100	Note 1
Feb-18-69	2.4	26,200	44,900	22,200	4,700	Note 1
Feb-19-69	2.5	19,000	38,700	16,800	3,800	Note 1
Feb-20-69	2.6	28,400	38,300	26,100	4,300	Note 1
Feb-21-69	2.5			29,300	3,800	Note 1
Feb-24-69	2.6	34,800	37,900	23,900	4,300	Note 1
Feb-25-69	2.5	33,700	41,800	25,200	3,700	Note 1
Feb-26-69	2.5	29,300	47,800	23,200	4,200	Note 1
Feb-27-69	2.2	23,700	29,700	23,700	2,200	Note 1
Feb-28-69	2.4	37,500	40,000	35,100	1,900	Note 1
Mar-03-69	2.4	23,500	43,400	21,600	2,700	Note 1
Mar-04-69	2.2	21,800	32,700	20,000	3,300	Note 1
Mar-05-69	2.3	22,700	37,800	20,800	3,000	Note 1
Mar-06-69	2.3	30,300	39,300	24,700	2,600	Note 1
Mar-07-69	2.3	22,700	27,300	18,900	2,600	Note 1
Mar-10-69	2.3	22,700	28,800	18,900	2,300	Note 1
Mar-11-69	2.1	24,600	23,900	16,700	1,100	Note 1
Mar-12-69	2.0	25,400	35,100	11,800	2,000	Note 1
Mar-13-69	2.0	18,500	30,000	13,400	2,000	Note 1
Mar-14-69	1.0	22,700	27,900	19,400	1,600	Note 1

CONFIDENTIAL BUSINESS INFORMATION

Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Mar-17-69	2.4	29,400	45,700	25,400	4,300	Note 1
Mar-18-69	2.6	39,200	53,500	30,300	3,900	Note 1
Mar-19-69	2.8	32,500	42,200	27,900	3,200	Note 1
Mar-20-69	2.9	28,800	66,300	28,800	3,800	Note 1
Mar-21-69	3.1	33,200	64,200	25,400	4,600	Note 1
Mar-24-69	3.4	31,400	47,000	28,600	4,500	Note 1
Mar-25-69	2.8	30,200	76,200	27,900	4,200	Note 1
Mar-26-69	2.8	35,000	47,200	32,600	1,700	Note 1
Mar-27-69	2.6	32,600	32,600	26,100	4,300	Note 1
Mar-28-69	2.4			28,200	2,800	Note 1
Mar-31-69	2.4	28,200	48,700	28,200	2,400	Note 1
Apr-01-69	2.6	30,400	52,200	28,300	3,900	Note 1
Apr-02-69	2.9	31,200	33,000	28,800	3,900	Note 1
Apr-03-69	2.9	26,400	30,600	24,000	3,300	Note 1
Apr-04-69	2.6	24,000	27,900	21,700	2,600	Note 1
Apr-07-69	2.7	22,500	39,300	18,000	2,700	Note 1
Apr-08-69	2.6	28,200	33,800	28,200	1,300	Note 1
Apr-09-69	2.8	25,600	37,600	16,300	5,600	Note 1
Apr-10-69	2.7	24,800	42,200	20,200	2,200	Note 1
Apr-11-69	2.9	26,300	50,400	26,300	3,400	Note 1
Apr-14-69	2.7	31,600	47,700	27,000	4,500	Note 1
Apr-15-69	3.2	31,600	61,000	28,900	2,100	Note 1
Apr-16-69	2.8	25,600	50,600	18,600	1,400	Note 1
Apr-17-69	2.8	30,000	49,200	25,600	2,800	Note 1
Apr-18-69	2.6	23,900	49,100	23,900	1,700	Note 1
Apr-21-69	2.7	15,800	24,400	15,800	3,000	Note 1
Apr-22-69	2.5	21,000	31,900	18,900	2,900	Note 1
Apr-23-69	2.6	21,700	33,200	19,500	3,000	Note 1
Apr-24-69	2.6	30,300	41,500	28,200	5,700	Note 1
Apr-25-69	2.7	36,000	41,200	33,800	2,300	Note 1
Apr-28-69	2.9	33,600	45,000	28,800	2,400	Note 1
Apr-29-69	2.6	26,100	33,300	26,100	3,900	Note 1
Apr-30-69	2.8	20,900	30,000	18,500	3,200	Note 1
May-01-69	2.7	24,900	34,100	22,500	1,800	Note 1
May-02-69	2.7	22,500	31,500	18,000	4,000	Note 1
May-05-69	2.8	13,900	28,300	10,500	3,300	Note 1
May-06-69	2.4	18,100	43,500	16,200	1,400	Note 1
May-07-69	2.7	16,900	35,600	18,000	2,500	Note 1
May-08-69	2.9	36,000	47,000	26,400	3,400	Note 1
May-09-69	3.5	35,300	54,600	33,800	2,100	Note 1
May-12-69	2.4	21,600	37,300	19,600	2,000	Note 1
May-13-69	2.5	27,500	41,200	25,200	1,700	Note 1
May-14-69	3.2	21,000	37,200	21,000	1,500	Note 1
May-15-69	2.6	26,200	48,700	26,200	1,600	Note 1
May-16-69	2.7	29,200	49,400	29,200	2,700	Note 1
May-19-69	2.7	33,700	40,700	29,200	1,400	Note 1
May-20-69	2.6	26,100	38,500	26,100	1,300	Note 1
May-21-69	2.5	31,500	35,800	29,400	1,700	Note 1
May-22-69	2.9	26,300	50,700	24,000	2,600	Note 1
May-23-69	2.5	33,600	36,900	25,200	3,700	Note 1
May-26-69	2.8	27,900	47,000	25,600	2,300	Note 1
May-27-69	2.6	23,900	28,400	19,600	1,300	Note 1
May-28-69	2.7	29,200	33,700	27,000	1,300	Note 1

CONFIDENTIAL BUSINESS INFORMATION

Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
May-29-69	2.7	29,800	31,200	21,400	1,500	Note 1
Jun-02-69	2.9	28,800	38,400	24,000	1,900	Note 1
Jun-03-69	2.8	27,900	41,200	27,900	1,400	Note 1
Jun-04-69	2.6	23,900	34,900	21,700	2,200	Note 1
Jun-05-69	2.9	28,800	51,700	21,600	1,900	Note 1
Jun-06-69	3.0	29,700	42,200	24,700	1,000	Note 1
Jun-09-69	3.0	22,300	34,200	22,300	2,500	Note 1
Jun-10-69	2.8	27,900	41,400	23,200	2,300	Note 1
Jun-11-69	2.9	23,900	40,000	19,200	1,500	Note 1
Jun-12-69	2.8	23,200	40,000	20,900	1,400	Note 1
Jun-13-69	2.7	40,400	43,600	21,100	1,400	Note 1
Jun-16-69	2.7	29,200	37,800	24,700	2,200	Note 1
Jun-17-69	3.0	29,700	42,200	29,700	1,500	Note 1
Jun-18-69	2.8	25,600	35,800	23,200	2,300	Note 1
Jun-19-69	2.9	26,300	36,500	23,200	1,400	Note 1
Jun-20-69	2.7	29,200	43,400	22,500	1,400	Note 1
Jun-23-69	2.8	27,900	33,100	21,000	2,800	Note 1
Jun-24-69	2.8	32,600	48,700	32,600	2,300	Note 1
Jun-25-69	2.8	27,900	46,500	25,500	2,800	Note 1
Jun-26-69	2.4	19,500	40,000	19,500	1,600	Note 1
Jun-27-69	2.7	20,300	38,200	18,000	1,800	Note 1
Jun-30-69	2.7	18,000	47,000	18,000	2,300	Note 1
Jul-01-69	2.6	26,100	36,000	21,000	6,100	Note 1
Jul-02-69	2.8	24,700	47,500	21,000	1,600	Note 1
Jul-03-69	2.7	27,000	37,400	20,200	1,800	Note 1
Jul-07-69	2.9	26,400	36,000	24,000	1,500	Note 1
Jul-08-69	2.7	22,500	33,800	22,500	1,300	Note 1
Jul-09-69	2.8	23,200	42,200	20,900	900	Note 1
Jul-10-69	2.8	30,200	49,200	30,200	1,800	Note 1
Jul-11-69	2.6	28,300	35,200	24,000	1,300	Note 1
Jul-14-69	2.9	43,200	47,400	26,400	1,400	Note 1
Jul-15-69	2.8	27,900	53,400	27,900	1,400	Note 1
Jul-16-69	2.8	20,900	66,000	18,500	1,900	Note 1
Jul-17-69	2.8	25,500	67,800	20,900	2,300	Note 1
Jul-18-69	2.6	21,700	63,000	17,400	1,800	Note 1
Jul-21-69	2.4	20,200	53,400	20,200	1,600	Note 1
Jul-22-69	2.5	21,000	56,200	18,900	900	Note 1
Jul-23-69	2.5	16,800	38,600	12,600	1,700	Note 1
Jul-24-69	2.5	37,800	56,600	21,000	3,000	Note 1
Jul-25-69	1.5	23,500	25,800	18,500	1,500	Note 1
Jul-28-69	1.5	30,700	33,100	23,200	1,200	Note 1
Jul-29-69	1.6	25,900	35,200	23,300	1,000	Note 1
Jul-30-69	1.5	28,300	29,500	27,000	1,200	Note 1
Jul-31-69	1.6	24,900	33,500	23,200	1,000	Note 1
Aug-01-69	1.5	22,200	33,800	19,700	800	Note 1
Aug-04-69	1.4	23,400	31,200	22,200	1,000	Note 1
Aug-05-69	1.6	30,500	37,300	28,000	800	Note 1
Aug-06-69	1.5	22,400	37,500	22,400	800	Note 1
Aug-07-69	1.4	21,000	34,400	21,000	700	Note 1
Aug-08-69	1.3	18,900	27,300	15,500	1,100	Note 1
Aug-11-69	1.7	28,500	40,800	25,700	1,100	Note 1
Aug-12-69	1.6	20,700	32,200	18,100	500	Note 1
Aug-13-69	1.8	44,700	25,300	26,700	1,000	Note 1

CONFIDENTIAL BUSINESS INFORMATION

Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Aug-14-69	1.9	30,700	31,300	30,700	2,600	Note 1
Aug-15-69	1.9	35,600	47,000	33,800	1,900	Note 1
Aug-18-69	1.6	24,500	38,500	23,100	500	Note 1
Aug-19-69	1.8	31,200	46,400	29,800	600	Note 1
Aug-20-69	1.8	32,500	39,300	31,200	900	Note 1
Aug-21-69	1.6	28,600	37,300	27,200	500	Note 1
Aug-22-69	1.4	24,600	34,200	17,600	700	Note 1
Aug-25-69	1.7	29,800	31,900	22,800	1,100	Note 1
Aug-26-69	1.4	29,300	27,600	28,000	1,000	Note 1
Aug-27-69	1.5	26,100	22,500	19,700	800	Note 1
Aug-28-69	1.1	18,900	21,800	17,000	200	Note 1
Aug-29-69	1.5	27,100	43,700	26,000	700	Note 1
Sep-03-69	1.5	24,600	30,400	22,100	700	Note 1
Sep-04-69	1.5	29,600	29,300	25,800	1,000	Note 1
Sep-05-69	1.6	25,900	37,700	19,400	800	Note 1
Sep-06-69	1.8	20,800	31,000	20,800	1,200	Note 1
Sep-08-69	1.5	25,900	16,000	21,000	800	Note 1
Sep-09-69	1.6	27,300	31,800	21,900	700	Note 1
Sep-10-69	1.4	25,700	29,700	25,700	500	Note 1
Sep-11-69	1.4	27,000	28,600	22,300	700	Note 1
Sep-12-69	1.3	27,900	28,400	21,300	700	Note 1
Sep-15-69	1.4	25,800	25,500	23,400	500	Note 1
Sep-16-69	1.5	28,200	35,000	25,900	300	Note 1
Sep-17-69	1.4	29,200	24,100	28,000	700	Note 1
Sep-18-69	1.4	28,000	45,000	28,200	300	Note 1
Sep-19-69	1.3	21,200	33,900	20,000	500	Note 1
Sep-22-69	1.6	27,200	33,400	23,300	300	Note 1
Sep-23-69	1.6	31,100	34,400	25,900	500	Note 1
Sep-24-69	1.4	20,800	26,400	19,600	400	Note 1
Sep-25-69	1.4	35,400	28,200	27,700	1,600	Note 1
Sep-26-69	1.6	34,800	40,800	32,300	1,000	Note 1
Sep-29-69	1.2	31,000	25,200	27,900	400	Note 1
Sep-30-69	1.4	32,700	21,800	31,600	200	Note 1
Oct-01-69	1.3	30,400	24,800	29,300	400	Note 1
Oct-02-69	1.4	31,000	25,100	28,400	500	Note 1
Oct-03-69	1.3	28,500	19,700	13,800	600	Note 1
Oct-06-69	1.3	30,000	22,700	26,700	700	Note 1
Oct-07-69	1.5	39,100	27,300	31,700	500	Note 1
Oct-08-69	1.3	34,700	29,500	32,400	1,100	Note 1
Oct-09-69	1.4	35,900	25,200	34,700	900	Note 1
Oct-10-69	1.5	50,000	42,400	40,000	300	Note 1
Oct-13-69	1.6	39,900	34,600	34,400	1,400	Note 1
Oct-14-69	1.2	28,900	28,200	26,800	600	Note 1
Oct-15-69	1.4	42,600	36,600	31,200	1,100	Note 1
Oct-16-69	1.2	39,900	31,800	33,600	1,400	Note 1
Oct-17-69	1.3	32,800	17,200	28,300	1,100	Note 1
Oct-20-69	1.5	34,900	20,000	32,600	500	Note 1
Oct-21-69	1.4	37,000	21,300	30,200	700	Note 1
Oct-22-69	1.5	36,100	38,400	34,700	700	Note 1
Oct-23-69	1.7	37,100	39,600	37,100	1,300	Note 1
Oct-24-69	1.5	37,700	42,400	34,000	1,200	Note 1
Oct-27-69	1.5	23,700	30,000	22,500	1,000	Note 1
Oct-28-69	1.3	33,200	37,600	21,400	600	Note 1

Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Oct-29-69	1.3			30,600	1,100	Note 1
Oct-30-69	1.1	29,900	48,200	28,100	1,500	Note 1
Oct-31-69	1.4	36,500	30,200	19,400	900	Note 1
Nov-03-69	1.5	43,500	33,900	33,900	500	Note 1
Nov-04-69	1.5	41,000	35,500	32,600	700	Note 1
Nov-05-69	1.4	29,800	31,000	27,500	400	Note 1
Nov-06-69	1.5	41,200	41,700	32,200	800	Note 1
Nov-07-69	1.3	34,200	37,100	31,100	700	Note 1
Nov-10-69	1.3	34,800	25,900	24,600	900	Note 1
Nov-11-69	1.5	30,800	37,000	27,000	1,000	Note 1
Nov-12-69	1.5	32,600	31,600	31,200	1,000	Note 1
Nov-13-69	1.4	53,200	30,400	46,000	1,200	Note 1
Nov-14-69	1.3	60,200	38,200	22,000	1,500	Note 1
Nov-17-69	1.4	32,000	33,000	32,000	1,200	Note 1
Nov-18-69	1.5	39,200	26,400	32,800	2,300	Note 1
Nov-19-69	1.5	40,500	35,400	38,000	2,000	Note 1
Nov-20-69	1.8	31,700	45,000	36,200	900	Note 1
Nov-21-69	1.3	27,000	22,800	27,000	450	Note 1
Nov-24-69	1.3	24,500	24,500	24,500	1,900	Note 1
Nov-25-69	1.7	33,900	46,900	25,300	1,100	Note 1
Nov-26-69	1.5	40,400	54,300	34,200	500	Note 1
Nov-27-69	1.4	39,400	54,400	38,100	900	Note 1
Nov-28-69	1.2	30,600	30,200	30,600	700	Note 1
Dec-01-69	1.4	35,300	28,900	27,000	700	Note 1
Dec-02-69	1.4	37,600	29,300	36,400	700	Note 1
Dec-03-69	1.4	26,900	33,100	25,700	300	Note 1
Dec-04-69	1.4	34,500	31,700	32,300	200	Note 1
Dec-05-69	1.4	40,600	33,900	37,100	700	Note 1
Dec-08-69	1.5	37,600	32,000	32,700	700	Note 1
Dec-09-69	1.5	34,900	27,700	34,900	300	Note 1
Dec-10-69	1.5	36,800	29,000	35,400	500	Note 1
Dec-11-69	1.6	41,200	37,000	35,900	1,100	Note 1
Dec-12-69	1.6	31,600	38,400	27,400	500	Note 1
Dec-15-69	1.5	44,900	27,200	31,600	500	Note 1
Dec-16-69	1.4	47,500	28,900	32,600	400	Note 1
Dec-17-69	1.3	39,400	30,400	34,900	700	Note 1
Dec-18-69				6,100	100	Note 1
Dec-19-69	1.7			27,500	300	Note 1
Dec-22-69	1.5			32,600		Note 1
Dec-23-69	1.2			30,500		Note 1
Dec-29-69	3.5	35,300	51,500	36,700	500	Note 1
Dec-30-69	1.3	34,000			100	Note 1
Dec-31-69					30	Note 1
Jan-01-70	1.3	19,000	31,600	19,000	400	Note 1
Jan 70	1.3				433	SA029359; SA029360; SA029361
Jan-02-70	1.2	41,400	48,105	36,300	1,000	Note 1
Jan-12-70	1.3	29,400	39,500	29,400	400	Note 1
Jan-13-70	1.1	33,900	30,100	31,000	600	Note 1
Jan-14-70	1.4	30,700	31,200	30,700	700	Note 1
Jan-15-70	0.9	17,800	20,100	15,400	300	Note 1
Jan-16-70	1.4	43,200	33,600	35,300	500	Note 1
Jan-19-70	1.9	32,400	30,000	28,000	300	Note 1
Jan-20-70	1.5	30,100	33,300	33,400	500	Note 1

Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Jan-21-70	1.5	33,300	34,400	32,400	500	Note 1
Jan-22-70	1.4	33,100	29,200	31,900	200	Note 1
Jan-23-70	1.3	33,400	31,900	30,100	400	Note 1
Jan-26-70		35,000	30,500		600	Note 1
Jan-27-70		30,000	32,000	38,000	500	Note 1
Jan-28-70	1.4	31,400	40,700	20,200	700	Note 1
Jan-29-70	1.4	30,200	44,800	34,900	700	Note 1
Jan-30-70	1.4	35,000	34,400	32,700	500	Note 1
Feb 70	1.5				600	SA029359; SA029360; SA029361, SA011275
Feb-02-70	1.4	27,100	33,200	26,000	700	Note 1
Feb-03-70	1.5	16,000	36,500	32,400	900	Note 1
Feb-04-70	1.4	15,600	36,200	32,600	400	Note 1
Feb-05-70	1.5	15,000	34,000	26,700	1,500	Note 1
Feb-06-70	1.4	15,800	34,500	26,500	500	Note 1
Feb-09-70		33,800			300	Note 1
Feb-10-70	1.3	33,600	26,300	33,600	1,100	Note 1
Feb-11-70	1.5	38,900	37,000	38,900	500	Note 1
Feb-12-70	1.4	28,000	31,300	28,000	400	Note 1
Feb-13-70	1.7	30,900	42,000	34,100	600	Note 1
Feb-16-70	1.5	31,400	39,900	30,000	300	Note 1
Feb-17-70	1.7	33,200	34,600	33,200	500	Note 1
Feb-18-70	1.6	33,200	39,000	31,800	500	Note 1
Feb-19-70	1.7	31,200	38,500	28,300	300	Note 1
Feb-20-70	1.7	33,000	37,100	30,300	300	Note 1
Feb-23-70	1.4	38,500	21,200	32,600	300	Note 1
Feb-24-70	1.3	30,000	23,500	28,000	400	Note 1
Feb-25-70	1.3	33,600	27,200	31,300	300	Note 1
Feb-26-70	1.4	31,700	26,000	23,900	600	Note 1
Feb-27-70	1.3	32,800	31,500	29,400	900	Note 1
Mar 70	1.4				638	SA029359; SA029360; SA029361
Mar-02-70	1.2					Note 1
Mar-03-70	1.4	29,600	35,600	25,300	900	Note 1
Mar-04-70	0.6					Note 1
Mar-05-70	1.2	26,100	21,100	22,800	800	Note 1
Mar-06-70	1.4					Note 1
Mar-09-70	1.3	30,000	27,100	27,200	300	Note 1
Mar-10-70	1.5					Note 1
Mar-11-70	1.0	55,100	45,200	47,000	1,500	Note 1
Mar-12-70	1.1					Note 1
Mar-16-70	1.5					Note 1
Mar-17-70	2.0			47,000	420	Note 1
Mar-18-70	1.6					Note 1
Mar-19-70	1.6	36,700	33,700	33,200	300	Note 1
Mar-20-70	1.5					Note 1
Mar-23-70	1.5					Note 1
Mar-24-70	1.2	20,400	23,600	18,200		Note 1
Mar-25-70	1.9					Note 1
Mar-26-70	1.4	25,500	27,300	22,200	300	Note 1
Mar-27-70	1.6					Note 1
Apr 70	1.5				810	SA029359; SA029360; SA029361
Apr-06-70	1.7					Note 1
Apr-07-70	1.5	45,000	35,300	42,500	800	Note 1
Apr-08-70	1.7					Note 1

CONFIDENTIAL BUSINESS INFORMATION

Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Apr-09-70	1.5	30,000	48,300	20,000	1,200	Note 1
Apr-10-70	1.4					Note 1
Apr-13-70	1.4					Note 1
Apr-14-70	1.7	38,800	39,600	19,900	600	Note 1
Apr-15-70	1.4					Note 1
Apr-16-70	1.6	30,800	32,200	45,300	2,400	Note 1
Apr-17-70	1.3					Note 1
Apr-20-70	1.6					Note 1
Apr-21-70	1.4			33,400	400	Note 1
Apr-22-70	1.6					Note 1
Apr-23-70	1.5			41,300	800	Note 1
Apr-24-70	1.5					Note 1
Apr-27-70	1.6					Note 1
Apr-28-70	1.7			39,700	500	Note 1
Apr-29-70	1.8					Note 1
Apr-30-70	1.8			40,800	1,000	Note 1
May-01-70	1.6					Note 1
May 70	1.7				558	SA029359; SA029360; SA029361
May-04-70	1.6					Note 1
May-05-70	1.9			42,300	150	Note 1
May-06-70	1.7					Note 1
May-07-70	1.9			43,900	310	Note 1
May-08-70	1.7					Note 1
May-11-70	1.5					Note 1
May-12-70	1.7			39,600	900	Note 1
May-13-70	1.8					Note 1
May-14-70	1.8			50,500	300	Note 1
May-15-70	2.0					Note 1
May-18-70	1.9					Note 1
May-19-70	1.5			33,000	500	Note 1
May-20-70	1.5					Note 1
May-21-70	1.7			42,700	800	Note 1
May-22-70	1.6					Note 1
May-25-70	1.5					Note 1
May-26-70	1.6	55,700	35,000	39,700	500	Note 1
May-27-70	1.5					Note 1
May-28-70	1.6	46,000	35,600	31,500	700	Note 1
May-29-70	1.6					Note 1
Jun 70	1.7				638	SA029359; SA029360; SA029361, SA011309
Jun-02-70	1.7	35,600	43,400	11,000	800	Note 1
Jun-03-70	1.9					Note 1
Jun-04-70	1.6	43,800	33,900	17,300	800	Note 1
Jun-05-70	1.6					Note 1
Jun-08-70	1.7					Note 1
Jun-09-70	1.7			53,000	300	Note 1
Jun-10-70	1.8					Note 1
Jun-11-70	1.9			45,800	700	Note 1
Jun-12-70	2.4					Note 1
Jun-15-70	1.6					Note 1
Jun-16-70	1.9			43,800	700	Note 1
Jun-17-70	1.6					Note 1
Jun-18-70	1.9			33,500	600	Note 1
Jun-19-70	1.8					Note 1

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Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Jun-22-70	1.7					Note 1
Jun-23-70	2.0			42,000	2,700	Note 1
Jun-24-70	1.8					Note 1
Jun-25-70	1.7	64,800	52,400	42,300	500	Note 1
Jun-26-70	1.4					Note 1
Jul 70	1.7				888	SA029359; SA029360; SA029361
Jul-06-70	1.2					Note 1
Jul-07-70	1.7			44,700	700	Note 1
Jul-08-70	1.5					Note 1
Jul-09-70	1.6			32,700	800	Note 1
Jul-10-70	1.6					Note 1
Jul-13-70	1.7					Note 1
Jul-14-70	1.8			46,700	600	Note 1
Jul-15-70	1.8					Note 1
Jul-16-70	1.7	54,700	53,400	43,700	800	Note 1
Jul-17-70	1.8					Note 1
Jul-20-70	1.9					Note 1
Jul-21-70	1.9			57,000	700	Note 1
Jul-22-70	2.0					Note 1
Jul-23-70	2.0			51,900	300	Note 1
Jul-24-70	1.9					Note 1
Jul-27-70	1.9					Note 1
Jul-28-70	1.9			62,300	700	Note 1
Jul-29-70	1.8					Note 1
Jul-30-70	1.6			47,200	800	Note 1
Jul-31-70	1.5					Note 1
Aug 70	1.8				988	SA029359; SA029360; SA029361
Aug-18-70	2.1	58,200	33,300	50,300	700	Note 1
Aug-19-70	1.3					Note 1
Aug-20-70	2.1	49,400	43,000	49,400	900	Note 1
Aug-21-70	1.9					Note 1
Aug-25-70	1.2			67,000	600	Note 1
Aug-26-70	1.9					Note 1
Aug-27-70	1.9			48,000	150	Note 1
Aug-28-70	1.7					Note 1
Aug-31-70	1.7					Note 1
Sep-01-70	1.5			30,300	500	Note 1
Sep 70	1.4				880	SA029359; SA029360; SA029361
Sep-02-70	1.8					Note 1
Sep-03-70	1.8			54,500	1,500	Note 1
Sep-04-70	1.1					Note 1
Sep-14-70	1.7					Note 1
Sep-15-70	1.5	45,200	41,800	45,700	1,700	Note 1
Sep-16-70	1.6					Note 1
Sep-17-70	1.8	49,400	49,200	43,700	900	Note 1
Sep-18-70	1.9					Note 1
Sep-21-70	1.9					Note 1
Sep-22-70	2.0	62,600	56,000	30,000	1,000	Note 1
Sep-23-70	2.0					Note 1
Sep-24-70	2.0	63,200	56,200	59,400	1,600	Note 1
Sep-25-70	2.0					Note 1
Sep-28-70	1.5					Note 1
Sep-29-70	1.7	70,200	46,200	55,200	800	Note 1

Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Sep-30-70	1.6					Note 1
Oct-01-70	1.5	60,800	45,000	56,700	1,000	Note 1
Oct 70	1.6				838	SA029359; SA029360; SA029361
Oct-02-70	1.5					Note 1
Oct-12-70	1.7					Note 1
Oct-13-70	1.8	52,400	42,000	52,400	600	Note 1
Oct-14-70	2.1					Note 1
Oct-15-70	1.8	57,900	42,600	46,400	900	Note 1
Oct-16-70	1.2					Note 1
Oct-19-70	1.8					Note 1
Oct-20-70	1.8	50,400	44,700	42,200	500	Note 1
Oct-21-70	1.8					Note 1
Oct-22-70	1.5	46,700	47,400	37,200	900	Note 1
Oct-23-70	0.5					Note 1
Oct-26-70	1.6					Note 1
Oct-27-70	1.8	59,700	47,100	38,800	900	Note 1
Oct-28-70	1.7					Note 1
Oct-29-70	1.8	60,500	52,500	56,000	900	Note 1
Oct-30-70	2.0					Note 1
Nov 70	1.6				890	SA029359; SA029360; SA029361
Nov-02-70	1.7					Note 1
Nov-03-70	1.6	43,400	43,300	41,800	1,100	Note 1
Nov-04-70	1.9					Note 1
Nov-05-70	1.4	72,000	39,900	54,200	700	Note 1
Nov-06-70	1.8					Note 1
Nov-09-70	1.7					Note 1
Nov-10-70	1.5	54,800	51,000	52,200	500	Note 1
Nov-11-70	1.6					Note 1
Nov-12-70	1.3	47,800	15,100	12,800	425	Note 1
Nov-13-70	1.5					Note 1
Nov-16-70	1.4					Note 1
Nov-17-70	1.5	46,200	58,700	33,400	800	Note 1
Nov-18-70	1.8					Note 1
Nov-19-70	1.5	43,400	49,300	19,900	1,200	Note 1
Nov-20-70	1.7					Note 1
Nov-23-70	1.7					Note 1
Nov-24-70	1.7	45,700	48,000	35,800	600	Note 1
Nov-25-70	1.6					Note 1
Nov-30-70	1.8					Note 1
Dec-01-70	0.7	14,800	15,500	10,000	500	Note 1
Dec 70	1.5				820	SA029359; SA029360; SA029361
Dec-02-70	1.4					Note 1
Dec-03-70	1.6	50,300	44,700	46,200	1,300	Note 1
Dec-04-70	1.9					Note 1
Dec-07-70	1.5					Note 1
Dec-08-70	1.4	57,400	54,000	56,200	1,000	Note 1
Dec-09-70	1.6					Note 1
Dec-10-70		66,800	59,700	54,700	1,200	Note 1
Dec-11-70	1.7					Note 1
Dec-14-70	1.2					Note 1
Dec-15-70	1.4	54,000	49,800	52,800	700	Note 1
Dec-16-70	1.5					Note 1
Dec-17-70	1.4	62,000	47,000	51,800	1,200	Note 1

Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Dec-18-70	1.4					Note 1
Dec-21-70	1.5					Note 1
Dec-22-70	1.1	62,700	42,800	57,000	600	Note 1
Dec-23-70	1.6					Note 1
Dec-28-70	1.2					Note 1
Dec-29-70	1.6	61,800	50,400	37,200	800	Note 1
Dec-30-70	1.7					Note 1
Jan 71	1.0				675	SA029359, SA029360
Jan-11-71	0.6					Note 1
Jan-12-71		44,400	48,600	33,800	400	Note 1
Jan-13-71	1.0					Note 1
Jan-14-71	1.0			44,800	800	Note 1
Jan-15-71	1.1					Note 1
Jan-18-71	0.8					Note 1
Jan-19-71	0.9	31,900	39,700	27,900	1,000	Note 1
Jan-20-71	1.0					Note 1
Jan-21-71	0.8	28,700	29,300	15,700	600	Note 1
Jan-22-71	1.3					Note 1
Jan-25-71	0.8					Note 1
Jan-26-71	0.8	49,400	39,700	25,100	1,000	Note 1
Jan-27-71	0.8					Note 1
Jan-28-71	0.9	20,900	35,100	17,000	1,200	Note 1
Jan-29-71	0.6					Note 1
Feb-01-71	1.4					Note 1
Feb 71	0.8				775	SA029359; SA029360
Feb-02-71	0.9	19,800	30,900	19,800	300	Note 1
Feb-03-71	0.9					Note 1
Feb-04-71	1.0	33,600	33,700	32,500	500	Note 1
Feb-05-71	0.9					Note 1
Feb-08-71	0.6					Note 1
Feb-09-71	0.7	48,000	21,700	34,800	900	Note 1
Feb-10-71	0.6					Note 1
Feb-11-71	0.7	45,100	24,300	28,300	1,300	Note 1
Feb-12-71	0.5					Note 1
Feb-16-71	0.7	43,100	19,000	34,000	400	Note 1
Feb-17-71	0.7					Note 1
Feb-18-71	1.0	29,300	33,400	19,400	600	Note 1
Feb-19-71	0.9					Note 1
Feb-22-71	1.2					Note 1
Feb-23-71	0.9	21,300	27,600	18,400	500	Note 1
Feb-24-71	0.9					Note 1
Feb-25-71	0.9	28,600	31,800	21,400	300	Note 1
Feb-26-71	1.0					Note 1
Mar-01-71	1.0					Note 1
Mar 71	1.0				480	SA029359, SA029360
Mar-02-71	0.8			27,700	400	Note 1
Mar-03-71	0.8					Note 1
Mar-04-71	1.0			40,500	800	Note 1
Mar-05-71	0.9					Note 1
Mar-08-71	0.8					Note 1
Mar-09-71	0.9	26,900	20,600	18,700	600	Note 1
Mar-10-71	0.9					Note 1
Mar-11-71	0.8	25,900	22,200	18,900	400	Note 1

Appendix 14a-A
Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Mar-12-71	1.1					Note 1
Mar-15-71	1 1					Note 1
Mar-16-71	0.8			30,700	300	Note 1
Mar-17-71	0.7					Note 1
Mar-18-71	1.1			18,400	500	Note 1
Mar-19-71	1.3					Note 1
Mar-22-71	1.3					Note 1
Mar-23-71	1.1	35,800	29,700	27,100	600	Note 1
Mar-24-71	1.1					Note 1
Mar-25-71	1.2	34,000	26,300	21,600	400	Note 1
Mar-26-71	1.3					Note 1
Apr 71	1.3				650	SA029359, SA029360
Apr-05-71	1.1					Note 1
Apr-06-71	1.1	19,300	39,700	14,700	600	Note 1
Apr-07-71	1.3					Note 1
Apr-08-71	0.8	18,200	38,700	9,100	300	Note 1
Apr-09-71	0.8					Note 1
Apr-26-71	0.6					Note 1
Apr-27-71	0.6	14,500	18,200	11,600	300	Note 1
Apr-28-71	0.7					Note 1
Apr-29-71		10,700	29,300	6,900	200	Note 1
Apr-30-71	0.6					Note 1
May 71	0.9				1,212	SA029359, SA029360, SA027743 - SA027745, SA011299
Jun 71	1.4				1,160	SA029359, SA029360, SA027743 - SA027745
Jun-14-71	1.8					Note 1
Jun-15-71	1.7	31,600	45,600	27,200	600	Note 1
Jun-16-71	1.6					Note 1
Jun-17-71	2.0	40,400	52,400	33,600	1,000	Note 1
Jun-18-71	1.7					Note 1
Jul 71	1.2				1,075	SA029359, SA029360, SA027743 - SA027745
Jul-12-71	1.0					Note 1
Jul-13-71	0.1					Note 1
Jul-14-71	0.0					Note 1
Jul-15-71	0.7	18,100	19,500	16,600	400	Note 1
Jul-16-71	0.1					Note 1
Jul-19-71	1.0					Note 1
Jul-20-71	0.9	17,200	15,000			Note 1
Jul-21-71	1.3					Note 1
Jul-22-71	1.2	23,000	27,200	16,800	2,000	Note 1
Jul-23-71	1.3					Note 1
Jul-28-71	1.6					Note 1
Jul-29-71	1.2		29,300	23,000	600	Note 1
Jul-30-71	1.3					Note 1
Aug 71	1.7				2,000	SA029359, SA029360; SA027743 - SA027745
Aug-02-71	0.7					Note 1
Aug-02-71	2.0					Note 1
Aug-03-71	1.4	76,000	38,400	27,700	1,100	Note 1
Aug-04-71	2.2	41,800	48,300	40,000	9,200	Note 1
Aug-05-71	1.8					Note 1
Aug-06-71	1.7					Note 1
Aug-07-71	1.3	32,800	32,000	21,500	900	Note 1
Aug-08-71	1.9	32,200	35,600	25,600	2,000	Note 1

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Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Aug-09-71	1.4					Note 1
Aug-10-71	1.4					Note 1
Aug-11-71				44,000		Note 1
Aug-13-71	2.0	66,800	52,800	57,000	1,600	Note 1
Aug-14-71	1.5					Note 1
Aug-15-71	1.8	41,600	49,300	35,400	800	Note 1
Aug-16-71	1.9					Note 1
Aug-17-71	1.9	39,300	43,700	31,200	1,600	Note 1
Aug-18-71	1.9					Note 1
Aug-23-71	1.9					Note 1
Aug-24-71	1.8	63,100	46,600	52,700	2,400	Note 1
Aug-25-71	1.9					Note 1
Aug-26-71	1.7	44,600	43,700	34,700	1,100	Note 1
Aug-27-71	1.7					Note 1
Aug-30-71	1.3					Note 1
Aug-31-71	1.4			28,800	700	Note 1
Sep-01-71	1.7					Note 1
Sep 71	1.6				1,430	SA029359; SA029360; SA027743 - SA027745
Sep-02-71	1.8	46,200	53,500	39,800	900	Note 1
Sep-03-71	1.9					Note 1
Sep-09-71	2.1			56,600	1,700	Note 1
Sep-10-71	2.1					Note 1
Sep-13-71	1.2					Note 1
Sep-14-71	1.4	33,200	31,600	42,800	2,400	Note 1
Sep-15-71	1.4					Note 1
Sep-16-71	1.4	32,600	22,800	60,800	1,500	Note 1
Sep-17-71	1.4					Note 1
Sep-20-71	1.5					Note 1
Sep-21-71	0.9	17,400	19,200	19,000	500	Note 1
Sep-22-71	1.3					Note 1
Sep-23-71	1.4	20,600	24,600	35,000	700	Note 1
Sep-24-71	1.3					Note 1
Sep-27-71	1.7					Note 1
Sep-28-71	1.8	39,200	38,000	25,800	900	Note 1
Sep-29-71	1.6					Note 1
Sep-30-71	1.9	20,500	54,500	16,800	900	Note 1
Oct-01-71	1.4					Note 1
Oct 71	1.4				925	SA029359; SA029360; SA027743 - SA027745
Oct-04-71	1.5					Note 1
Oct-05-71	1.0	27,000	29,500	14,200	1,700	Note 1
Oct-06-71	1.2					Note 1
Oct-07-71	1.2	26,900	23,100	16,000	500	Note 1
Oct-08-71	1.1					Note 1
Oct-11-71	1.5					Note 1
Oct-12-71	1.5	30,000	38,400	25,000	1,700	Note 1
Oct-13-71	1.5					Note 1
Oct-14-71	1.5	40,000	36,700	20,000	800	Note 1
Oct-15-71	1.5					Note 1
Oct-18-71	1.3					Note 1
Oct-19-71	1.7	37,700	40,000	23,700	600	Note 1
Oct-20-71	1.6					Note 1
Oct-21-71	1.1	17,800	24,200	17,800	400	Note 1
Oct-22-71	1.0					Note 1

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Appendix 14a-A
Allied Bryant Mill Clarifier
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Oct-25-71	1 8					Note 1
Oct-26-71	1 5	37,500	48,200	31,300	800	Note 1
Oct-27-71	1 4					Note 1
Oct-28-71	1 4	21,900	45,200	17,200	1,000	Note 1
Oct-29-71	1 5					Note 1
Nov 71	1 5				1,238	SA029359 SA029360 SA027743 - SA027745
Nov-15-71	1 7					Note 1
Nov-16-71	1 4	44,100	34,400	32,100	1,000	Note 1
Nov-17-71	0 9					Note 1
Nov-18-71	1 8	40,700	47,100	34,500	2,200	Note 1
Nov-19-71	2 4					Note 1
Nov-22-71	1 3					Note 1
Nov-23-71	1 6	29,400	48,100	22,700	1,100	Note 1
Nov-24-71	1 1					Note 1
Nov-25-71	1 0	26,700	39,300	15,500	1,000	Note 1
Nov-26-71	0 5					Note 1
Nov-29-71	1 0					Note 1
Nov-30-71	0 6	12,200	13,200	8,000	400	Note 1
Dec-01-71	1 0					Note 1
Dec 71	0 9				410	SA029359, SA029360, SA027743 - SA027745
Dec-02-71	1 4	19,100	2,100	16,800	500	Note 1
Dec-03-71	1 3					Note 1
Dec-13-71	1 3					Note 1
Dec-14-71	1 2	7,100	14,700	6,100	400	Note 1
Dec-15-71	0 9					Note 1
Dec-16-71	0 7	4,900	11,400	4,300		Note 1
Dec-17-71	0 8					Note 1
Dec-20-71	0 2					Note 1
Dec-21-71		5,900	4,700	5,900	200	Note 1
Dec-22-71	0 2					Note 1
Dec-23-71		2,500	700	2,100	100	Note 1
Jan 72					225	SA029359, SA029360
Feb 72					34	SA029359, SA029360
Mar 72	0 6				48	SA029359, SA029360
Apr 72	0 7				30	SA029359, SA029360
May 72	0 6				250	SA029359, SA029360
Jun 72	0 7				187	SA029359, SA029360
Jul 72	0 9				266	SA029359, SA029360
Aug 72	1 4				320	SA029359, SA029360
Sep 72	1 4				412	SA029359, SA029360
Oct 72	2 1				435	SA029359, SA029360
Nov 72	1 1				240	SA029359, SA029360
Dec 72	1 1				137	SA029359, SA029360
Jan 73	0 8				400	SA029359, SA029360
Feb 73	0 9				212	SA029359, SA029360
Mar 73	0 9				215	SA029359, SA029360
Mar-05-74	0.6		9,335		190	066037
Mar-07-74	0.9		11,995		190	066037
Mar-12-74	0.8		11,595		110	066037
Mar-19-74	0.7		8,035		90	066037
Mar-26-74	0.8		15,085		135	066037
Mar-28-74	0.9		8,295		65	066037
Apr-02-74	0.8		7,055		55	066037

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Allied Bryant Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	DS	SS	DS	SS	
Apr-04-74	**0.9**		**11,765**		**45**	**066037**
Apr-09-74	**1.2**		**8,495**		**75**	**066037**
Apr-11-74	**0.9**		**10,005**		**135**	**066037**
Apr-16-74	**0.8**		**5,935**		**75**	**066037**
Apr-18-74	**0.7**		**6,235**		**85**	**066037**
Apr-23-74	**0.9**		**11,675**		**245**	**066037**
Apr-25-74	**0.8**		**6,055**		**155**	**066037**
Jul-18-77	2.3			11,224	1,335	SA 033502 (WRC)
Jan-28-78	2.3					SA033493 - SA033498
Jan-29-78	1.5					SA033493 - SA033498
Jan-30-78	3.2					SA033493 - SA033498
Jan-31-78	3.9					SA033493 - SA033498
Feb-27-78	4.1					MDNR003986 - MDNR003989
Feb-28-78	3.0					MDNR003986 - MDNR003989
Mar-27-79	1.9					KA04800841-KA04800846
Mar-28-79	1.9					KA04800841-KA04800846
May-14-79					197	SA034338 - SA034352
May-31-79					69	SA034338 - SA034352
Jun-24-80	2.8			15,009	1,062	WRC (Appendix 8a-1, no Bates number)
Jan-26-81	1.5			8,172	626	SA 034341 - 52 (WRC)
Mar-01-82	1.5			9,041	352	SA 033485-92 (WRC)
Oct-25-82	1.8			8,916	523	SA 033485-92 (WRC)

Note 1 = Allied Data found in Bates # SA034834 to SA035050, SA035107 to SA035474, SA035584, SA035586, SA035615

Blanks indicate no monitoring data.

SS = Suspended solids; DS = Dissolved solids, BOD = Biolgical Oxygen Demand.

Loads (lb/day) converted from PPM or mg/L using: Concentration (ppm or mg/L) x Flow (MGD) x 8.33.

WRC samples listed for 6/13/67 and 6/14/67 (SA 032024) in prior submittal were in error,
they are the same as those for 5/13/67 and 5/14/67.

Shaded cell with bold text indicates November 2001 revision.

CONFIDENTIAL BUSINESS INFORMATION

APPENDIX 14A-B

Appendix 14a-B
Allied King Mill Clarifier
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
1955	**6.50**				**33,653**	R	**Kendrick Exhibit 561**
Jan 56	6.54				34,970	R	**KA04600382**
Jan-10-56	5.51				28,965	R	**063792 - 063796 (WRC)**
Jan-11-56	6.31		**167,700**		24,738	R	**063792 - 063796 (WRC)**
Jan-12-56	6 47		**113,222**		41,564	R	**063792 - 063796 (WRC)**
Jan-13-56	6.70		**94,863**		44,136	R	**063792 - 063796 (WRC)**
Jan-14-56	6.56		**65,571**		40,969	R	**063792 - 063796 (WRC)**
Jan-16-56	7.68		**162,453**		29,456	R	**063792 - 063796 (WRC)**
Oct 56	6.13		58,300		18,050		KA050001173
Jan-23-57	7.74	90,350	69,700				Note 1
Jan-24-57	8.44	91,600	90,000				Note 1
Jan-25-57	8.37	104,700	87,700				Note 1
Jan-29-57	8.77	124,500	99,500				Note 1
Jan-30-57	8.77	110,000	99,500				Note 1
Jan-31-57	8.68	137,500	95,600				Note 1
Feb-01-57	8.60	115,500	80,700				Note 1
Feb-04-57	8.52	113,700	93,700				Note 1
Feb-05-57	8.44	165,000	91,400				Note 1
Feb-07-57	7.98		102,500				Note 1
Feb-08-57	7.60	178,000	86,000				Note 1
Feb-11-57	8.11	115,000	100,000				Note 1
Feb-12-57	8.11	174,700	97,300				Note 1
Feb-13-57	8.11	178,000	81,100				Note 1
Feb-14-57	8.11	188,080	108,800				Note 1
Feb-15-57	8.11	101,500	112,500				Note 1
Feb-18-57	8.11	101,500	86,600		26,400		Note 1
Feb-19-57	8.09	108,000	97,000		34,400		Note 1
Feb-20-57	7.21	102,300	72,070		19,800		Note 1
Feb-21-57	8.37	115,000	95,400		21,600		Note 1
Feb-22-57	7.87				38,100		Note 1
Feb-25-57	8.77	117,000	83,400		38,000		Note 1
Feb-26-57	8.50	127,000	95,000		34,000		Note 1
Feb-27-57	8.36	118,400	96,800		29,850		Note 1
Feb-28-57	8.44	105,500	98,000		58,400		Note 1
Mar-01-57	8.02						Note 1
Mar-12-57	7.18	95,800	89,300		26,350		Note 1
Mar-13-57	7.27	106,000	92,000		23,050		Note 1
Mar-14-57	7.19	93,000			36,000		Note 1
Mar-15-57	7.30	115,500	125,300		38,400		Note 1
Mar-16-57	7.83						Note 1
Mar-25-57			116,000		29,200		Note 1
Mar-26-57	7.01	101,000	107,300		25,400		Note 1
Mar-27-57	6.92	98,100	100,000		27,600		Note 1
Mar-28-57	7.18	77,850	76,800		18,600		Note 1
Mar-29-57	7.44	74,350					Note 1
May-57	**8.03**		**137,100**		**43,885**	R	**KA 04600382 (WRC)**
May-06-57	8.04	88,390			45,700		Note 1
May-07-57	8.93	78,100	92,200		36,400		Note 1
May-08-57	8.93	81,900	114,500		37,250		Note 1
May-09-57	7.80	87,800	85,700		31,200		Note 1
May-10-57	6.88	80,400			30,950		Note 1
May-11-57	6 40	69,300			22,400		Note 1

Appendix 14a-B
Allied King Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
May-13-57	6.82	73,800	87,500		27,250		Note 1
May-14-57	7.37	92,000			36,800		Note 1
May-15-57	6.31	89,500	116,500		22,100		Note 1
May-16-57	5.73	62,200	84,000		17,200		Note 1
May-17-57	5.65	54,200	79,200		13,200		Note 1
May-18-57	6.58		91,800				Note 1
May-20-57	7.53	100,500	98,600		17,600		Note 1
May-21-57	7.10	91,800	73,400		16,600		Note 1
May-24-57	7.39						Note 1
May-25-57	6.68						Note 1
May-27-57	8.20	75,200	97,100		29,400		Note 1
May-28-57	7.85	84,700	95,400		20,900		Note 1
May-29-57	7.42	92,700	64,300		33,400		Note 1
May-30-57	6.32	73,700	85,300		34,800		Note 1
May-31-57	6.16	74,400	91,500		40,000		Note 1
Jun-01-57	6.50						Note 1
Jun-10-57	8.45	82,470	122,300		14,000		Note 1
Jun-11-57	7.71	96,200	126,000		40,400		Note 1
Jun-12-57	7.55		134,000		28,950		Note 1
Jun-13-57	7.46		98,400		28,000		Note 1
Jun-14-57	7.95						Note 1
Jul-08-57	4.48						Note 1
Jul-09-57	7.98	86,500	137,000		45,300		Note 1
Jul-10-57	7.85	68,700	77,800		28,800		Note 1
Jul-11-57	8.14	91,500	99,700		37,800		Note 1
Jul-12-57	7.85	78,510	133,000		45,800		Note 1
Jul-13-57	7.71	83,600	103,500		29,500		Note 1
Nov '57-Jan'58	**7.15**		**113,670**		**36,750**	R	**KA04600382**
Dec-31-57	7.46						Note 1
Jan-01-58	7.46						Note 1
Jan-02-58	7.12	113,000	100,200		13,680		Note 1
Jan-03-58	7.00	81,700	74,700		29,700		Note 1
Jan-04-58	7.85						Note 1
Jan-06-58	7.39	91,600	96,100		30,100		Note 1
Jan-07-58	7.19	104,800	115,100				Note 1
Jan-08-58	6.55	107,900	109,000		31,750		Note 1
Jan-09-58	6.39	92,700	95,600				Note 1
Jan-10-58					30,350		Note 1
Jan-13-58	6.84	79,700	70,750		20,500		Note 1
Jan-14-58	7.00	105,000	109,700		15,180		Note 1
Jan-15-58	6.76	93,000	96,000		19,170		Note 1
Jan-16-58	6.76	62,000	111,500		28,150		Note 1
Jan-17-58	7.23	99,500	125,500		26,500		Note 1
Jan-18-58	7.24	102,700	100,000		18,700		Note 1
Jan-20-58	4.96	68,200	61,200		12,400		Note 1
Jan-21-58	7.87	105,000	114,100		31,500		Note 1
Jan-22-58	7.63	108,000	115,100		39,400		Note 1
Jan-23-58	7.47	106,000	112,100		44,800		Note 1
Jan-24-58	7.15	104,300	131,200		45,300		Note 1
Jan-25-58	7.07	88,400	123,500		43,600		Note 1
Jan-27-58	8.02	107,000	119,000		25,450		Note 1
Jan-28-58		109,300	121,300				Note 1

CONFIDENTIAL BUSINESS INFORMATION

Appendix 14a-B
Allied King Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Jan-29-58		118,800	113,700				Note 1
Jan-30-58		115,700	125,000				Note 1
Jan-31-58		125,000	146,200				Note 1
Feb-01-58	6.38	103,800	113,000				Note 1
Feb-03-58	7.79	97,300	112,800				Note 1
Feb-04-58	7.71	135,000	138,900		43,600		Note 1
Feb-05-58	7.71	118,900			46,800		Note 1
Feb-06-58	7.07	112,000	100,700				Note 1
Feb-07-58	7.71	128,500	88,000				Note 1
Feb-08-58	7.39						Note 1
Feb-25-58		99,200	74,100				Note 1
Feb-26-58	7.24	102,500	83,100		15,680		Note 1
Feb-27-58	6.92	109,500			17,310		Note 1
Feb-28-58	7.07	97,400	102,000		25,350		Note 1
Mar-01-58	7.07	118,000			13,550		Note 1
Mar-03-58	6.67	90,300	81,800		19,170		Note 1
Mar-04-58	6.62	110,500	101,000		30,400		Note 1
Mar-05-58	6.54	109,000	84,900		21,250		Note 1
Mar-06-58	7.15	110,300	79,750		23,250		Note 1
Mar-07-58	7.15						Note 1
May-14-58	6.23	91,000	85,800		11,450		Note 1
May-15-58	6.03	60,340	65,800		17,100		Note 1
May-16-58	5.80	82,300	72,000		21,300		Note 1
May-17-58	5.65				16,950		Note 1
May-19-58	6.36	82,200	76,800		18,550		Note 1
May-20-58	5.94	92,600	82,600		14,350		Note 1
May-21-58	5.94	91,600	78,400		22,800		Note 1
May-22-58	5.65	82,300	71,500		16,000		Note 1
May-23-58	5.65	70,500	67,600		22,100		Note 1
May-24-58	5.73	88,400			**18,150**	R	Note 1
May-26-58	**6.26**	75,600	86,000		24,000	R	Note 1
May-27-58	**6.23**	83,200	85,200		37,400	R	Note 1
May-28-58	**6.02**	70,200			60,180	R	Note 1
May-29-58	**5.80**	99,200	77,400		37,200	R	Note 1
Jun-02-58	6.31	86,600	77,700		52,000		Note 1
Jun-03-58	6.31	68,300			59,900		Note 1
Jun-04-58	5.92	108,500	67,200		32,500		Note 1
Jun-05-58	5.92	83,800	80,000		71,000		Note 1
Jun-06-58	5.58	97,800	75,400		34,500		Note 1
Jun-07-58	5.51						Note 1
Jun-09-58	5.92	73,600			21,100		Note 1
Jun-10-58	5.92	93,800	86,600		30,600		Note 1
Jun-11-58	5.80	82,250	68,700		18,400		Note 1
Jun-12-58	5.58	53,600	58,600		10,250		Note 1
Jun-13-58	5.92	81,500	73,100		13,800		Note 1
Jun-14-58	6.09						Note 1
Jun-16-58	5.92	93,800	86,800		22,700		Note 1
Jun-17-58	5.80	96,800	75,800		19,350		Note 1
Jun-18-58	5.72	90,900	65,800				Note 1
Jun-19-58	5.65	89,500	64,100		17,900		Note 1
Jun-20-58	5.58	83,800	80,000		22,800		Note 1
Jun-21-58	5.55						Note 1

Appendix 14a-B
Allied King Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Jun-23-58	5.72	81,000	53,800		23,350		Note 1
Jun-24-58	5.87				14,200		Note 1
Jun-25-58	5.78	96,600	67,000		10,120		Note 1
Jun-26-58	5.78	86,600	73,700		6,750		Note 1
Jun-27-58	6.09	101,500	66,500		6,350		Note 1
Jun-28-58	5.80	106,500	71,700		9,190		Note 1
Jun-30-58	6.61	93,600	67,700		21,500		Note 1
Jul-01-58	6.40						Note 1
Jul-02-58	6.22				21,250		Note 1
Jul-14-58	4.49						Note 1
Jul-15-58	4.13	61,900	42,100				Note 1
Jul-16-58	5.72	85,600	65,200				Note 1
Jul-17-58	6.09						Note 1
Jul-18-58	6.36						Note 1
Jul-19-58	6.02	85,100			19,000		Note 1
Jul-28-58	6.30	123,300	94,500				Note 1
Jul-29-58	6.16		102,500		36,700		Note 1
Jul-30-58	5.94		92,000		23,250		Note 1
Jul-31-58	5.80	101,500	65,200		22,250		Note 1
Aug-01-58	5.51	59,600	57,800		16,050		Note 1
Aug-02-58	5.72	107,500			17,100		Note 1
Aug-04-58	6.39	106,500	76,800		27,650		Note 1
Aug-05-58	6.46		79,800		21,500		Note 1
Aug-06-58	6.16						Note 1
Aug-07-58	6.02	107,500	85,100		17,010		Note 1
Aug-08-58	5.87	98,000	108,200		50,400		Note 1
Aug-09-58	5.18	97,000			20,700		Note 1
Aug-12-58	5.10						Note 1
Aug-13-58	**5.10**	102,000	83,600			R	Note 1
Aug-14-58	5.65		83,600				Note 1
Aug-15-58			89,688				Note 1
Aug-25-58		72,000	83,100		22,100		Note 1
Aug-26-58		107,500	122,800		75,400		Note 1
Aug-27-58		104,700	147,000		67,700		Note 1
Aug-28-58		106,100	112,800		43,500		Note 1
Aug-29-58					65,200		Note 1
Sep-08-58	6.61	99,200	90,900		23,700		Note 1
Sep-09-58	6.02	70,100			18,520		Note 1
Sep-10-58	5.72						Note 1
Sep-11-58	5.95						Note 1
Sep-12-58	6.73	106,700	116,500		33,050		Note 1
Sep-13-58	6.69						Note 1
Sep-15-58	6.99	110,800					Note 1
Sep-22-58	7.32	91,300			22,600		Kendrick Exhibit #565 (SA 035446)
Sep-23-58	4.57	74,200			19,400		Kendrick Exhibit #565 (SA 035446)
Sep-24-58	7.15	92,400	131,000		31,000		Kendrick Exhibit #565 (SA 035446)
Sep-25-58	7.07	116,000	143,300		46,500		Kendrick Exhibit #565 (SA 035446)
Sep-26-58	7.20	102,000			27,600		Kendrick Exhibit #565 (SA 035446)
Sep-27-58	6.99						Kendrick Exhibit #565 (SA 035446)
Sep-29-58	7.40	120,500	104,500		37,000		Note 1
Sep-30-58	7.40	142,000	142,000		48,700		Note 1
Oct-01-58	6.92	83,600	113,000		37,750		Note 1

Appendix 14a-B
Allied King Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Oct-02-58	6.99	93,100	122,000				Note 1
Oct-03-58	6.89	89,100	92,000				Note 1
Oct-04-58	6.89						Note 1
Oct-27-58	6.23	114,200	102,700		21,800		Note 1
Oct-28-58	5.17	77,600	85,300		16,800		Note 1
Oct-29-58	6.16	100,000			30,800		Note 1
Oct-30-58	5.31	90,800	78,000		19,490		Note 1
Oct-31-58	6.81						Note 1
Nov-03-58	6.76	107,000	82,400		58,700		Note 1
Nov-04-58	7.40	123,300			22,200		Note 1
Nov-06-58	5.58	76,800	85,600		22,650		Note 1
Nov-07-58	5.88						Note 1
Nov-10-58	6.61						Note 1
Nov-11-58	7.15	119,000	130,000				Note 1
Nov-12-58	7.07	88,400	108,700		47,200		Note 1
Nov-13-58	7.23	75,500	121,800		64,600		Note 1
Nov-14-58	7.23	120,800	119,200		45,700		Note 1
Nov-17-58	7.74	103,500	115,500		31,350		Note 1
Nov-18-58	5.65						Note 1
Nov-19-58	4.83	76,400	71,500		29,000		Note 1
Nov-20-58	4.49	76,700	58,900		20,950		Note 1
Nov-21-58	4.56	51,400	67,600				Note 1
Nov-22-58	4.36						Note 1
Nov-24-58	4.69	58,700	66,500		13,300		Note 1
Nov-25-58	4.65	58,100			26,000		Note 1
Nov-26-58	4.69						Note 1
Nov-27-58	4.69						Note 1
Nov-28-58	4.49						Note 1
Nov-29-58	4.49						Note 1
Dec-03-58	5.12						Note 1
Dec-04-58	7.65	120,800	114,500		62,400		Note 1
Dec-05-58	7.07	129,900	100,900		52,500		Note 1
Dec-06-58	7.07						Note 1
Dec-08-58	6.46	116,000	98,600		60,300		Note 1
Dec-09-58		107,200			55,500		Note 1
Dec-10-58	6.15	138,500			18,800		Note 1
Dec-15-58	7.00	111,000	98,000		173,500		Note 1
Dec-16-58	7.00	122,500	109,700		121,300		Note 1
Dec-17-58	6.92	127,000	113,000		88,100		Note 1
Dec-18-58	6.68	139,200	108,500				Note 1
Dec-19-58	6.50	135,500	82,200				Note 1
Dec-20-58	6.50						Note 1
Dec-22-58	6.50	127,800	71,500				Note 1
Dec-23-58	6.50						Note 1
Dec-26-58	6.92						Note 1
Dec-27-58	6.84						Note 1
Dec-29-58	6.90	120,900	100,100				Note 1
Dec-30-58	6.50	97,500	96,500				Note 1
Jan-05-59	6.90	109,500	84,800				Note 1
Jan-06-59	6.00	115,200	78,000		36,120		Note 1
Jan-07-59	6.50	118,950	91,975		18,460		Note 1
Jan-08-59	6.30	120,960	105,840		31,500		Note 1

CONFIDENTIAL BUSINESS INFORMATION

Appendix 14a-B
Allied King Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Jan-09-59	6.50	113,750	94,250				Note 1
Jan-12-59	5.11	136,200	88,500		22,400		Note 1
Jan-13-59	5.13	111,280	72,800		16,250		Note 1
Jan-14-59	4.77	95,440	83,500		9,550		Note 1
Jan-15-59	4.56	87,500	68,500		14,450		Note 1
Jan-16-59	5.00	75,000	81,500		23,350		Note 1
Jan-19-59	6.00	115,200			16,000		Note 1
Jan-20-59	6.50	108,500	78,000				Note 1
Jan-21-59	6.00						Note 1
Jan-22-59	6.00						Note 1
Jan-23-59	6.50						Note 1
Jan-26-59	6.50	97,500	157,000		13,000		Note 1
Jan-27-59	6.50	108,500	70,500		7,600		Note 1
Jan-28-59	6.50	119,500	87,700		30,300		Note 1
Jan-29-59	6.50	108,500	111,200		13,000		Note 1
Jan-30-59	6.40	101,500	98,600		6,400		Note 1
Jan-31-59	6.55	131,000	110,600				Note 1
Feb-02-59	6.60	71,700	86,000				Note 1
Feb-03-59	6.30	98,500	74,500				Note 1
Feb-04-59	7.59	112,000	88,500				Note 1
Feb-05-59	6.87						Note 1
Feb-06-59	6.87	109,000	99,500				Note 1
Feb-09-59	7.00	105,000	93,500		24,500		Note 1
Feb-10-59	6.55	98,200	87,200		24,000		Note 1
Feb-11-59	6.63	99,500	98,500		23,200		Note 1
Feb-12-59	6.47	110,300	82,300		21,600		Note 1
Feb-13-59	6.55	92,700	100,300		29,400		Note 1
Feb-14-59	6.55	125,500	127,000				Note 1
Feb-16-59	6.71						Note 1
Feb-17-59	6.31	73,600	58,000		39,800		Note 1
Feb-18-59	6.63	116,000	73,000		41,000		Note 1
Feb-19-59	6.47	91,700	74,000		29,100		Note 1
Feb-20-59	6.55	92,700	64,300		45,800		Note 1
Feb-21-59	6.63	105,000	87,500				Note 1
Feb-23-59	6.79				91,700		Note 1
Feb-24-59	6.47	113,200	93,000		112,000		Note 1
Feb-25-59	6.63	99,500	79,500		50,800		Note 1
Feb-26-59	6.37	72,000	91,500		31,000		Note 1
Feb-27-59	6.16				28,600		Note 1
Feb-28-59	6.80	101,500	82,000				Note 1
Mar-02-59	6.55	98,200	126,000		25,000		Note 1
Mar-03-59	6.50				21,700		Note 1
Mar-04-59	6.25	104,000	375,000		8,300		Note 1
Mar-05-59	6.31	111,600	100,500		20,000		Note 1
Mar-06-59	6.37	130,200	100,900		15,900		Note 1
Mar-07-59	6.35	100,000	114,000				Note 1
Mar-09-59	6.50	97,500	100,400		19,500		Note 1
Mar-10-59	6.55	136,200	61,300		10,900		Note 1
Mar-11-59	6.23	100,900	100,100		32,100		Note 1
Mar-12-59	6.39	100,700	130,200		36,000		Note 1
Mar-13-59	6.31						Note 1
Mar-14-59	6.50						Note 1

Appendix 14a-B
Allied King Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Mar-16-59	6.50						Note 1
Mar-17-59	6.50	130,000	94,500		22,700		Note 1
Mar-18-59	6.16	71,700	88,200		10,250		Note 1
Mar-19-59	5.70	66,700	133,000		44,700		Note 1
Mar-20-59	5.75	115,000	98,700		33,500		Note 1
Mar-21-59	5.93	104,000	101,000				Note 1
Mar-23-59	6.63	94,000	79,500		30,400		Note 1
Mar-24-59	6.16	87,000	103,000		29,800		Note 1
Mar-25-59	**5.76**	**77,000**	**74,000**		**32,600**	**R**	**Note 1**
Mar-26-59	5.62	80,000	115,200		24,400		Note 1
Mar-27-59	5.56				25,000		Note 1
Mar-28-59	6.47		86,000				Note 1
Mar-30-59	6.50				24,900		Note 1
Mar-31-59	6.94						Note 1
Apr-01-59	6.94	104,000	98,500		19,600		Note 1
Apr-02-59	5.86	112,500	86,000		49,700		Note 1
Apr-03-59	6.79		92,700		32,700		Note 1
Apr-04-59	6.50						Note 1
Apr-07-59	5.63	61,000	76,000		47,700		Note 1
Apr-08-59	5.57				27,800		Note 1
Apr-09-59	5.93				65,200		Note 1
Apr-14-59	6.16	103,000	177,000		40,000		Note 1
Apr-15-59	5.93				34,455		KA04600382, KA04600383
Apr-15-59	5.86				30,500		Note 1
Apr-16-59	5.63	89,000	109,000		25,300		Note 1
Apr-21-59	5.78						Note 1
Apr-22-59	4.99						Note 1
Apr-23-59	5.75	143,500	105,500		18,200		Note 1
Apr-28-59	6.23						Note 1
Apr-29-59	5.41	99,000	85,000		19,800		Note 1
Apr-30-59	5.70	86,000	107,500		35,200		Note 1
May-05-59	6.00	91,000	113,000		19,100		Note 1
May-06-59	6.16	1,180,000	110,000		37,000		Note 1
May-07-59	6.23	109,000	112,000		49,800		Note 1
May-12-59	6.00						Note 1
May-13-59	6.23	114,000	124,000		33,200		Note 1
May-14-59	6.63						Note 1
May-19-59	6.55	98,500	133,000		27,300		Note 1
May-20-59	6.31						Note 1
May-21-59	6.55	104,000	148,000		31,600		Note 1
May-26-59	6.55	126,000	136,000		35,000		Note 1
May-27-59	6.28	99,500	118,000		50,300		Note 1
May-28-59	6.87	114,000	108,000		81,000		Note 1
Jun-02-59	6.23	125,000	158,500		18,700		Note 1
Jun-03-59	6.35						Note 1
Jun-04-59	6.23	98,500	116,000		12,000		Note 1
Jun-09-59	6.23	104,000	133,000		59,200		Note 1
Jun-10-59	6.47	91,500	129,000		62,500		Note 1
Jun-11-59	6.31	110,000	125,000		63,000		Note 1
Jun-16-59	6.87				106,000		Note 1
Jun-17-59	6.63	88,000	148,000		124,000		Note 1
Jun-18-59	6.71	123,000	174,000		45,700		Note 1

Appendix 14a-B
Allied King Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Jun-23-59	6.87	120,000	136,000				Note 1
Jun-24-59	7.02				190,000		Note 1
Jun-25-59	7.02	123,000	136,000		119,000		Note 1
Jun-30-59	6.31				-		Note 1
Jul-01-59	6.87	114,500	110,000		66,400		Note 1
Jul-02-59	6.63						Note 1
Jul-07-59	6.73	134,500	118,000		181,500		Note 1
Jul-08-59	6.73	123,500	121,000		78,400		Note 1
Jul-09-59	6.42	123,000	135,000		176,000		Note 1
Jul-14-59	6.73	117,000	106,000		53,700		Note 1
Jul-15-59	6.73	118,000	111,000		39,600		Note 1
Jul-16-59	6.73	123,000	130,000		112,000		Note 1
Jul-21-59	6.23	93,500	126,000		61,200		Note 1
Jul-22-59	6.26	88,600	107,000		85,400		Note 1
Jul-23-59	6.16	87,500	77,000		9,500		Note 1
Aug-11-59	6.23		86,000		17,700		Note 1
Aug-12-59	6.55		93,500		27,200		Note 1
Aug-13-59	6.39		74,100		46,800		Note 1
Aug-18-59	6.54				43,400		Note 1
Aug-19-59	6.39		110,400		31,900		Note 1
Aug-20-59	6.40						Note 1
Aug-25-59	6.53		162,500		44,500		Note 1
Aug-26-59	6.55		115,400		33,500		Note 1
Aug-27-59	6.63		98,500		22,100		Note 1
Sep-01-59	6.55	54,500	76,400		37,500		Note 1
Sep-02-59	6.63	105,000	100,000		39,800		Note 1
Sep-03-59	6.79	90,500	108,500		42,800		Note 1
Sep-09-59	6.95	94,600	60,200		39,000		Note 1
Sep-10-59	6.95	104,000	161,000		34,700		Note 1
Sep-15-59	6.95	60,400	187,500				Note 1
Sep-16-59	6.80		116,000		48,000		Note 1
Sep-17-59	6.87						Note 1
Sep-22-59	6.47		129,000				Note 1
Sep-23-59	6.55	92,700	125,500		26,200		Note 1
Sep-24-59	6.55	120,000	130,000		45,800		Note 1
Sep-29-59	6.87	92,200	129,000		53,700		Note 1
Sep-30-59	6.87	108,000	113,200		30,900		Note 1
Nov-03-59	6.50						Note 1
Nov-04-59	6.50						Note 1
Nov-05-59	6.50						Note 1
Nov-10-59	7.36						Note 1
Nov-11-59	7.36						Note 1
Nov-12-59	7.37	110,000	88,500		28,200		Note 1
Nov-17-59	7.02	152,000	150,000		103,000		Note 1
Nov-18-59	6.23	114,000	137,000		31,200		Note 1
Nov-19-59	7.02						Note 1
Nov-24-59	7.02	70,200	154,500		67,800		Note 1
Dec-01-59	6.77	96,000	132,000		6,760		Note 1
Dec-02-59	6.77	90,000	99,100		93,000		Note 1
Dec-03-59	6.77	107,000	116,000		89,000		Note 1
Dec-08-59	6.87	108,800	105,000		57,200		Note 1
Dec-09-59	7.19	117,800	141,200		9,000		Note 1

CONFIDENTIAL BUSINESS INFORMATION

Appendix 14a-B
Allied King Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Dec-10-59	6.87				37,900		Note 1
Dec-15-59	7.19	107,800	110,800		79,000		Note 1
Dec-16-59	6.87	86,000	86,700		28,600		Note 1
Dec-17-59	7.28	78,700	134,500		37,800		Note 1
Dec-22-59	7.00						Note 1
Dec-23-59	7.00						Note 1
Dec-29-59	6.79				39,500		Note 1
Dec-30-59	7.00				42,000		Note 1
Dec-31-59	7.00						Note 1
Jan-05-60	7.00						Note 1
Jan-06-60	7.00	99,300	95,600		25,600		Note 1
Jan-07-60	7.00	75,800	67,700		42,000		Note 1
Jan-12-60	7.52	112,800	125,500		120,200		Note 1
Jan-13-60	6.87	80,000	76,700		137,000		Note 1
Jan-14-60	6.23	78,000	77,000		56,000		Note 1
Jan-19-60	7.50						Note 1
Jan-20-60	7.50				35,100		Note 1
Jan-21-60	7.37				125,000		Note 1
Jan-26-60	7.50	144,000	122,500		76,500		Note 1
Jan-27-60	7.20	95,700	105,500		78,000		Note 1
Jan-28-60	6.55	93,000	105,900		84,000		Note 1
Feb-02-60	6.73	92,700	100,500		96,800		Note 1
Feb-03-60	6.95	104,100	102,000		68,300		Note 1
Feb-04-60	7.00	111,000	132,000		149,100		Note 1
Feb-09-60	7.02	105,500	87,700		49,000		Note 1
Feb-10-60	7.00	122,500	122,500		88,500		Note 1
Feb-11-60	7.00	111,000	126,000		106,000		Note 1
Feb-16-60	7.00	122,300	119,000		152,000		Note 1
Feb-17-60	6.85	114,000	93,500		106,000		Note 1
Feb-18-60	6.85	97,000	99,500		108,000		Note 1
Feb-23-60	6.90	115,000	127,500		77,000		Note 1
Feb-24-60	6.75	95,800	110,200		95,800		Note 1
Feb-25-60	7.00	111,800	95,800		70,000		Note 1
Mar-01-60	7.00	198,000	166,500		164,500		Note 1
Mar-02-60	7.00	87,600	138,600		18,700		Note 1
Mar-03-60	7.00						Note 1
Mar-08-60	7.00	105,000	69,000		158,500		Note 1
Mar-09-60	7.00	140,000	113,200		134,000		Note 1
Mar-10-60	7.00	99,400	115,000		58,300		Note 1
Mar-15-60	7.00	99,000			38,500		Note 1
Mar-16-60	7.00				40,700		Note 1
Mar-17-60	7.00				52,500		Note 1
Mar-22-60	6.50				46,600		Note 1
Mar-23-60	7.00				49,000		Note 1
Mar-24-60	7.00						Note 1
Mar-29-60	7.00	116,800	178,500		29,200		Note 1
Mar-30-60	7.00	157,500	137,600		21,000		Note 1
Mar-31-60	7.00	145,800	87,500		21,000		Note 1
Apr-21-60	6.28	104,000	103,000		35,200		Note 1
Apr-26-60	6.50	113,800	117,000		31,400		Note 1
Apr-27-60	6.80	102,000	113,500		93,000		Note 1
Apr-28-60	6.55	93,000	110,000		69,800		Note 1

Appendix 14a-B
Allied King Mill Clarifier
Historical Wastewater Flow, Influent and Effluent Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
May-03-60	6.23	119,500	122,500		24,900		Note 1
May-04-60	6.23				41,500		Note 1
May-05-60	5.93	99,000	99,000		76,200		Note 1
May-10-60	6.25	114,200	101,200				Note 1
May-11-60	6.50	81,300	132,300				Note 1
May-12-60	5.93	89,000	100,000		40,300		Note 1
May-17-60	6.16	97,300	97,300		61,500		Note 1
May-18-60	6.24	114,300	113,200		93,500		Note 1
May-19-60	6.55	109,000	96,100		53,200		Note 1
May-24-60	6.50						Note 1
May-25-60	6.50	119,200	112,800		44,300		Note 1
May-26-60	6.50	130,000	118,000		24,800		Note 1
May-31-60	6.50	126,200	91,500		49,300		Note 1
Jun-01-60	6.23	83,000	100,500		53,000		Note 1
Jun-02-60	6.55	98,300	143,000		152,000		Note 1
Jun-07-60	6.23	88,500	108,000		59,200		Note 1
Jun-08-60	6.16	92,300	162,400		84,200		Note 1
Jun-09-60	6.16				105,600		Note 1
Jun-14-60	6.16	123,200	122,100		11,300		Note 1
Jun-15-60	5.93	108,800	89,000		23,700		Note 1
Jun-16-60	6.23	114,200	105,000		17,600		Note 1
Jun-21-60	6.55	109,100	145,000		31,000		Note 1
Jun-22-60	6 47	113,300	83,100		33,400		Note 1
Jun-23-60	6 47	108,000	98,200		35,500		Note 1
Jun-28-60	6.55	125,100	121,000		19,600		Note 1
Jun-29-60	6.55	114,400	106,800		12,200		Note 1
Jun-30-60	6.37	106,000	113,600		30,800		Note 1
Jul-05-60					47,790		Note 1
Jul-13-60	5 95	109,200	137,100		19,900		Note 1
Jul-14-60	5.93	98,600	98,000		22,700		Note 1
Jul-19-60	6.10				36,600		Note 1
Jul-20-60	6.55	108,200	67,100		50,700		Note 1
Jul-21-60	6.39	111,800	113,000		47,800		Note 1
Jul-26-60	6.55				60,000		Note 1
Jul-27-60	6.55	98,000	125,000		68,000		Note 1
Jul-28-60	6.39	80,000	126,000		87,000		Note 1
Aug-16-60	5.93	109,000	163,000		14,800		Note 1
Aug-17-60	6.79						Note 1
Aug-18-60	6.87				12,600		Note 1
Aug-23-60	6.50						Note 1
Aug-24-60	6 79	126,000	103,000		3,400		Note 1
Aug-25-60	6 79	107,500	108,300		113,000		Note 1
Aug-30-60	6.91	98,000	103,800		78,400		Note 1
Aug-31-60	6.97	104,500	101,000		87,200		Note 1
Sep-01-60	7 02	93,600	103,000		85,400		Note 1
Sep-06-60	7 26	91,000	75,300		21,800		Note 1
Sep-07-60	6 74	106,800	70,700		9,000		Note 1
Sep-08-60	6.80	90,800	79,700		4,700		Note 1
Sep-13-60	7 14	130,100	95,300		8,300		Note 1
Sep-14-60	7 19	101,800	85,000		7,200		Note 1
Sep-15-60	6 87	91,400	93,600		37,700		Note 1
Sep-20-60	6 90						Note 1

Appendix 14a-B
Allied King Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Sep-21-60	6.90						Note 1
Sep-22-60	7.39	110,500	134,400		73,900		Note 1
Sep-27-60	7.85	117,800	128,200		173,000		Note 1
Sep-28-60	8.55				85,500		Note 1
Sep-29-60	8.55	128,200	166,800		115,200		Note 1
Oct-01-60	6.55	103,500	127,500				Note 1
Oct-04-60	7.79	96,500	161,000		119,500		Note 1
Oct-05-60	7.72	104,000	179,000		110,800		Note 1
Oct-06-60	7.85						Note 1
Oct-07-60	6.39	117,000	126,000		90,500		Note 1
Oct-11-60	7.45	106,000	211,000		69,800		Note 1
Oct-12-60	7.47	124,600	125,800		82,400		Note 1
Oct-13-60	7.52	138,000	135,500		80,300		Note 1
Oct-18-60	7.26	108,800	139,000		36,300		Note 1
Oct-19-60	6.99	110,800	142,000		56,000		Note 1
Oct-20-60	6.99	116,600	140,000		91,000		Note 1
Oct-25-60	6.74	112,600	227,000		41,800		Note 1
Oct-26-60	6.87	108,800	168,500		90,400		Note 1
Oct-27-60	6.36	111,300	147,400		106,000		Note 1
Nov-01-60	6.61	126,600	268,000		143,000		Note 1
Nov-02-60	6 49	97,300	138,000		100,600		Note 1
Nov-03-60	6.49	146,000	163,400		121,000		Note 1
Nov-08-60	7.52	132,000	184,500		146,000		Note 1
Nov-09-60	7.46	131,000	227,500		173,000		Note 1
Nov-10-60	7.52	132,000	156,000		79,000		Note 1
Nov-15-60	7.33	122,500	219,000		86,000		Note 1
Nov-16-60	7.46	124,400	174,400		92,300		Note 1
Nov-17-60	7.46	124,400	162,000		166,600		Note 1
Nov-22-60	7.12	119,000	181,200		95,200		Note 1
Nov-23-60	7.19						Note 1
Nov-29-60	7.19	120,000	158,400		145,400		Note 1
Nov-30-60	7.19	96,000	169,200		145,000		Note 1
Dec-01-60	7.19	120,000	188,400		188,400		Note 1
Dec-06-60	7.65	127,700	356,600		123,800		Note 1
Dec-07-60	7.52	125,500	197,000		214,500		Note 1
Dec-08-60	7.52	125,500			107,900		Note 1
Dec-13-60	7.31						Note 1
Dec-14-60	7.31						Note 1
Dec-15-60	7.31						Note 1
Dec-20-60	7.31	115,800	235,200		131,700		Note 1
Dec-21-60	7.31	121,900	213,200		190,200		Note 1
Dec-22-60	7.31						Note 1
Dec-27-60	7.31						Note 1
Dec-28-60	7.31						Note 1
Dec-29-60	7.31						Note 1
Jun-27-61	7.40		**162,713**		**102,928**	R	**SA 038997-039000 (WRC)**
Jul-06-61	7.00		120,400		63,000		Note 1
Jul-07-61	7.00		106,400		44,800		Note 1
Jul-11-61	7.20		92,160		64,944		Note 1
Jul-12-61	7.60		215,840		52,060		Note 1
Jul-20-61	6.30		102,060		102,060		Note 1
Aug-04-61	6.50		302,900		59,605		Note 1

CONFIDENTIAL BUSINESS INFORMATION

Appendix 14a-B
Allied King Mill Clarifier
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Oct-03-62	2.80					R	NCASI000194
Oct-04-62	2.80				10,280	R	NCASI000194
Oct-05-62	2.69				5,380	R	NCASI000194
Oct-11-62	3.70				24,800	R	NCASI000194
Oct-12-62	3.55				15,400	R	NCASI000194
Oct-16-62	5.20				46,800	R	NCASI000194
Oct-17-62	4.70				39,500	R	NCASI000194
Oct-18-62	4.40				17,400	R	NCASI000194
Oct-19-62	4.22				15,500	R	NCASI000194
Oct-24-62	4.48				8,200	R	NCASI000194
Oct-25-62	4.48				19,450	R	NCASI000194
Oct-26-62	4.35				32,600	R	NCASI000194
Nov-08-62	6.10		134,000		14,200	R	KA04500102
Nov-14-62	5.93		95,000		4,920	R	KA04500102
Nov-15-62	6.23		129,000		22,800	R	KA04500102
Jan-08-63	7 40		221,700		118,000		KA04800468
Jan-18-63	6 80		107 400		22,800		KA04800468
Jan-24-63	7 90		162,050		24,200		KA04800468
Mar-05-63	7 20		222,000		11,950		Note 1
Mar-06-63	7 00		175,000		11,600		Note 1
Mar-07-63	6 80		184,000		24,000		Note 1
Mar-11-63	7 90		242,000		97,500		Note 1
Mar-12-63	8 00		154,000		84,000		SA028970
Mar-13-63	6 70		181,000		60,300		SA028970
Mar-14-63	6 50		196,000		92,000		SA028970
Mar-18-63	6 50		124,000		70,500		SA028970 SA028974
Mar-19-63	6 80		136,000		38,500		Note 1
Mar-20-63	7 00		127 000		18,600		Note 1
Mar-21-63	6 80		130,000		34,000		Note 1
Mar-22-63	6 70		119,000		48,000		Note 1
Mar-25-63	6 70		123,000		3,350		Note 1
Mar-26-63	6 70		145,000		8,960		Note 1
Mar-27-63	6 90		126,000		11,500		Note 1
Mar-28-63	6 90		141,000		54,000		Note 1
Mar-29-63	6 90		136,000		13,500		Note 1
Apr-01-63	6 70		220,000		60,000		Note 1
Apr-02-63	6 50		195,000		71,000		Note 1
Apr-03-63	6 50		127,000		58,500		SA028974
Apr-04-63	6 40		125,000		71,500		SA028974
Apr-05-63	6 40		93,000		66,300		SA028974
Apr-06-63	6 50		120,000		22,200		Note 1
Apr-07-63	6 40		123,000		26,600		Note 1
Apr-08-63	6 30		169,000		47,300		Note 1
Apr-09-63	6 30		153,000		69,300		Note 1
Apr-10-63	6 50		162,500		76,500		Note 1
Apr-11-63	6 50		124,500		59,500		Note 1
Apr-12-63	6 50		166,000		113,500		Note 1
Apr-13-63	6 50				48,700		Note 1
Apr-15-63	6 70		202,000		55,700		Note 1
Apr-16-63	7 00		114,000		69,500		Note 1
Apr-17-63	7 20		126,500		24,100		Note 1
Apr-18-63	7 00		125,000		18,600		Note 1

CONFIDENTIAL BUSINESS INFORMATION

Appendix 14a-B
Allied King Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Apr-19-63	7.00		166,000		51,500		Note 1
Apr-20-63	7.10		147,000		49,100		Note 1
Apr-21-63	7.20		189,000		104,000		SA028970
Apr-22-63	7.00		168,000		60,800		SA028970, SA028973
Apr-23-63	7.10		144,500		71,000		SA028970, SA028973
Apr-24-63	7.00		180,000		134,500		SA028970, SA028973
Apr-25-63	7.00		173,000		73,800		SA028970, SA028973
Apr-29-63	7.16		131,000		35,800		Note 1
Apr-30-63	7.16		157,500		66,800		Note 1
May-01-63	7.09		154,000		62,600		Note 1
May-02-63	7.09		177,500		49,600		Note 1
May-03-63	7.16		154,000		53,700		Note 1
May-04-63	6.95		130,000		44,600		Note 1
May-06-63	7.56		93,100		14,500		Note 1
May-07-63	7.24		203,000		74,000		Note 1
May-08-63	7.24		175,000		78,500		Note 1
May-09-63	7.24		121,000				Note 1
May-10-63	7.24		132,000		60,000		Note 1
May-13-63	7.42		198,000		78,000		Note 1
May-14-63	7.09		186,000		107,500		Note 1
May-15-63	7.09		175,000		67,400		Note 1
May-16-63	7 09		222,000		63,800		Note 1
May-20-63	7.09						Note 1
May-21-63	7.09		252,000		65,000		Note 1
May-22-63	7.09		215,000		57,900		Note 1
May-23-63	7.09		167,000		66,200		Note 1
May-24-63	6.95		133,500		65,000		Note 1
May-25-63	7.09		125,000		64,900		Note 1
May-27-63	7 40		214,000		140,000		Note 1
May-28-63	7 10		169,000		108,000		Note 1
Jun-03-63	7 10		231,000		79,400		Note 1
Jun-04-63	7.40		178,000		59,500		Note 1
Jun-05-63	7 70		181,000		81,400		Note 1
Jun-06-63	7.70		161,000		76,000		Note 1
Jun-10-63	8 10		164,000		61,800		Note 1
Jun-11-63	7.90		140,000		74,000		Note 1
Jun-12-63	8 00		93,000		68,200		Note 1
Jun-13-63	7 60		195,000		73,000		Note 1
Jun-14-63	6.60		131,000		97,000		Note 1
Jun-18-63	5 90		188,500		29,100		Note 1
Jun-19-63	7 40		168,000		73,000		Note 1
Jun-20-63	7 40		152,000		68,000		Note 1
Jun-21-63	7.20		174,000		60,300		Note 1
Jul-63	**7.44**		**166,109**		**65,285**	R	**SA028948-SA028957**
Aug-63	**7.36**		**152,469**		**59,223**	R	**SA028948-SA028957**
Sep-63	**7.07**		**161,118**		**38,073**	R	**SA028948-SA028957**
Oct-63	**6.96**		**163,951**		**40,095**	R	**SA028948-SA028957**
Nov-63	**6.94**		**206,831**		**60,380**	R	**SA028948-SA028957**
Dec-63	**7.00**		**167,200**		**45,800**	R	**SA028948-SA028957**
Apr-24-65	5 49		33,000		4,500		Note 1
Apr-25-65	5 78		90,500		4,000		Note 1
Apr-26-65	5 49		108,000		31,200		Note 1

Appendix 14a-B
Allied King Mill Clarifier
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Apr-27-65	5 34		97,000		6,200		Note 1
Apr-28-65	5 34		91,500		27,400		Note 1
May-05-65	5 49	68,500	69,500	68,500	20,500		Note 1
May-06-65	5 63	74,400	60,000	61,200	21,500		Note 1
May-07-65	5 34	40,000	38,200	35,400	1,800		Note 1
May-08-65	5 49	41,000	43,700	32,000	4,500		Note 1
May-10-65	5 63	70,500	64,200	42,200	8,400		Note 1
May-11-65	5 49	68,500	71,300	64,000	13,700		Note 1
May-12-65	5 63	70,500	64,600	66,000	10,300		Note 1
Jun-09-65	5 20		45,000		1,700		Note 1
Jun-10-65	5 06		43,800		850		Note 1
Jun-21-65	5 35	44,500	37,400	44,500			Note 1
Jun-22-65	5 49	31,300	32,000	31,300			Note 1
Jun-23-65	3 12	26,800	24,200	18,200			Note 1
Jun-24-65	5 34	44,600	38,400	31,200			Note 1
Jun-28-65	4 91	45,000	27,000	45,000			Note 1
Jun-29-65	5 20	26,000	37,300	30,300			Note 1
Jun-30-65	5 20	34,700	38,900	34,700			Note 1
Jul-01-65	5 21	39,100	40,000	47,700			Note 1
Jul-07-65	4 22	17,500	14,700	14,000			Note 1
Jul-08-65	4 22	31,500	20,500	21,000			Note 1
Jul-13-65	4 77	50,500	35,000	42,000			Note 1
Jul-14-65	5 06	46,200	20,200	29 400			Note 1
Jul-15-65	4 92	57,300	28,800	49,100			Note 1
Jul-20-65	5 20	30,200	10,400	30,200			Note 1
Jul-21-65	5 20	56,300	26,800	39,000			Note 1
Jul-22-65	4 77	19,900	23,800	7,800			Note 1
Jul-27-65	4 77	31,800	59,000	27,500			Note 1
Jul-28-65	4 77	15,900	25,600	39,700			Note 1
Jul-29-65	4 49	48,500	63,500	33,600			Note 1
Aug-09-65	4 49	33,500	80,600	29,800			Note 1
Aug-10-65	4 49	33,500	85,000	29,800			Note 1
Aug-11-65	4 65	50,300	26,200	27,400			Note 1
Aug-12-65	4 65	15,400	88,600	3,800			Note 1
Aug-16-65	4 49	29,800	30,500	26,000			Note 1
Aug-17-65	4 22	28,200	21,800	24,600			Note 1
Aug-18-65	4 49	29,800	20,400	29,800			Note 1
Aug-19-65	4 65	30,800	44,200	30,800			Note 1
Aug-23-65	4 49	29,800	20,200	22,400			Note 1
Aug-24-65	4 49	33,600	14,700	26,100			Note 1
Aug-25-65	4 65	30,800	15,500	30,800			Note 1
Aug-26-65	5 06	33,800	28,600	26,600			Note 1
Aug-30-65	5 06	33,800	27,800	29,300			Note 1
Aug-31-65	5 06	33,800	17,700	27,000			Note 1
Sep-01-65	5 06	33,800	9,300	33,800			Note 1
Sep-02-65	4 92	36,600	18,100	32,600			Note 1
Sep-07-65	4 35	32,600	29,000	25,400			Note 1
Sep-08-65	4 35	25,400	25,400	18,200			Note 1
Sep-09-65	4 49	37,400	41,000	37 400			Note 1
Sep-13-65	4 77	35,800	25,300	31,800			Note 1
Sep-14-65	4 77	31,800	25,500	27,700			Note 1
Sep-16-65	4 49	33,400	26,100	29,800			Note 1

CONFIDENTIAL BUSINESS INFORMATION

Appendix 14a-B
Allied King Mill Clarifier
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Sep-20-65	4 92	24,500	18,900	20,400			Note 1
Oct-05-65	4 65	34,700	24,700	34,700			Note 1
Oct-06-65	4 65	37,000	41,000	37,000			Note 1
Oct-07-65	4 65	34,700	26,400	30,800			Note 1
Oct-12-65	4 49	33,600	25,400	29,800			Note 1
Oct-13-65	4 49	33,600	23,800	33,600			Note 1
Oct-14-65	4 49	29,800	33,500	29,800			Note 1
Oct-19-65	4 65	30,900	38,700	30,900			Note 1
Oct-20-65	4 49	29,800	10,400	29,800			Note 1
Oct-27-65	4 65	38,600	28,600	34,700			Note 1
Oct-28-65	4 49	33,600	39,600	29,900			Note 1
Nov-02-65	4 65	42,500	31,700	34,800			Note 1
Nov-03-65	4 77	27,700	33,300	27,700			Note 1
Nov-04-65	4 77	38,700	30,200	38,700			Note 1
Nov-09-65	4 22	38,600	23,800	35,000			Note 1
Nov-10-65	4 22	28,100	23,800	24,500			Note 1
Nov-11-65	4 08	34,100	19,700	30,600	4,000		Note 1
Nov-30-65	3 95	33,000	34,900	29,600			Note 1
Dec-01-65	4 08	27,200	22,400	27,200			Note 1
Dec-02-65	4 22	45,500	23,200	42,100			Note 1
Dec-14-65	4 35	40,000	32,700	36,400			Note 1
Dec-15-65	4 22	31,600	25,900	31,600			Note 1
Dec-16-65	4 22	21,100	23,100	24,500			Note 1
Mar-08-66	3 42	39,800	29,000	43,000	4,000		Note 1
Mar-09-66	4 22	42,200	27,300	38,600	2,800		Note 1
Mar-10-66	3 94	39,400	32,200	39,400	3,900		Note 1
Mar-11-66	3 68	36,800	23,300	33,700	1,800		Note 1
Mar-14-66	3 68	36,800	33,200	36,800	6,100		Note 1
Mar-15-66	2 93	24,400	18,100	26,800	1,900		Note 1
Mar-16-66	2 93	29,300	12,200	29,300			Note 1
Mar-17-66	3 17	29,000	18,000	29,000	3,600		Note 1
Mar-18-66	3 43	37,200	28,600	37,200	4,000		Note 1
Mar-21-66	5 20	43,400	22 400	38,700	4,300		Note 1
Mar-22-66	5 06	37,800	26,200	42,200			Note 1
Mar-23-66	5 06	63,200	21,600	67,600	3,600		Note 1
Mar-24-66	4 49	52,300	29,200	44,800	3,700		Note 1
Mar-25-66	4 08	27,000	20,400	23,700	3,400		Note 1
Mar-28-66	4 35	52,400	19,600	32,700	4,300		Note 1
Mar-29-66	4 35	25,400	23,800	29,000	4,400		Note 1
Mar-30-66	4 49	29,800	28,300	29,800	300		Note 1
Mar-31-66	4 49	56,000	28,000	48,500	3,700		Note 1
Apr-01-66	4 35	39,700	48,000	39,700	2,900		Note 1
Apr-04-66	3 68	27,600	28,200	27,800	1,200		Note 1
Apr-05-66	3 68	21,500	23,400	24,400	1,200		Note 1
Apr-06-66	3 43	17,100	26,200	17,100	1,700		Note 1
Apr-07-66	3 43	45,700	17,700	43,700	3,400		Note 1
Apr-08-66	3 30	35,700	21,900	**35,700**	2,800	R	Note 1
Apr-11-66	3 06	17,800	14,700	**25,400**	3,000	R	Note 1
Apr-12-66	2 99	17,100	15,100	**17,100**	1,500	R	Note 1
Apr-13-66	2 81	16,400	18,700	**11,700**	900	R	Note 1
Apr-14-66	2 93	36,600	11,700	35,700	200		Note 1
Apr-15-66	3 05	33,100	27,000	35,600	1,000		Note 1

CONFIDENTIAL BUSINESS INFORMATION

Appendix 14a-B
Allied King Mill Clarifier.
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Apr-18-66	3 43	31,300	17,100	34 200	2,300		Note 1
Apr-19-66	3 30	33,000	14,900	27,400	1,100		Note 1
Apr-20-66	3 30	30,200	14,800	27,400	1,100		Note 1
Apr-21-66	3 13	31,200	13,600	31,200	1,500		Note 1
Apr-22-66	3 30	30,000	27,400	21,900	1,100		Note 1
Apr-25-66	2 01	20,100	11,400	16,800			Note 1
Apr-26-66	2 93	29,300	14,200	22,000	1,500		Note 1
Apr-27-66	3 17	23,800	11,700	15,800			Note 1
Apr-28-66	3 43	29,800	24,700	23,900	1,700		Note 1
Apr-29-66	3 68	39,800	24,000	30,800	600		Note 1
May-02-66	4 22	42,100	11,200	31,500	1,400		Note 1
May-03-66	4 35	29,000	29,000	14,500	750		Note 1
May-04-66	3 95	26,300	19,700	16,500	700		Note 1
May-05-66	3 81	31,800	19,100	25,200	1,300		Note 1
May-06-66	3 95	33,000	19,700	26,400	1,800		Note 1
May-09-66	3 81	34,900	21,000	38 100	5,100		Note 1
May-10-66	3 81	35,800	32,400	32,800	1,300		Note 1
May-11-66	3 30	27,400	19,700	19,200	2,700		Note 1
May-12-66	3 68	**48,000**	26,400	36,800	1,900	R	Note 1
May-13-66	3 30	30,200	17,500	30,200			Note 1
May-16-66	3 95	26,200	16,200	23,000	300		Note 1
May-17-66	4 22	24,500	14,000	28,100			Note 1
May-18-66	4 22	14,100	19,600	14 100			Note 1
May-19-66	4 08	40,000	28,600	40,000	200		Note 1
May-20-66		36,000		36,000	700		Note 1
May-23-66	3 95	36,100	23,400	36,100			Note 1
May-24-66	3 95	49,200	21,900	43,000	2,000		Note 1
May-25-66	3 95	19,800	18,400	19,800	100		Note 1
May-26-66	3 95	20,300	15,800	36,200	500		Note 1
May-27-66	4 08	40,500	10,200	37,500	1,300		Note 1
May-30-66	3 95	16,600	20,400	19,800			Note 1
May-31-66	4 08	36,800	13,400	36,800			Note 1
Jun-01-66	4 08	44,300	21,100	44,300	1,000		Note 1
Jun-02-66	4 08	40,800	28,000	32 400	1,800		Note 1
Jun-03-66	3 43	28,600	38,400	28,600	500		Note 1
Jun-06-66	2 70	29,200	17,100	27,000			Note 1
Jun-07-66	2 93	26,900	26,900	24,400			Note 1
Jun-08-66	2 70	33,700	14,000	22 400	800		Note 1
Jun-09-66	2 81	25,700	20,100	25,700	700		Note 1
Jun-13-66	3 05	25,400	14,500	28,000	250		Note 1
Jun-14-66	3 05	28,000	25,800	28,000	1,200		Note 1
Jun-15-66	2 93	24,400	22,500	22,000	400		Note 1
Jun-16-66	2 93	26,900	25,800	26,900	500		Note 1
Jun-17-66	2 81	30,400	17,400	30,400	500		Note 1
Jun-20-66	3 05	35,600	26,000	28,000	500		Note 1
Jun-21-66	2 93	21,900	19,100	19,400			Note 1
Jun-22-66	3 05	28,000	12,200	24,900			Note 1
Jun-23-66	3 05	25,400	18,700	17,700			Note 1
Jun-24-66	3 05	35,500	19,800	32,600	500		Note 1
Jun-27-66	3 05	33,000	36,300	25,400			Note 1
Jun-28-66	3 05	30,300	33,600	26 500	1,000		Note 1
Jun-29-66	2 93	26,900	21,000	19,600	500		Note 1

CONFIDENTIAL BUSINESS INFORMATION

Appendix 14a-B
Allied King Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Jun-30-66	3.17	21,700	25,900	21,100	1,000		Note 1
Jul-01-66	3.17	31,700	2,700	26,400	1,000		Note 1
Jul-05-66	3.14	34,000	18,400	31,400	100		Note 1
Jul-13-66	3.71	27,800	18,000	27,800			Note 1
Jul-21-66	2.50	25,000	15,900	20,400	800		Note 1
Aug-02-66	2.85	35,600	21,800	29,800	100		Note 1
Aug-10-66	2.89	33,800	24,400	31,300	100		Note 1
Aug-18-66	2 72	29,300	21,300	27,200	2,700		Note 1
Aug-23-66	3.30	35,900	19,200	27,500	1,100		Note 1
Sep-06-66	2.23	24,100	20,100	18,500	1,100		Note 1
Sep-07-66	2.23	22,300	24,800	16,700	1,100		Note 1
Sep-08-66	2.23	26,800	29,000	22,300	1,500		Note 1
Sep-13-66	3 17	37,000	47,600	29,000	5,200		Note 1
Sep-21-66	3.17		31,000				Note 1
Sep-29-66	2.23	29,700	41,500	26,100	750		Note 1
Oct-04-66	3 17	39,600	43,000	28,000			Note 1
Oct-12-66	2.93	34,100	31,300	29,300			Note 1
Oct-13-66	2 81	30,500	16,900	28,100	1,800		Note 1
Oct-17-66	2 23	26,000	14,900	**20,400**	1,500	R	Note 1
Oct-18-66	2 46	24,600	14,000	22,600	400		Note 1
Oct-19-66	2 23	24,000	13,700	17,100	1,500		Note 1
Oct-20-66	2.23	26,000	12,600	18,500	1,500		Note 1
Oct-21-66	2.23	22,300	27,100	18,600	1,500		Note 1
Oct-24-66	1 91	17,400	18,400	12,700	1,000		Note 1
Nov-08-66	1 71	21,300	22,100	17,000	1,100		Note 1
Nov-11-66	2.33	21,300	17,500	21,300	1,100		Note 1
Nov-22-66		14,000	16,900	10,500	200		Note 1
Dec-12-66	0 44	3,600	1,300	3,600	50		Note 1
Dec-14-66	0 57			5,200			Note 1
Dec-16-66	0 57	6,200	6,900	5,700	400		Note 1
Dec-19-66	0 57	4,800	3,900	3,800	300		Note 1
Dec-21-66	0.50	5,000	5,300	4,600	400		Note 1
Dec-28-66	0 72	5,200	7,200	4,700	200		Note 1
Dec-30-66	0 72	7,800	5,800	6,000	250		Note 1
Jan-04-67	0 88	24,000	29,500	8,000	150		Note 1
Jan-06-67	0 72	23,000	16,400	6,600	350		Note 1
Jan-09-67	0 41	17,800	21,400	3,400	500		Note 1
Jan-11-67	0 38	21,700	15,300	3,700	200		Note 1
Jan-13-67	0 44	25,300	15,200	4,300	200		Note 1
Jan-16-67	1 22	28,300	26,300	11,100	4,000		Note 1
Jan-18-67	1 22	27,600	32,200	11,100	1,000		Note 1
Jan-20-67	1 39			17,400	900		Note 1
Jan-25-67	0 87	24,500	29,000	6,600	5,800		Note 1
Feb-15-67	0 57	27,300	13,600	5,200	950		Note 1
Feb-17-67	0 57	32,000	22,700	3,300	600		Note 1
Feb-20-67	0 50	21,300	13,700	4,200	700		Note 1
Feb-22-67	0 37	28,800	22,000	4,900	1,200		Note 1
Feb-24-67	0 88	33,500	24,500	10,000	500		Note 1
Feb-27-67	0 72	21,000	25,200	3,600	200		Note 1
Mar-01-67	0 57	21,700	33,000	4,800	100		Note 1
Mar-03-67	0 44	26,000	23,500	4,400			Note 1
Mar-06-67	0 57	29,000	29,000	4,800	100		Note 1

CONFIDENTIAL BUSINESS INFORMATION

Appendix 14a-B
Allied King Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Mar-08-67	0.57	25,900	27,900	4,300	200		Note 1
Mar-13-67	0.58	29,600	10,900	6,200			Note 1
Mar-15-67	0.58	27,300	25,000	6,700	400		Note 1
Mar-20-67	0.64	25,100	33,900	5,400	1,100		Note 1
Mar-22-67	0 50	21,700	28,400	8,300	250		Note 1
Mar-24-67	0.72	41,000	36,700	7,700	700		Note 1
Mar-27-67	0 57	25,200	25,800	5,300			Note 1
Mar-29-67	0.88	16,500	29,500	4,400	450		Note 1
Mar-31-67	0.80	28,200	17,500	10,000			Note 1
Apr-03-67	0 89	30,600	38,600	9,500	500		Note 1
Apr-05-67	1.13	20,400	21,500	5,600	250		Note 1
Apr-07-67	0 39						Note 1
Apr-10-67	0 72	31,000	20,400	7,800	850		Note 1
Apr-12-67	0 88	25,800	26,100	8,000	150		Note 1
Apr-14-67	0.57	25,100	22,600	5,700	300		Note 1
Apr-17-67	0.57	23,100	31,300	4,800			Note 1
Apr-19-67	0.20	26,600	23,600	3,500			Note 1
Apr-21-67	0 15	24,400	31,400	1,800	250		Note 1
Apr-24-67	0.28	23,400	21,800	1,600	1,300		Note 1
Apr-26-67	0 28	21,800	15,700	2,700			Note 1
Apr-28-67	0 28	27,300	30,300	2,800	400		Note 1
May-01-67			402				Note 1
May-13-67	**0.97**				**583**	**R**	**MDNR 003652-56 (WRC)**
May-14-67	**0.57**				**219**	**R**	**MDNR 003652-56 (WRC)**
Jun-07-67	2 15	25,900	13,600	25,100	1,600		Note 1
Jun-08-67	2 26	22,600	13,700	22,600	3,600		Note 1
Jun-13-67	0 57	7,200	5,400	6,900	400		Note 1
Jun-14-67	0 57		6,200		330		Note 1
Jun-19-67	1 40	19,300	16,300	17,500	200		Note 1
Jun-21-67	0 57	6,200	25,600	6,200			Note 1
Jun-23-67				4,000			Note 1
Jun-26-67	0 31	18,900	12,300	2,600	1,600		Note 1
Jun-28-67	0.20	20,800	18,100	2,300	700		Note 1
Jun-30-67	0 20	22,200	34,500	2,300	300		Note 1
Jul-05-67	1 13	12,000	7,800	12,000	600		Note 1
Jul-07-67	0 20	13,100	18,400	2,300			Note 1
Jul-10-67	0 31	23,100	25,100	2,600			Note 1
Jul-12-67	0 31	32,700	15,800	4,100			Note 1
Jul-14-67	0 25	27,600	24,100	3,800			Note 1
Jul-17-67	1 40	14,000	13,600	1,200	500		Note 1
Jul-19-67	0 64	25,700	25,200	4,900	900		Note 1
Jul-20-67	0 38	33,800	16,000	4,700	600		Note 1
Jul-24-67	0 50	28,200	18,800	4,600	400		Note 1
Jul-26-67	0 64	24,000	20,600	5,900	700		Note 1
Jul-28-67	0 80	26,100	22,400	5,200	1,000		Note 1
Jul-31-67	0 44	25,300	24,300	2,900	650		Note 1
Aug-02-67	0 50	31,300	31,800	5,900			Note 1
Aug-04-67	0 80	23,700	20,500	5,300	500		Note 1
Aug-07-67	0 64	28,400	30,500	6,500			Note 1
Aug-09-67	1 04	28,300	43,700	9,500			Note 1
Aug-11-67	0 88	28,800	20,000	8,700			Note 1
Aug-14-67	0 64	25,900	22,400	6,500			Note 1

Appendix 14a-B
Allied King Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Aug-16-67	0 80	22,300	26,400	6,600	500		Note 1
Aug-21-67	0 72	25,200	25,700	6,600	400		Note 1
Aug-23-67	0 80	24,100	32,400	6,500	200		Note 1
Aug-25-67	0 96	31,300	41,200	9,600	150		Note 1
Aug-28-67	1 04	20,800	23,800	8,400	700		Note 1
Aug-30-67	0 88	26,400	14,900	8,000	300		Note 1
Sep-06-67	1 22	24,500	25,500	10,000	600		Note 1
Sep-08-67	0 88	27,100	23,200	7,300	900		Note 1
Sep-11-67	1 21	32,500	23,000	12,200	8,100		Note 1
Sep-13-67	1 13	27,500	25,500	9,300	200		Note 1
Sep-15-67	1 40	35,400	19,600	15,200			Note 1
Sep-18-67	2 93	26,900	17,100	24,500	1,500		Note 1
Sep-20-67	1 22	19,100	11,500	10,000			Note 1
Sep-22-67	1 22	35,100	18,500	14,100	800		Note 1
Sep-25-67	0 96	32,600	20,000	9,600	500		Note 1
Sep-29-67	0 96	29,000	16,800	11,100	300		Note 1
Oct-02-67	0 87	29,600	31,400	8,000	300		Note 1
Oct-04-67	1 22	35,000	26,300	12,200	400		Note 1
Oct-06-67	1 04	25,500	20,100	8,600			Note 1
Oct-09-67	2 70	22,500	19,300	22,500	1,300		Note 1
Oct-11-67	0 88	40,400	19,300	11,700	500		Note 1
Oct-13-67	1 04	37,400	18,700	10,400			Note 1
Oct-16-67	2 12	21,200	12,400	12,400	3,500		Note 1
Oct-18-67	2 46	22,600	19,300	20,400	1,200		Note 1
Oct-20-67	2 46	21,400	11,900	21,400	2,500		Note 1
Oct-25-67	2 81	28,100	24,400	28,100	1,500		Note 1
Oct-27-67	2 70	26,200	21,600	25,000	1,300		Note 1
Oct-30-67	2 93	24,500	26,400	17,100			Note 1
Nov-01-67	2 50	12,500	18,200	12,500			Note 1
Nov-06-67	2 58	25,800	21,100	21,500	500		Note 1
Nov-08-67	3 17	37,100	24,300	31,700	1,000		Note 1
Nov-10-67	3 17	29,000	24,500	26,400	1,100		Note 1
Nov-13-67	2 93	29,400	19,600	24,400	500		Note 1
Nov-15-67	2 81	18,700	16,400	18,700	900		Note 1
Nov-17-67	3 05	30,500	16,800	30,500	500		Note 1
Nov-20-67	2 46	20,500	15,600	16,400	400		Note 1
Nov-22-67	2 81	9,400	17,800	7,000	900		Note 1
Nov-27-67	2 46	26,700	21,000	24,600			Note 1
Nov-29-67	2 70	22,400	17,500	22,400	500		Note 1
Dec-01-67	2 70	26,900	12,400	22,400			Note 1
Dec-04-67	2 81	28,200	27,000	25,800			Note 1
Dec-06-67	2 70	29,200	19,300	27,000	1,300		Note 1
Dec-08-67	2 81	25,800	21,500	23,400	900		Note 1
Dec-11-67	2 70	31,400	20,800	29,200	1,800		Note 1
Dec-13-67	2 81	18,900	13,600	18,900	1,400		Note 1
Dec-15-67	2 93	29,300	15,000	24,300	1,500		Note 1
Dec-18-67	2 46	22,800	17,600	22,800	2,100		Note 1
Dec-20-67	2 70	22,500	13,900	20,200	1,800		Note 1
Dec-27-67	2 70	27,000	32,700	22,200	500		Note 1
Dec-29-67	2 70	18,000	18,400	13,400	1,800		Note 1
Jan-03-68	2 70	20,300	14,400	15,700			Note 1
Jan-05-68	2 70	29,200	12,100	27,000	400		Note 1

Appendix 14a-B
Allied King Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Jan-08-68	2 96	27,200	20,700	24,600	1,000		Note 1
Jan-10-68	2 96	34,400	19,700	32,100	500		Note 1
Jan-12-68	2 96	32,000	16,400	29,600	300		Note 1
Jan-15-68	2 96	24,600	22,700	19,700	500		Note 1
Jan-17-68	2 96	19,800	27,100	17,300	900		Note 1
Jan-19-68	2 96	32,000	13,800	32,000	1,000		Note 1
Jan-22-68	2 70	38,200	18,400	31,500	500		Note 1
Jan-24-68	2 70	15,800	23,900	15,800	900		Note 1
Jan-26-68	2 70	27,000	15,800	27,000	900		Note 1
Jan-29-68	2 23	20,500	10,100	20,500	700		Note 1
Jan-31-68	2 33	19,400	22,100	19,400	100		Note 1
Feb-01-68	2 81						Note 1
Feb 68	3 12				662		SA029101 SA029103
Feb-02-68	2 81	28,100	28,800	23,400	500		Note 1
Feb-05-68	4 22	35,200	35,800	31,500	1,400		Note 1
Feb-07-68	3 17	29,000	26,400	26,400	500		Note 1
Feb-09-68	4 08	26,400	25,100	19,200	500		Note 1
Feb-16-68	3 43	31,500	16,700	28,600	700		Note 1
Feb-19-68	3 43	28,500	23,000	28,500	1,100		Note 1
Feb-21-68	3 68	27,600	31,300	27,600	700		Note 1
Feb-23-68	3 43	31,500	27,400	28,600	1,100		Note 1
Feb-26-68	3 43	31,500	19,500	28,600	1,700		Note 1
Feb-28-68	3 43	34,300	28,000	28,800	500		Note 1
Mar-01-68	3 43	34,300	22,900	31,400	500		Note 1
Mar-04-68	2 70	29,200	19,400	22,400	1,300		Note 1
Mar-06-68	2 58	25,800	18,600	21,500	500		Note 1
Mar-08-68	2 70	27,000	20,600	27,000	400		Note 1
Mar-11-68	2 93	29,400	19,500	22,000	1,900		Note 1
Mar-13-68	3 43	37,100	22,300	31,300	600		Note 1
Mar-15-68	3 43	31,500	21,700	28,600			Note 1
Mar-18-68	3 55	29,300	27,700	29,300	600		Note 1
Mar-20-68	3 43	31,400	22,800	31,400	600		Note 1
Mar-22-68	3 68	33,700	24,400	30,700	700		Note 1
Mar-25-68	3 17	29,000	27,600	29,000			Note 1
Mar-27-68	3 43	28,600	20,000	28,600	1,100		Note 1
Mar-29-68	3 43	31,400	20,000	28,500			Note 1
Apr-01-68	3 68	33,700	27,200	30,600	2,400		Note 1
Apr-03-68	3 43	28,500	23,900	22,800	600		Note 1
Apr-05-68	3 43	31,500	25,700	28,500	600		Note 1
Apr-08-68	3 08	42,800	38,000	33,400			Note 1
Apr-10-68	1 75	16,800	14,700	14,500			Note 1
Apr-15-68	2 23	19,300	15,600	14,900	350		Note 1
Apr-17-68	1 60	11,400	11,100	10,700	250		Note 1
Apr-19-68	3 30	31,900	28,700	27,400	1,000		Note 1
Apr-22-68	2 46	27,400	25,500	18,400	1,200		Note 1
Apr-24-68	2 70	26,200	30,500	20,500	900		Note 1
Apr-26-68	2 70	26,900	23,700	22,500			Note 1
Apr-29-68	3 95	36,400	34,600	29,500	500		Note 1
May-01-68	3 95	37,500	32,800	29,600	700		Note 1
May-03-68	3 43	36,900	25,200	34,300			Note 1
May-13-68	3 43	37,200	24,600	34,300	1,700		Note 1
May-15-68	3 68	33,700	38,400	30,600	1,200		Note 1

CONFIDENTIAL BUSINESS INFORMATION

Appendix 14a-B
Allied King Mill Clarifier
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
May-17-68	3 68	24,400	26,400	24,400			Note 1
May-20-68	4 49	48,400	47,000	41,200	700		Note 1
May-22-68	3 95	39,500	39,500	39,500	650		Note 1
May-24-68	4 22	38,600	57,000	38,600	700		Note 1
May-27-68	4 08	32,300	34,000	28,600	450		Note 1
May-29-68	4 08	27,200	140,000	30,600	1,100		Note 1
May-31-68	2 93	36,700	26,400	33,000	740		Note 1
Jun-03-68	3 95	36,100	40,000	36,100	2,000		Note 1
Jun-04-68	2 93	46,200	44,600	26,800	500		Note 1
Jun-04-68	2 34				349	R	SA 029223-30 (WRC)
Jun-05-68	2 93	56,000	44,700	41 400	500		Note 1
Jun-05-68	2 72				408	R	SA 029223-30 (WRC)
Jun-19-68	3 05	25,400	33,700	22,800	1,000		Note 1
Jun-21-68	3 30	27,600	31,300	24,700	500		Note 1
Jun-24-68	2 70	20,100	34,200	18,000	400		Note 1
Jun-26-68	2 93	24,500	46,200	21,900	1,000		Note 1
Jun-28-68	3 81	31,700	35,500	31,700			Note 1
Jul-01-68	5 34	28,900	39,200	28,900	4,500		Note 1
Jul-03-68	4 49	30,000	37,400	28,200	3,000		Note 1
Jul-08-68	3 95	36,100	29,600	32,800	600		Note 1
Jul-10-68	4 35	43,500	36,200	43,500	3,600		Note 1
Jul-15-68	3 43	31,300	29,600	28,500	1,100		Note 1
Jul-17-68	2 12	24,800	19,500	14,100	1,000		Note 1
Jul-19-68		38,600	37,700	28,500	600		Note 1
Jul-22-68	3 05	48,500	52,000	22,800	500		Note 1
Jul-24-68	3 05			27,800	1,000		Note 1
Jul-26-68	3 05	48,400	51,200	22,800			Note 1
Jul-29-68	3 95	32,900	35,300	26,300	1,900		Note 1
Jul-31-68	4 09	23,900	43,400	23,900	2,700		Note 1
Aug-02-68	3 05	26,400	42,500	19,700	1,800		Note 1
Aug-05-68	3 17	21,200	32,900	18,500	1,600		Note 1
Aug-07-68	3 17	23,700	37,400	23,700	500		Note 1
Aug-09-68	3 30	30,200	28,500	30,200			Note 1
Aug-12-68	3 17	19,800	21,200	21,100	600		Note 1
Aug-14-68	4 49	33,600	51,600	37,400	1,500		Note 1
Aug-16-68	4 22	36,900	57,000	31,600	3,900		Note 1
Aug-19-68	3 81	34,800	36,700	28,600			Note 1
Aug-21-68	3 95	32,900	32,000	32,900	700		Note 1
Aug-23-68	4 08	33,400	57,400	30,100			Note 1
Aug-26-68	3 05	22,900	20,800	22,900			Note 1
Aug-28-68	3 05	25,500	24,300	25,500	500		Note 1
Aug-30-68	3 05	27,800	23,400	22,900	500		Note 1
Sep-04-68	2 93	24,400	28,600	19,500	500		Note 1
Sep-09-68	2 33	17,500	31,200	17,500			Note 1
Sep-11-68	2 33	21,300	26,100	16,700	700		Note 1
Sep-13-68	2 33	19,900	24,200	19,900	500		Note 1
Sep-16-68	2 33	19,400	22,600	17,400			Note 1
Sep-18-68	3 30	27,400	51,800	22,000	1,700		Note 1
Sep-20-68	3 53	29,400	59,700	29 400	500		Note 1
Sep-23-68	3 95	32,900	49,400		2,600		Note 1
Sep-25-68	4 65	38,700	74,400	31,000	1,500		Note 1
Sep-27-68	3 95	32,900	35,500	26,300	1,300		Note 1

Appendix 14a-B
Allied King Mill Clarifier
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Sep-30-68	3.30	35,700	26,400	27,500	100		Note 1
Oct-02-68	3.95	36,100	25,700	33,000			Note 1
Oct-04-68	2.93	54,200	34,200	26,900			Note 1
Oct-07-68	2.57	21,800	38,500	10,700	900		Note 1
Oct-09-68	2 46	29,300	25,900	20,600	1,000		Note 1
Oct-11-68	2.93						Note 1
Oct-14-68	3.68	24,500	26,200	27,600	1,500		Note 1
Oct-16-68	3.81	31,800	83,000	30,200	1,900		Note 1
Oct-18-68	3 95	32,900	43,500	29,600	2,300		Note 1
Oct-21-68	2.93	26,700	37,800	22,000	900		Note 1
Oct-23-68	4.22			24,600			Note 1
Oct-25-68	3 43	31,300	30,800	25,600			Note 1
Oct-28-68	3.05	25,500	25,400	22,900	500		Note 1
Oct-30-68	3 17	29,100	28,600	29,100	1,600		Note 1
Nov-01-68	3.95	39,500	35,700	36,100	600		Note 1
Nov-04-68	2 93	26,900	47,000	24,400			Note 1
Nov-06-68	3.05	20,400	48,700	17,700	1,000		Note 1
Nov-08-68	2.93	29,300	27,800	24,400	500		Note 1
Nov-11-68	2 19	18,300	31,800	18,300	700		Note 1
Nov-13-68	2 19	16,400	34,400	10,900			Note 1
Nov-15-68	2 19	23,800	29,300	18,200	1,800		Note 1
Nov-18-68	2 93	24,400	32,700	22,000	500		Note 1
Nov-20-68	2 70	22,500	26,100	20,200	900		Note 1
Nov-22-68	2 93	24,400	13,700	22,000			Note 1
Nov-25-68	2 93	24,400	37,600	19,500	1,500		Note 1
Nov-29-68	2 93	24,500	34,700	22,000	1,600		Note 1
Dec-02-68	2 93	24,400	26,400	22,000	500		Note 1
Dec-04-68	3 95	32,900	56,600	32,900	700		Note 1
Dec-06-68	3 95	33,000	30,900	29,600	700		Note 1
Dec-09-68	3 17	23,800	33,400	21,200	500		Note 1
Dec-11-68	3 43	28,600	36,600	25,700			Note 1
Dec-13-68	3 55	32,600	35,500	32,600			Note 1
Dec-16-68	4 49	37,300	42,600	29,900			Note 1
Dec-18-68	4 35	29,000	51,400	29,000	2,100		Note 1
Dec-20-68	4 35	36,200	36,200	32,600	1,400		Note 1
Dec-27-68	2 93	26,800	36,200	24,400			Note 1
Dec-30-68	1 71	28,600	29,200	14,200	300		Note 1
Jan-01-69	2 46	27,000	26,600	18,400			Note 1
Jan-03-69	2 33	29,000	43,400	15,500	800		Note 1
Jan-06-69	1 71	34,400	42,400	14,200	300		Note 1
Jan-08-69	2 46	39,000	43,900	22,500	800		Note 1
Jan-10-69	2 33	29,000	35,400	19,400			Note 1
Jan-13-69	3 17	34,900	70,200	28,200	500		Note 1
Jan-15-69	3 05	34,000	47,400	22,900	500		Note 1
Jan-17-69	3 30	43,200	53,300	33,000	1,000		Note 1
Jan-20-69	3 05	25,500	23,400	22,900	1,500		Note 1
Jan-22-69	2 46	18,500	20,500	18,500			Note 1
Jan-24-69	3 05	28,000	13,700	22,800	500		Note 1
Jan-27-69	3 17	41,800	39,800	23,800	1,000		Note 1
Jan-29-69	3 17	34,800	55,200	26,400	1,000		Note 1
Jan-31-69	2 93	39,400	38,000	24,400	1,500		Note 1
Feb-03-69	3 43	35,700	46,400	31,200			Note 1

Appendix 14a-B
Allied King Mill Clarifier
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Feb-05-69	3 43	21,600	36,000	14,300	600		Note 1
Feb-07-69	2 70	36,000	52,400	22,400			Note 1
Feb-10-69	2 01	21,900	30,100	15,100	1,000		Note 1
Feb-12-69	2 70	24,000	34,200	15,700	1,400		Note 1
Feb-14-69	2 46	33,600	58,700	20,500	400		Note 1
Feb-17-69	2 01	24,600	45,600	16,800	700		Note 1
Feb-19-69	2 69	27,100	49,700	14,000	900		Note 1
Feb-21-69	2 46	36,800	45,400	24,600			Note 1
Feb-24-69	3 95	57,400	62,300	36,300	700		Note 1
Feb-26-69	4 65	41,400	43,100	31,000	2,000		Note 1
Feb-28-69	4 35	57,500	55,000	39,800	1,600		Note 1
Mar-03-69	2 70	46,000	28,200	18,000	1,300		Note 1
Mar-05-69	2 01	21,900	19,600	13,900	1,000		Note 1
Mar-07-69	3 43	45,800	32,800	31,400			Note 1
Mar-10-69	2 93	36,000	43,400	22,000			Note 1
Mar-12-69	2 93	29,000	26,300	17,100	500		Note 1
Mar-14-69	2 12	36,500	45,500	22,900			Note 1
Mar-17-69	2 01	27,600	33,800	16,700	300		Note 1
Mar-19-69	2 01	27,700	38,200	16,500			Note 1
Mar-21-69	2 12	28,700	28,600	17,700	1,000		Note 1
Mar-24-69	3 17	29,100	29,000	26,400			Note 1
Mar-26-69	3 17	29,100	28,400	29,100	1,500		Note 1
Mar-28-69	3 43	34,300	33,700	28,400	1,100		Note 1
Mar-31-69	2 79	20,900	31,000	18,500	900		Note 1
Apr-02-69	2 70	15,700	22,900	15,700			Note 1
Apr-04-69	2 70	22,500	18,400	22,500	2,200		Note 1
Apr-07-69	3 56	32,400	31,400	26,600	600		Note 1
Apr-09-69	3 05	23,100	38,100	15,300			Note 1
Apr-11-69	2 66	32,400	25,400	22,100	800		Note 1
Apr-14-69	1 34	22,300	22,800	13,400			Note 1
Apr-16-69	1 67	23,400	23,000	9,800			Note 1
Apr-21-69	4 08	30,700	41,500	23,800	700		Note 1
Apr-23-69	2 66	29,600	42,500	19,900	500		Note 1
Apr-25-69	2 79	36,800	45,400	27,900	500		Note 1
Apr-28-69	2 00	24,400	23,900	15,000	300		Note 1
Apr-30-69	2 24	21,100	28,000	13,100			Note 1
May-02-69	2 00	26,800	31,300	16,700	800		Note 1
May-05-69	2 35	24,800	34,100	14,700	800		Note 1
May-07-69	2 35	13,800	30,300	11,800	400		Note 1
May-09-69	2 22	35,700	33,700	25,000	250		Note 1
May-12-69	2 26	31,700	37,000	20 700			Note 1
May-14-69	2 14	20,300	23,500	10,500			Note 1
May-16-69	2 26	34,300	41,500	18,800			Note 1
May-19-69	2 93	41,500	38,200	34,100			Note 1
May-21-69	3 95	42,700	52,200	36,000			Note 1
May-23-69	3 81	31,700	25,400	28,600			Note 1
May-26-69	3 68	27,700	39,700	24,500	600		Note 1
May-28-69	3 68	30,700	21,500	27,600			Note 1
Jun-02-69	3 68	30,700	43,400	30,700			Note 1
Jun-04-69	3 95	29,600	46,600	29,600			Note 1
Jun-06-69	3 68	33,700	31,900	30,600			Note 1
Jun-09-69	3 17	29,100	21,700	26,500			Note 1

Appendix 14a-B
Allied King Mill Clarifier
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Jun-11-69	3 17	21,100	26,400	21,100			Note 1
Jun-13-69	3 95	26,400	22,400	26,400			Note 1
Jun-16-69	2 27	29,100	19,500	18,900	600		Note 1
Jun-18-69	2 15	25,400	29,400	17,900			Note 1
Jun-20-69	2 27	28,500	35,000	20,400			Note 1
Jun-23-69	3 18	30,600	27,200	21,300			Note 1
Jun-25-69	2 03	31,600	39,100	17,000			Note 1
Jun-27-69	2 03	19,500	21,400	13,500			Note 1
Jun-30-69	2 04	29,300	26,900	18,700	350		Note 1
Jul-02-69	1 80	22,500	30,000	18,000	450		Note 1
Jul-07-69	2 93	31,800	23,500	29,500	300		Note 1
Jul-09-69	3 68	36,800	24,900	33,600	900		Note 1
Jul-11-69	3 68	33,800	21,500	30,600			Note 1
Jul-14-69	3 81	44,500	35,900	41,200			Note 1
Jul-16-69	3 95	19,700	44,700	16,500			Note 1
Jul-18-69	3 43	25,700	41,000	25,700	1,700		Note 1
Jul-21-69	3 68	30,700	40,000	27,600			Note 1
Jul-23-69	3 30	13,800	29,700	13,800	500		Note 1
Jul-25-69	3 55	35,500	29,000	29,600			Note 1
Jul-28-69	3 43	37,300	32,500	31,400	100		Note 1
Jul-30-69	3 55	29,900	35,500	26,600			Note 1
Aug-01-69	3 68	30,600	33,100	30,600	100		Note 1
Aug-04-69	3 43	22,800	30,200	22,800			Note 1
Aug-06-69	3 68	27,600	57,000	24,600	600		Note 1
Aug-08-69	3 55	26,600	23,200	20,600			Note 1
Aug-11-69	5 30	30,200	38,100	27,500	500		Note 1
Aug-13-69	3 43	28,500	36,700	25,600			Note 1
Aug-15-69	2 70	27,700	31,500	18,000	400		Note 1
Aug-18-69	2 81	35,000	41,800	23,300			Note 1
Aug-20-69	2 81	31,800	31,800	21,100			Note 1
Aug-22-69	2 81	28,700	44,500	22,500			Note 1
Aug-25-69	3 93	32,700	41,200	29,500			Note 1
Aug-27-69	3 17	23,800	31,200	21 100	600		Note 1
Aug-29-69	2 93	24,400	25,400	17,100			Note 1
Sep-04-69	3 30	27,400	33,000	24,700			Note 1
Sep-06-69	3 30	24,700	31,900	22,000			Note 1
Sep-08-69	3 68	30,600	52,100	27,600	600		Note 1
Sep-10-69	3 68	27,600	27,600	27,600	600		Note 1
Sep-12-69	4 65	34,300	39,100	25,100	400		Note 1
Sep-15-69	2 93	21,900	21,900	19,500			Note 1
Sep-17-69	2 93	24,500	19,100	24,500			Note 1
Sep-19-69	3 05	25,400	21,800	20,300			Note 1
Sep-22-69	2 93	21,900	17,100	19,600			Note 1
Sep-24-69	2 93	19,600	16,700	17,000			Note 1
Sep-26-69	3 17	26,400	21,200	21,100			Note 1
Sep-29-69	3 30	30,100	26,900	30,100			Note 1
Oct-01-69	3 81	31,800	31,100	28,600	600		Note 1
Oct-03-69	3 43	22,700	20,000	20,000	900		Note 1
Oct-06-69	3 05	25,400	19,800	20,300			Note 1
Oct-08-69	3 30	22,100	23,700	22 100	500		Note 1
Oct-10-69	2 81	25,700	22,300	23,400			Note 1
Oct-13-69	3 55	32,600	33,900	26,500	600		Note 1

CONFIDENTIAL BUSINESS INFORMATION

Appendix 14a-B
Allied King Mill Clarifier.
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Oct-15-69	3 43	28,500	47,200	25,600	500		Note 1
Oct-17-69	3 43	28,500	39,900	25,600			Note 1
Oct-20-69	3 68	36,800	41,700	28,600			Note 1
Oct-22-69	3 95	29,700	98,700	29,700	200		Note 1
Oct-24-69	4 22	31,600	49,600	28,000			Note 1
Oct-27-69	3 95	29,600	64,200	26,200	2,000		Note 1
Oct-29-69	3 95	29,400	36,900	25,700			Note 1
Oct-31-69	3 95	29,600	35,000	26,400			Note 1
Nov-03-69	3 95	32,900	54,000	32,900			Note 1
Nov-05-69	4 08	30,600	43,500	27,300			Note 1
Nov-07-69	4 08	30,700	36,600	30,700	600		Note 1
Nov-10-69	3 68	36,800	32,600	33,700	600		Note 1
Nov-12-69	3 68	27,600	46,600	21,400			Note 1
Nov-14-69	3 55	26,600	29,200	20,700	500		Note 1
Nov-17-69	2 23	22,300	54,500	18,600	750		Note 1
Nov-21-69	2 93	32,800	32,800	18,700	500		Note 1
Nov-24-69	3 56	32,700	31,000	26,600	1,100		Note 1
Nov-26-69	3 43	28,500	43,400	28,500	600		Note 1
Nov-28-69	3 18	26,500	31,200	23,800			Note 1
Dec-01-69	3 95	42,700	63,100	32,900	600		Note 1
Dec-03-69	3 81	28,500	37,100	25,500			Note 1
Dec-05-69	3 95	32,800	32,700	26,200	500		Note 1
Dec-08-69	3 55	35,600	43,700	26,600	600		Note 1
Dec-10-69	3 55	26,600	40,800	23,700			Note 1
Dec-15-69	3 68	33,600	35,600	27,600	1,200		Note 1
Dec-17-69	3 43	28,600	36,900	25,600	600		Note 1
Dec-19-69	3 81	38,200	51,400	38,200	1,300		Note 1
Dec-22-69	3 81	28,600	50,200	28,600	600		Note 1
Dec-29-69	3 55	26,600	38,600	23,600	100		Note 1
Dec-31-69	3 81	31,700	47,100	31,700	1,900		Note 1
Jan-02-70	3 81	38,100	56,000	35,000			Note 1
Jan-05-70	3 55	29,600	45,000	26,500			Note 1
Jan-07-70	3 55	26,600	49,200	23,600			Note 1
Jan-12-70	3 55	26,700	42,000	26,700	1,000		Note 1
Jan-14-70	3 55	35,800	39,600	35,600	1,000		Note 1
Jan-19-70	3 55	35,500	57,200	29,600	1,000		Note 1
Jan-21-70	3 55	32,500	62,400	29,600	600		Note 1
Jan-23-70	3 55	29,500	73,500	29,500	600		Note 1
Jan-26-70	3 55	29,600	43,400	29,600	600		Note 1
Jan-28-70	3 55	29,600	42,000	26,600	500		Note 1
Jan-30-70	3 55	26,700	45,600	20,700	600		Note 1
Feb-02-70	3 55	26,600	46,600	26,600	600		Note 1
Feb-04-70	3 55	27,400	42,000	26,600			Note 1
Feb-06-70	3 55	32,500	28,300	26,700			Note 1
Feb-09-70	3 55	29,000	44,400	23,700	600		Note 1
Feb-11-70	3 55	29,600	34,000	26,700	500		Note 1
Feb-13-70	3 55						Note 1
Feb-16-70	3 59	26,600	36,200	26,600			Note 1
Feb-18-70	3 55	23,000	40,000	13,600			Note 1
Feb-20-70		32,100	37,400	20,100			Note 1
Feb-23-70	3 43	28,600	51,700	25,600	600		Note 1
Feb-25-70	3 43	28,400	37,600	25,600	1,200		Note 1

Appendix 14a-B
Allied King Mill Clarifier
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Feb-27-70	3.68	33,800	33,100	27,600	600		Note 1
Mar-02-70	2 43	24,400		21,900	500		Note 1
Mar-04-70	2.60	12,500		16,700	400		Note 1
Mar-06-70	2.81	23,400	26,300	21,000	600		Note 1
Mar-16-70		26,500	23,600	21,600			Note 1
Mar-18-70		15,200	29,700	16,500	600		Note 1
Mar-20-70	3.17			20,500	900		Note 1
Apr-06-70	3 05	25,400	30,500	25,400	500		Note 1
Apr-08-70	3 17	26,400	22,700	26,400	300		Note 1
Apr-10-70	3 95	39,500	23,700	36,300	700		Note 1
Apr-13-70	3.67	27,600	44,200	24,300	300		Note 1
Apr-15-70	3.04	20,400	26,400	15,200			Note 1
Apr-17-70	2 93	24,500	33,700	22,000	500		Note 1
Apr-20-70	3.10	13,500	23,000				Note 1
Apr-22-70	2.93	12,000		12,000			Note 1
Apr-24-70	3 15	15,400		15,400			Note 1
Apr-27-70	3 68	33,700	36,300	30,700			Note 1
Apr-29-70	3.68	21,500	37,400	15,400			Note 1
May-04-70	2.93	22,000	29,300	19,500			Note 1
May-06-70	2.93	18,300	39,000	14,700			Note 1
May-08-70	3 05	25,100	27,400	21,300			Note 1
May-11-70	3.68	30,700	27,600	29,000	600		Note 1
May-13-70	3.68	18,400	52,700	18,400			Note 1
May-15-70	3 30	33,000	23,100	24,700			Note 1
May-18-70	3 30	27 400	36,200	24,700	1,000		Note 1
May-20-70	3 30	23,900	31,400	19,100	500		Note 1
May-22-70	3 42	34,300	37,700	25,600	600		Note 1
May-25-70	2 93	31,700	47,900	24,400			Note 1
May-27-70	2 93	19,500	41,400	17,100			Note 1
May-29-70	3 17	31,700	41,000	26,400			Note 1
Jun-01-70	2 93	29,400	30,300	27,000			Note 1
Jun-03-70	2 81	16,400	33,300	14,000	500		Note 1
Jun-05-70	2 93	22,000	39,000	19,500	1,000		Note 1
Jun-08-70	3 17	21,100	25,900	21,100			Note 1
Jun-10-70	3 17	23,800	37,000	21,800	500		Note 1
Jun-12-70	2 93	24,400	24,800				Note 1
Jul-08-70	2 46	18,500	27,900	18,500	400		Note 1
Jul-10-70	2 48	20,500	27,300	16,400	1,100		Note 1
Jul-13-70	2 81	23,400	30,000	23,400	500		Note 1
Jul-15-70	2 33	21,000	30,000	21,000	400		Note 1
Jul-17-70	2 81	28,200	21,100	28,200			Note 1
Jul-22-70	3 17	21,100	45,000	15,800	300		Note 1
Jul-24-70	3 17	29,100	29,500	30,100			Note 1
Jul-27-70	3 55	41,400	41,700	35,500			Note 1
Jul-29-70	3 68	15,400	42,400	12,200			Note 1
Jul-31-70	3 81	35,000	45,100	31,700			Note 1
Aug-03-70					0		Note 1
Aug-05-70	3 17	21,000		15,100			Note 1
Aug-07-70	3 08	39,700	47,200	36,800	1,200		Note 1
Aug-19-70	3 43	25,800	26,800	20,000	1,000		Note 1
Aug-21-70	3 30	27,500	35,000	22,000	800		Note 1
Aug-24-70	3 17	29,000	30,600	26,000	300		Note 1

Appendix 14a-B
Allied King Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Aug-26-70	3.55	20,400	49,900	22,400			Note 1
Aug-28-70	3.55	23,600	40,000	20,700			Note 1
Sep-02-70	3.68	27,600	29,000	18,800			Note 1
Sep-04-70	3.68	33,800	28,900	30,600			Note 1
Sep-09-70	2.70	15,800	36,000	13,500			Note 1
Sep-11-70	2.93	29,300	44,400	26,900	1,000		Note 1
Sep-20-70	2.93	29,300	25,500	24,100	500		Note 1
Sep-22-70	3.20	14,600	39,100	14,600			Note 1
Sep-24-70	2.93	24,400	39,100	21,300	600		Note 1
Sep-28-70	2.93	26,800	24,400	15,500	1,400		Note 1
Sep-30-70	3.30	19,200	44,200	19,200			Note 1
Oct-02-70	2.46		29,600		400		Note 1
Oct-12-70	3.17	23,700	37,100	21,000			Note 1
Oct-14-70	3.30	21,900	35,300	19,200			Note 1
Oct-19-70	2.81	21,000	34,300	16,400	500		Note 1
Oct-21-70	2.93	22,000	34,700	19,500	500		Note 1
Oct-26-70	2.81	18,700	32,700	18,700	500		Note 1
Oct-28-70	2.93	24,400	34,200	22,000			Note 1
Nov-16-70	2.93	19,600	40,000	17,100	1,000		Note 1
Nov-18-70	2.93	17,100	23,500	14,600	300		Note 1
Nov-20-70	2.93	22,000	35,000	19,500	500		Note 1
Nov-23-70	3.43	28,500	42,700	28,500	900		Note 1
Nov-25-70	2.93	27,000	56,200	22,000	1,000		Note 1
Nov-30-70	3.17	23,800	41,200	23,800	500		Note 1
Dec-02-70	3.17	23,800	43,200	15,800	800		Note 1
Dec-04-70	3.43	28,400	46,300	25,700	1,700		Note 1
Dec-07-70	3.17	26,500	47,200	26,500	1,500		Note 1
Dec-09-70	2.93	46,200	28,300	17,200	1,000		Note 1
Dec-11-70	3.17	29,100	41,400	26,300	900		Note 1
Dec-14-70	3.29	27,400					Note 1
Dec-16-70	3.40	22,900	43,400	22,900	600		Note 1
Dec-18-70	3.43	32,600	45,000	23,600	300		Note 1
Dec-21-70	3.17	26,400	30,600	21,100			Note 1
Dec-23-70	3.30	24,700	42,200	22,700			Note 1
Dec-28-70					300		Note 1
Dec-30-70	3.43	28,500	39,400	25,700	300		Note 1
Jan-04-71		25,600	43,500	15,900	600		Note 1
Jan-11-71	3.23	25,600	48,700	25,600	600		Note 1
Jan-18-71	3.30	33,000	59,500	30,200	500		Note 1

Note 1 = Allied Data found in Bates # SA034834 to SA035050, SA035107 to SA035474, SA035584, SA035586, SA035615

Blanks indicate no monitoring data

SS = Suspended solids; DS = Dissolved solids, BOD = Biolgical Oxygen Demand.

Loads (lb/day) converted from PPM or mg/L using: Concentration (ppm or mg/L) x Flow (MGD) x 8.33.

Rev? = R indicates revision from original submittal (revision shown in bold).

CONFIDENTIAL BUSINESS INFORMATION

APPENDIX 14A-C

Appendix 14a-C
Allied Monarch Mill Clarifier
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
1955	5.60				25,011	R	Kendrick Exhibit 561
Jul-28-55	5.80		48,450		15,440	R	063803 - 063808 (WRC)
Jul-29-55	5.58		52,720		22,898	R	063803 - 063808 (WRC)
Jul-30-55	5.86		47,148		21,009	R	063803 - 063808 (WRC)
Jul-31-55	4.75		1,218		1,929	R	063803 - 063808 (WRC)
Aug-01-55	5.53		44,821		17,304	R	063803 - 063808 (WRC)
Aug-02-55	5.75		52,944		18,633	R	063803 - 063808 (WRC)
Aug-03-55	5.28		39,920		12,981	R	063803 - 063808 (WRC)
Jan 56	3.66				17,558	R	KA04600384 (WRC)
Jan-10-56	3.54		44,190		15,043	R	063797 - 063802 (WRC)
Jan-11-56	3.73		44,782		17,280	R	063797 - 063802 (WRC)
Jan-12-56	3.69		48,820		18,906	R	063797 - 063802 (WRC)
Jan-13-56	3.53		44,060		20,586	R	063797 - 063802 (WRC)
Jan-14-56	3.43		32,304		15,112	R	063797 - 063802 (WRC)
Jan-15-56	0.65		754			R	063797 - 063802 (WRC)
Jan-16-56	4.05		46,179		14,680	R	063797 - 063802 (WRC)
Sept/Oct-1956	5.25		49,900		19,200	R	KA050001172; SA029197
Dec-31-56	4.73	59,800	44,800		19,750		Note 1
Jan-01-57	4.63	57,800	43,850		27,000		Note 1
Jan-02-57	4.53	41,500	46,700		22,700		Note 1
Jan-03-57	4.77	59,700	50,000		26,300		Note 1
Jan-04-57	4.49	41,200	64,400		38,950		Note 1
Jan-07-57	4.50	41,850	39,800		16,500		Note 1
Jan-08-57	2.80	23,350	24,300		10,300		Note 1
Jan-09-57	4.67	46,700	46,000				Note 1
Jan-10-57	4.60	42,700	34,600				Note 1
Jan-11-57	4.10	37,600	26,700		21,900		Note 1
Mar-06-57	1.87	9,360	16,700				Note 1
Mar-25-57	2.42	20,200	48,600		4,620		Note 1
Mar-26-57	2.08	15,600	46,500				Note 1
May-28-57	4.30	44,800	46,600		25,100		Note 1
May-29-57	4.30	21,500	36,600		12,900		Note 1
Dec-30-57	5.05	61,100	41,700		8,840		Note 1
Dec-31-57	3.95						Note 1
Jan-01-58	4.00						Note 1
Jan-02-58	5.00	73,000	49,600		12,900		Note 1
Jan-03-58	5.00	58,400	41,200				Note 1
Jan-04-58	5.20						Note 1
Jan-06-58	5.35	60,700	24,300	60,800	2,090		Note 1
Jan-07-58	5.30	73,600	48,600		12,050		Note 1
Jan-08-58	5.25	68,500			4,860		Note 1
Jan-09-58	5.00	59,000	56,500		12,700		Note 1
Jan-10-58		41,600	60,500		17,100		Note 1
Jan-13-58	5.05	75,800	137,100		17,700		Note 1
Jan-14-58	4.75	55,500	75,200		15,850		Note 1
Jan-15-58	5.20	73,800	46,800		17,350		Note 1
Jan-16-58	4.55	39,800	44,750				Note 1
Dec-09-59	1.75	7,300	22,400		875		SA035334, SA035356
Dec-10-59	1.75				600		SA035334, SA035356
Dec-15-59	1.60	8,000	29,600				SA035334, SA035356
Dec-16-59	1.75	13,100	45,500				SA035334, SA035356
Dec-17-59	1.75	2,900	29,400		875		SA035334, SA035356

Appendix 14a-C
Allied Monarch Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Dec-22-59	1.75						SA035334, SA035356
Dec-23-59	1.75						SA035334, SA035356
Dec-29-59	2.45				8,100		SA035334, SA035356
Dec-30-59	2.35						SA035334, SA035356
Dec-31-59	2.50						SA035334, SA035356
Jan-05-60	2.25						Note 1
Jan-06-60	1.90	3,200	29,800				Note 1
Jan-07-60	1.75						Note 1
Jan-12-60	1.85	6,200	24,600				Note 1
Jan-13-60	1.80	9,000	49,200		300		Note 1
Jan-14-60	1.75	11,700	37,300		290		Note 1
Jan-19-60	1.75				290		Note 1
Jan-20-60	1.85	4,600	19,100	5,500	300		Note 1
Jan-21-60	2.15						Note 1
Jan-26-60	1.75				2,600		Note 1
Jan-27-60	1.75				200		Note 1
Jan-28-60	1.90				300		Note 1
Feb-02-60	1.55	3,900	17,000		500		Note 1
Feb-03-60	1.40	4,600	27,300				Note 1
Feb-04-60	1.40						Note 1
Feb-09-60	1.75						Note 1
Feb-10-60	1.75						Note 1
Feb-11-60	1.75						Note 1
Feb-17-60	1.55	4,700	73,800		470		Note 1
Feb-18-60	2.55	7,700	49,700		260		Note 1
Feb-19-60	2.50						Note 1
Feb-23-60	0.75	2,200	6,900				Note 1
Feb-24-60	0.50	1,200	4,100		160		Note 1
Feb-25-60	0.50				160		Note 1
Mar-01-60	0.75	2,500	4,200		460		Note 1
Mar-02-60	0.65				750		Note 1
Mar-03-60	0.75	2,500	3,200		1,000		Note 1
Mar-08-60	0.75	3,100	37,000		2,500		Note 1
Mar-09-60	0.90	5,200	12,600		600		Note 1
Mar-10-60	0.85	2,100	12,200				Note 1
Mar-15-60	0.75	2,500	4,700		600		Note 1
Mar-16-60	0.65	2,100	4,300				Note 1
Mar-17-60	0.80	3,300	4,100		500		Note 1
Mar-22-60	0.45	1,500	6,600				Note 1
Mar-23-60	0.65	1,100	1,600		400		Note 1
Mar-24-60	0.65	2,700	7,500				Note 1
Mar-29-60	0.65	2,160	24,400				Note 1
Mar-30-60	0.60		13,900				Note 1
Mar-31-60	0.60						Note 1
Apr-05-60	0.70	2,300	6,600				Note 1
Apr-06-60	0.75						Note 1
Apr-07-60	0.70	1,750	20,900		100		Note 1
Apr-12-60	0.75	2,700	11,500				Note 1
Apr-13-60	0.40						Note 1
Apr-14-60	0.50				400		Note 1
Apr-19-60	0.70	4,800	18,000		100		Note 1
Apr-20-60	0.65	8,100	28,700		800		Note 1

Appendix 14a-C
Allied Monarch Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Apr-21-60	0.65	2,100	35,400				Note 1
Apr-26-60	0.50	2,700	16,200		400		Note 1
Apr-27-60	0.70	2,300	21,400		100		Note 1
Apr-28-60	0.75	3,100	16,200		400		Note 1
May-04-60	0.65						Note 1
May-05-60	0.50	1,600	300				Note 1
May-10-60	0.30						Note 1
May-11-60	0.65						Note 1
May-12-60	0.70	2,900	11,300		300		Note 1
May-17-60	0.75	2,500	14,900				Note 1
May-18-60	0.80	2,600	13,300				Note 1
May-19-60	0.80	1,300	3,400				Note 1
May-24-60	0.95						Note 1
May-25-60	0.90	3,000	13,800				Note 1
May-26-60	0.90	2,200	4,900				Note 1
May-31-60	1.00	2,500	2,200		500		Note 1
Jun-01-60	0.90				600		Note 1
Jun-02-60	0.95	2,400	4,400		300		Note 1
Jun-07-60	0.95	4,700	5,400		500		Note 1
Jun-08-60	1.00	4,200	5,300		800		Note 1
Jun-09-60	1.05				350		Note 1
Jun-14-60	0.95	4,100	14,100		600		Note 1
Jun-15-60	0.75				100		Note 1
Jun-16-60	0.85	4,900	7,900				Note 1
Jun-21-60	0.85				280		Note 1
Jun-22-60	0.90	4,200	4,500		280		Note 1
Jun-23-60	0.75	2,500	3,900		750		Note 1
Jun-28-60	0.85	3,500	8,800		560		Note 1
Jun-29-60	0.50	2,200	9,100				Note 1
Jun-30-60	0.75	2,500	14,300		125		Note 1
Jul-05-60	0.75				125		Note 1
Jul-06-60	0.75						Note 1
Jul-07-60	0.85	2,500	12,700		140		Note 1
Jul-12-60	0.65	2,100	4,300				Note 1
Jul-13-60	0.50				800		Note 1
Jul-14-60	0.65						Note 1
Jul-19-60	0.75				125		Note 1
Jul-20-60	0.75				370		Note 1
Jul-21-60	0.75	2,500	8,700				Note 1
Jul-26-60	0.75	3,400			250		Note 1
Jul-27-60	0.90	3,750	11,250		150		Note 1
Jul-28-60	0.75	625	1,000		125		Note 1
Aug-02-60	0.75				250		Note 1
Aug-03-60	0.76				250		Note 1
Aug-04-60	0.90	3,000	1,600		600		Note 1
Aug-09-60	0.85	2,000	8,500		700		Note 1
Aug-10-60	0.95	2,400	6,800		3,900		Note 1
Aug-11-60	0.90						Note 1
Aug-16-60	0.95				600		Note 1
Aug-17-60	0.95						Note 1
Aug-18-60	0.80				5,300		Note 1
Aug-23-60	0.85	2,100	26,000		850		Note 1

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Appendix 14a-C
Allied Monarch Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Aug-24-60	0.90				1,500		Note 1
Aug-25-60	1.00	2,500	9,000		160		Note 1
Aug-30-60	1.00	1,700	18,300		800		Note 1
Aug-31-60	0.95	2,400	28,300		1,600		Note 1
Sep-01-60	0.90				120		Note 1
Sep-06-60	0.65				210		Note 1
Sep-07-60	0.55	1,800	5,200		550		Note 1
Sep-08-60	0.40	1,300	5,900				Note 1
Sep-13-60	0.35	900	4,700				Note 1
Sep-14-60	0.30	1,000	3,600				Note 1
Sep-15-60	0.25	600	3,100				Note 1
Sep-20-60	0.45	1,900	12,000		750		Note 1
Sep-21-60	0.40	1,600	9,400		1,300		Note 1
Sep-22-60	0.40	1,600	8,400		250		Note 1
Sep-27-60	0.50	2,100	7,700		200		Note 1
Sep-28-60	0.55				270		Note 1
Sep-29-60	0.60	3,500	11,100				Note 1
Oct-04-60	0.60	3,500	13,900				Note 1
Oct-05-60	0.60	3,500	16,000		400		Note 1
Oct-06-60	0.60						Note 1
Oct-11-60	0.60	3,000	20,200		400		Note 1
Oct-12-60	0.60	4,510	13,500				Note 1
Oct-13-60	0.60	5,520	16,300		300		Note 1
Oct-18-60	0.65	4,340	17,800		110		Note 1
Oct-19-60	0.60						Note 1
Oct-20-60	0.45	3,750	14,950				Note 1
Oct-25-60	0.45	3,380	26,600				Note 1
Oct-26-60	0.53	5,270	13,800				Note 1
Oct-27-60	0.45	3,380	12,400		450		Note 1
Nov-01-60	0.30	1,750	2,350				Note 1
Nov-02-60	0.40	2,670	3,600				Note 1
Nov-03-60	0.65						Note 1
Nov-08-60	0.60						Note 1
Nov-09-60	0.68	4,540	3,060				Note 1
Nov-10-60	0.65	4,880	2,820		220		Note 1
Nov-15-60	0.75	5,640	7,640		380		Note 1
Nov-16-60	0.55	4,130	3,760		270		Note 1
Nov-17-60	0.63	4,180	5,740		210		Note 1
Nov-22-60	0.73	4,840	5,090		480		Note 1
Nov-23-60	0.75						Note 1
Nov-29-60	0.65	4,890	6,730		330		Note 1
Nov-30-60	0.70	4,680	6,560		350		Note 1
Dec-01-60	0.73	6,060	8,600		480		Note 1
Dec-06-60	0.60	3,500	5,800				Note 1
Dec-07-60	0.55						Note 1
Dec-08-60	0.60	4,000	3,800				Note 1
Dec-13-60	1.08	6,280	12,200				Note 1
Dec-14-60	0.40	2,340	6,260		70		Note 1
Dec-15-60	0.70	5,250	6,190		120		Note 1
Dec-20-60	0.65	3,250	4,550		110		Note 1
Dec-21-60	0.65	3,800	5,750		110		Note 1
Dec-22-60	0.55						Note 1

Appendix 14a-C
Allied Monarch Mill Clarifier
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Dec-27-60	0 75	5,000	5,630		130		Note 1
Dec-28-60	0.70	4,670	4,080		120		Note 1
Dec-29-60	0.75	5,010	5,010				Note 1
Jun 61					200		SA033117 - SA033189
Jun-27-61	**1.51**				**213**	R	**SA 038997-039000 (WRC)**
March 1963	**1.50**		**4,500**		**500**	R	**NCASI 000128-31**
Mar-16-63	1.60		5,680				SA028974
Mar-17-63	1.50		4,250		500		SA028974
Mar-18-63	1.50		3,750		1,750		SA028970, SA028974
Apr-03-63	1.40		3,500				SA028974
Apr-04-63	1.45		3,390				SA028974
Apr-05-63	1.45		4,120				SA028974
May-21-63	1.79		18,200				Note 1
May-22-63	1.79		16,100				Note 1
May-23-63	1.79		19,200				Note 1
May-24-63	1.86		18,320				Note 1
Jun-21-65	1.79	8,400	18,200	8,900			Note 1
Jun-22-65	1.79	6,900	16,100	3,000			Note 1
Jun-23-65	1.79	9,000	19,200	6,000			Note 1
Jun-24-65	1.86	14,000	18,320	8,000			Note 1
Jun-28-65	1.79	16,400	6,260	10,400			Note 1
Jun-29-65	1.80	1,500	1,375	1,500			Note 1
Jun-30-65	1.80	6,000	15,000	6,000			Note 1
Jul-01-65	1.64	8,190	16,650	8,190			Note 1
Jul-07-65	1.63	5,400	17,200	1,300			Note 1
Jul-08-65	1.79	8,900	16,700	3,000			Note 1
Jul-13-65	1.71	7,400	18,300	4,400			Note 1
Jul-14-65	1.79	10,400	13,700	5,900			Note 1
Jul-15-65	1.79	10,400	14,800	8,900			Note 1
Jul-20-65	1.79	4,500	7,700	2,900			Note 1
Jul-21-65	1.87	9,400	20,400	6,200	1,200		Note 1
Jul-22-65	1.86	7,700	23,600	4,600	1,200		Note 1
Jul-27-65	1 55	3,900	9,350	3,900			Note 1
Jul-28-65	1.47	4,920	14,200	6,120			Note 1
Jul-29-65	1.87	7,800	12,500	6,230			Note 1
Aug-09-65	1.87	6,200	16,700	4,700			Note 1
Aug-10-65	1.79	10,500	19,400	7,400			Note 1
Aug-11-65	1 87	7,800	17,700	4,700			Note 1
Aug-12-65	1.94	8,100	18,200	6,400			Note 1
Aug-16-65	1.79	7,500	31,400	6,000			Note 1
Aug-17-65	1.94	6,500	35,400	4,800			Note 1
Aug-18-65	1.94	11,300	20,400	8,000			Note 1
Aug-19-65	1.94	8,100	12,300	6,500			Note 1
Aug-23-65	1.94	4,800	21,000	3,200			Note 1
Aug-24-65	1.94	6,500	23,600	6,500			Note 1
Aug-25-65	1.87	4,600	13,800	4,600			Note 1
Aug-26-65	1 87	9,400	15,300	7,800			Note 1
Aug-30-65	1.87	7,800	10,000	6,300			Note 1
Aug-31-65	1.79	6,000	13,400	4,500			Note 1
Sep-01-65	1.79	7,400	12,200	6,000			Note 1
Sep-02-65	1.79	9,000	9,800	7,500			Note 1
Sep-07-65	1 87	6,300	17,800	4,700			Note 1

Appendix 14a-C
Allied Monarch Mill Clarifier
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Sep-08-65	1.94	11,600	12,300	9,300			Note 1
Sep-09-65	1.87	6,300	10,600	4,600			Note 1
Sep-13-65	1.87	9,400	16,800	6,200			Note 1
Sep-14-65	1.87	6,200	16,900	6,200			Note 1
Sep-16-65	1.87	6,300	11,800	4,700			Note 1
Sep-20-65	1.87	6,200	16,600	4,700			Note 1
Oct-05-65	1.79	7,400	11,100	7,400			Note 1
Oct-06-65	1.87	7,700	19,600	6,200	2,500		Note 1
Oct-07-65	1.87	6,200	16,500	6,200			Note 1
Oct-12-65	1.87	6,300	20,600	4,700			Note 1
Oct-13-65	1.87	7,800	11,800	6,200			Note 1
Oct-14-65	1.94	6,500	19,400	6,500			Note 1
Oct-19-65	1.94	8,100	16,800	4,900			Note 1
Oct-20-65	1.94	8,100	14,200	6,500			Note 1
Oct-27-65	1.94	9,700	21,300	6,500			Note 1
Oct-28-65	1.94	8,100	16,800	6,500			Note 1
Nov-02-65	1.94	9,700	25,800	8,100	300		Note 1
Nov-03-65	1.87	6,200	12,900	4,700	250		Note 1
Nov-04-65	1.87	7,800	16,200	4,600			Note 1
Nov-09-65	1.79	7,500	23,800	7,500			Note 1
Nov-10-65	1.79	7,400	14,000	4,500			Note 1
Nov-11-65	1.87	9,400	16,600	4,700	1,200		Note 1
Nov-30-65	1.87	6,200	25,200	6,200			Note 1
Dec-01-65	1.96	8,100	31,800	4,900			Note 1
Dec-02-65	1.96	8,200	27,800	8,200			Note 1
Dec-07-65	1.87	3,100	22,400	4,600	2,500		Note 1
Dec-08-65	1.96	8,200	11,400	8,200	1,300		Note 1
Dec-09-65	1.92	7,900	5,200	9,600			Note 1
Dec-14-65	1.82	6,100	22,200	4,500			Note 1
Dec-15-65	1.82	9,100	13,600	7,600			Note 1
Dec-16-65	1.92	6,400	20,500	4,700			Note 1
Mar-08-66	1.64	6,800	6,600	6,800	300		Note 1
Mar-09-66	1.94	8,100	6,500	6,500	300		Note 1
Mar-10-66	1.94	9,800	10,200	9,800			Note 1
Mar-11-66	1.56	7,800	8,300	6,500			Note 1
Mar-14-66	1.63	9,500	10,100	9,500	800		Note 1
Mar-15-66	1.48	8,700	10,000	8,700			Note 1
Mar-16-66	1.55	9,000	12,900	9,000	520		Note 1
Mar-17-66	1.63	11,000	20,000	9,500	830		Note 1
Mar-18-66	1.71	10,000	18,500	10,000			Note 1
Mar-21-66	1.64	9,600	11,200	9,600			Note 1
Mar-22-66	1.64	9,600	15,400	8,200	1,380		Note 1
Mar-23-66	1.95	11,400	10,100	11,400	650		Note 1
Mar-24-66	1.72	11,500	11,500	10,000	850		Note 1
Mar-25-66	1.63	9,500	10,900	8,200	820		Note 1
Mar-28-66	1.48	7,400	16,500	7,400	200		Note 1
Mar-29-66	1.64	8,200	16,700	8,200	100		Note 1
Mar-30-66	1.71	7,100	11,900	8,600	120		Note 1
Mar-31-66	1.64	9,600	10,900	8,200	100		Note 1
Apr-01-66	1.64	12,300	17,000	9,600	800		Note 1
Apr-04-66	1.55	7,700	12,900	9,000	500		Note 1
Apr-05-66	1.64	5,400	16,400	8,200	1,100		Note 1

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Appendix 14a-C
Allied Monarch Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Apr-06-66	1.64	8,200	11,800	8,200	500		Note 1
Apr-07-66	1.71	10,000	8,000	10,000	1,100		Note 1
Apr-08-66	1.71	8,600	8,000	8,600	1,100		Note 1
Apr-11-66	1.71	7,100	9,500	8,600	1,700		Note 1
Apr-12-66	1.71	8,600	10,000	8,600	600		Note 1
Apr-13-66	1.71	11,400	11,100	10,000	800		Note 1
Apr-14-66	1.71	12,800	19,400	11,400	600		Note 1
Apr-15-66	1.63	11,900	13,700	8,200			Note 1
Apr-18-66	1.63	9,500	14,400	12,200	800		Note 1
Apr-19-66	1.71	7,100	14,800	8,500			Note 1
Apr-20-66	1.55	7,500	11,100	9,000	250		Note 1
Apr-21-66	1.71	10,000	15,200	8,600	850		Note 1
Apr-22-66	1.55	7,800	14,500	3,900	500		Note 1
Apr-25-66	1.63	8,200	12,000	6,800	800		Note 1
Apr-26-66	1.63	10,800	14,700	5,400	1,100		Note 1
Apr-27-66	1.63	9,500	14,400	4,100	800		Note 1
Apr-28-66	1.63	10,900	14,400	6,800			Note 1
Apr-29-66	1.55	10,300	10,400	7,700			Note 1
May-02-66	1.79	10,400	10,100	5,900			Note 1
May-03-66	1.86	9,300	9,200	4,700	600		Note 1
May-04-66	1.71	8,500	11,100	4,200	900		Note 1
May-05-66	1.63	8,200	13,000	4,100	800		Note 1
May-06-66	1.71	8,500	16,800	5,700	600		Note 1
May-09-66	1.63	9,500	14,000	9,500	1,600		Note 1
May-10-66	1.71	10,000	10,300	8,600	2,000		Note 1
May-11-66	1.63	9,500	10,900	6,800	1,600		Note 1
May-12-66	1.55	7,800	12,700	5,200	900		Note 1
May-13-66	1.71	7,100	12,200	7,100	1,400		Note 1
May-16-66	1.71	8,600	12,500	5,700	280		Note 1
May-17-66	1.63	8,100	13,000	6,800	270		Note 1
May-18-66	1.63	5,500	17,400	2,700	270		Note 1
May-19-66	1.63	9,500	10,800	9,500	800		Note 1
May-20-66	1.86	6,200	11,000	7,700	300		Note 1
May-23-66	1.86	12,400	26,000	10,800	1,600		Note 1
May-24-66	1.79	11,900	15,400	10,400			Note 1
May-25-66	1.79	7,400	10,000	8,900	100		Note 1
May-26-66	1.79	10,400	23,800	10,400			Note 1
May-27-66	1.55	10,300	9,600	9,500	13,000		Note 1
May-30-66	1.71	7,100	13,100	8,600			Note 1
May-31-66	1.79	10,400	14,300	10,400	900		Note 1
Jun-01-66	1.48	11,100	8,500	9,900	600		Note 1
Jun-02-66	1.79	8,900	14,300	6,000	600		Note 1
Jun-03-66	1.79	9,000	18,500	8,600	600		Note 1
Jun-06-66	1.79	13,400	12,400	11,600			Note 1
Jun-07-66	1.55	7,750	10,300	6,500	250		Note 1
Jun-08-66	1.63	9,500	8,700	8,150	100		Note 1
Jun-09-66	1.71	7,100	11,600	7,100			Note 1
Jun-10-66	1.86	9,300	14,300	8,600	700		Note 1
Jun-13-66	1.86	9,300	17,200	9,300	900		Note 1
Jun-14-66	1.79	11,900	12,000	8,950	300		Note 1
Jun-15-66	1.86	7,750	11,500	6,200	500		Note 1
Jun-16-66	1.79	10,400	12,700	7,400			Note 1

CONFIDENTIAL BUSINESS INFORMATION

Appendix 14a-C
Allied Monarch Mill Clarifier
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Jun-17-66	1.71	8,500	12,300	9,900	600		Note 1
Jun-20-66	1.79	10,900	11,200	7,400	500		Note 1
Jun-21-66	1.79	8,900	8,100	4,500	300		Note 1
Jun-22-66	1.71	7,100	12,500	5,700	300		Note 1
Jun-23-66	1.79	7,400	8,700	4,500			Note 1
Jun-24-66	1.79	12,000	16,000	7,400			Note 1
Jun-27-66	1.86	12,400	25,400	4,700	300		Note 1
Jun-28-66	1.70	7,400	16,000	4,600			Note 1
Jun-29-66	1.71	8,900	15,800	5,700			Note 1
Jun-30-66	1.71	11,900	16,700	7,400	300		Note 1
Jul-01-66	1.94	11,300	17,500	4,800	600		Note 1
Jul-05-66	1.27	8,500	11,600	4,200	400		Note 1
Jul-13-66	1.27	5,300	13,700	4,200			Note 1
Jul-21-66	1.48	7,400	28,000	4,900	1,300		Note 1
Jul-26-66	1.27	6,000	13,700	4,200	600		Note 1
Aug-02-66	1.06	7,100	8,000	5,800	200		Note 1
Aug-10-66	1.34	5,600	24,800	4,500	600		Note 1
Aug-18-66	1.86	10,900	17,400	6,100	900		Note 1
Aug-23-66	1.79	4,500	18,400	4,500	1,200		Note 1
Aug-31-66	1.94	8,100	11,300	1,600	600		Note 1
Sep-08-66	2.27	13,300	27,100	7,600			Note 1
Sep-14-66	1.48	8,600	11,100	6,200			Note 1
Sep-27-66	1.40	16,000	5,600	11,700	200		Note 1
Oct-04-66	1.55	7,700	14,800	3,900			Note 1
Oct-14-66	1.48	6,300	7,800	1,200			Note 1
Oct-20-66	1.55	7,800	9,600	3,900	500		Note 1
Oct-25-66	1.48	7,400	14,300	3,700	200		Note 1
Nov-03-66	1.91	4,900	10,800	3,200			Note 1
Nov-15-66	1.79	4,500	11,000	3,000			Note 1
Nov-22-66	1.76	4,900	6,300	3,000	100		Note 1
Dec-06-66	1.48	5,000	11,600	3,700			Note 1
Dec-13-66	1.48	6,100	4,700	4,900	200		Note 1
Dec-21-66	1.40	4,700	8,600	3,500	450		Note 1
Dec-29-66	1.45	6,000	12,100	4,700	500		Note 1
Jan-04-67	1.45	6,000	6,100	6,000	500		Note 1
Jan-13-67	1.45	7,300	9,000	4,800	700		Note 1
Jan-16-67	1.45	6,000	9,200	3,600	500		Note 1
Jan-23-67	1.45	2,400	9,500	2,400	700		Note 1
Feb-15-67	1.45	6,000	6,800	4,800	500		Note 1
Feb-24-67	1.50	6,200	5,000	6,200	500		Note 1
Feb-27-67	1.50	3,700	11,400	2,500	250		Note 1
Mar-08-67	1.50	3,700	10,000	3,700	500		Note 1
Mar-17-67	1.45	4,800	4,100	4,800			Note 1
Mar-22-67	1.79	2,900	2,700	1,500	100		Note 1
Mar-27-67	1.71	7,100	10,400	7,100			Note 1
Apr-05-67	1.71	4,300	11,900	1,400			Note 1
Apr-14-67	1.71	7,100	10,800	5,700			Note 1
Apr-17-67	1.71	7,100	18,000	7,100			Note 1
Apr-26-67	1.71	1,400	13,400		100		Note 1
May 67					**372**	**R**	**na**
May-13-67	**2.13**				**496**	**R**	**MDNR 003652-56 (WRC)**
May-14-67	**1.86**				**248**	**R**	**MDNR 003652-56 (WRC)**

Appendix 14a-C
Allied Monarch Mill Clarifier
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Jun-05-67	1.79	7,450	10,700	8,930	1,340		Note 1
Jun-13-67	1.86						Note 1
Jun-14-67	1.86	10,100	10,200	9,300	800		Note 1
Jun-22-67	1.86	9,300	15,500	9,300			Note 1
Jun-26-67	1.86	3,100	10,200	1,500	900		Note 1
Jul-05-67	1.94	11,300	7,000	8,000	200		Note 1
Jul-11-67	1.79	4,500	11,900	3,000			Note 1
Jul-19-67	1.79	5,900	12,500	4,400			Note 1
Jul-27-67	1.63	4,100	12,300	2,700	300		Note 1
Aug-01-67	1.63	4,100	12,200	4,100	550		Note 1
Aug-09-67	1.55	11,600	7,000	5,200			Note 1
Aug-17-67	1.55	6,500	7,000	3,900			Note 1
Aug-22-67	1.55	5,100	10,700	2,600	800		Note 1
Aug-30-67	1.63	2,700	11,400	2,700	300		Note 1
Sep-07-67	1.63	6,800	16,500	4,100	1,100		Note 1
Sep-12-67	1.71	7,100	14,600	7,100	500		Note 1
Sep-20-67	1.86	4,600	10,800	3,100	600		Note 1
Sep-27-67	2.02	5,100	12,400	5,100	700		Note 1
Oct-05-67	1.94	6,500	23,600	6,500	600		Note 1
Oct-10-67	1.94	4,800	19,700	4,800			Note 1
Oct-18-67	2.02	3,300	10,400	3,300	300		Note 1
Oct-26-67	1.94	4,800	14,200	3,200	700		Note 1
Oct-31-67	2.02	5,000	19,500	3,300	700		Note 1
Nov-08-67	2.02	1,700	12,800				Note 1
Nov-16-67	2.02	1,700	16,200	1,700			Note 1
Nov-21-67	1.94	4,800	13,900	3,200			Note 1
Nov-29-67	1.94	9,700	7,500	8,100	300		Note 1
Dec-07-67	2.02	8,400	19,000	8,400	100		Note 1
Dec-12-67	2.10	3,300	10,200	1,600	100		Note 1
Dec-20-67	1.94	19,500	20,400	16,200	1,300		Note 1
Dec-28-67	1.94	8,100	11,000	8,100	700		Note 1
Jan-02-68	2.02	6,700	13,800	6,700	700		Note 1
Jan-10-68	2.02	3,400	20,200	3,400	300		Note 1
Jan-18-68	2.02	11,700	21,100	10,000	700		Note 1
Jan-23-68	2.02	3,400	12,800	1,700	300		Note 1
Jan-31-68	1.94	3,200	12,600	1,600	300		Note 1
Feb-08-68	1.94	3,200	10,300	1,600	300		Note 1
Feb-14-68	1.94	6,400	16,800	4,900	300		Note 1
Feb-22-68	1.86	6,200	10,900	3,100	300		Note 1
Feb-27-68	1.86	7,900	20,300	4,700	300		Note 1
Mar-06-68	1.86	4,700	13,700	3,100	300		Note 1
Mar-14-68	1.86	4,700	9,300	4,700	300		Note 1
Mar-19-68	1.79	5,900	8,900	4,500			Note 1
Mar-27-68	1.79	4,400	6,000	3,000			Note 1
Apr-04-68	1.86	6,200	6,800	4,600			Note 1
Apr-09-68	1.79	5,900	13,600	5,900			Note 1
Apr-17-68	1.79	2,900	13,400	1,400	300		Note 1
Apr-25-68	1.71	7,100	10,000	4,300			Note 1
Apr-30-68	1.71	4,300	750	1,400			Note 1
May-14-68	2.02	5,000	11,400	5,000			Note 1
May-22-68	2 42	12,100	15,400	10,000			Note 1
May-30-68	2 52	13,700	17,700	9,500	600		Note 1

Appendix 14a-C
Allied Monarch Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Jun-04-68	2.42	14,100	20,200	4,400	1,200		Note 1
Jun-04-68	2.13				**388**	R	**SA 029223-30 (WRC)**
Jun-05-68	2.42	14,200	20,500	6,000	800		Note 1
Jun-05-68	1.90				**535**	R	**SA 029223-30 (WRC)**
Jun-13-68	2.42	10,000	12,500	6,000	1,200		Note 1
Jun-18-68	2.42	6,100	9,400	6,100	400		Note 1
Jun-26-68	2.52	6,300	18,900	6,300	400		Note 1
Jul-03-68	2.42			6,100	120		Note 1
Jul-10-68	2.35	1,800	19,600	9,800	1,600		Note 1
Jul-18-68	2.42	6,100	19,800	2,000	800		Note 1
Jul-23-68	2.27	9,500	19,200	7,500	300		Note 1
Jul-31-68	1.86	4,700	21,700	3,100	600		Note 1
Aug-08-68	1.86	7,700	14,300	6,200	300		Note 1
Aug-14-68	1.94	3,300	23,500	2,500	200		Note 1
Aug-20-68	2.60				564	R	**SA 032010-30 (WRC)**
Aug-22-68	2.19	21,900	11,300	18,200	700		Note 1
Aug-27-68	1.79	5,900	12,200	4,400	600		Note 1
Sep-04-68	1.94	6,500	13,600	6,500			Note 1
Sep-12-68	1.79	5,900	14,900	2,900	300		Note 1
Sep-17-68	1.86	9,300	10,500	7,700			Note 1
Sep-21-68	1.86	3,100	9,600	1,500	600		Note 1
Oct-03-68	2.10	17,500	10,900	15,800	700		Note 1
Oct-08-68	1.94	6,500	14,500	3,200	600		Note 1
Oct-18-68	1.94	3,250	14,000	3,250			Note 1
Oct-24-68	1.94	6,500	13,300	4,700			Note 1
Oct-29-68	1.94	6,400	17,500	4,800			Note 1
Nov-06-68	1.86	4,600	11,500	1,500			Note 1
Nov-14-68	1.94	8,100	24,800	4,700	800		Note 1
Nov-19-68	1.79	5,900	10,400	4,400	300		Note 1
Nov-27-68	1.79	6,000	7,700	4,400	3,900		Note 1
Dec-05-68	1.71	4,300	8,000	2,800			Note 1
Dec-10-68	1.71	5,700	8,000	4,300	800		Note 1
Dec-18-68	1.71	2,900	5,000	2,900	300		Note 1
Dec-26-68	1.71	4,300	4,000	4,300			Note 1
Dec-31-68	1.71	5,700	7,100	4,300			Note 1
Jan-08-69	1.71	4,200	2,300	4,200			Note 1
Jan-16-69	1.71	4,300	7,400	1,400	300		Note 1
Jan-22-69	1.71	1,500	2,800	1,500	300		Note 1
Jan-28-69	1.71	4,300	8,300	1,400	600		Note 1
Feb-05-69	1.71	1,400	4,000	1,400	300		Note 1
Feb-13-69	1.71	8,500	4,900	4,300			Note 1
Feb-18-69	1.71	2,900	5,100	1,400			Note 1
Feb-26-69	1.71	4,200	5,100	1,400	300		Note 1
Mar-06-69	1.71	7,100	3,700	7,100			Note 1
Mar-11-69	1.71	1,800	6,800	1,800			Note 1
Mar-19-69	1.71	4,300	4,300	1,400			Note 1
Mar-25-69	1.71	4,300	8,500	4,300			Note 1
Apr-02-69	1.79	3,000	6,800	3,000	300		Note 1
Apr-10-69	1.63	6,800	6,200	5,400			Note 1
Apr-15-69	1.79	3,000	6,200	1,500			Note 1
Apr-23-69	1.79	1,500	6,200	1,500			Note 1
May-01-69	1.86	3,100	6,200	3,100			Note 1

Appendix 14a-C
Allied Monarch Mill Clarifier
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
May-06-69	1.86	150	3,400	100	300		Note 1
May-15-69	1.86	1,500	6,100	1,500			Note 1
May-20-69	1.94	6,500	4,200	4,800			Note 1
May-28-69	1.55	6,500	2,200	3,900			Note 1
Jun-04-69	1.86	6,200	7,100	4,600			Note 1
Jun-12-69	1.94	3,200	5,200	3,200			Note 1
Jun-17-69	1.48	6,100	2,800	6,100			Note 1
Jun-25-69	1.71	4,300	6,000	4,300			Note 1
Jul-03-69	1.94		2,600				Note 1
Jul-08-69	1.86	4,600	4,000	4,600			Note 1
Jul-16-69	1.71	1,400	5,700	1,400			Note 1
Jul-24-69	1.79	10,300	5,000	8,900			Note 1
Jul-28-69	3.34			11,100	2,200		Note 1
Jul-29-69	3.15			11,100	1,000		Note 1
Jul-30-69	3.15	2,600	3,200		1,000		Note 1
Jul-31-69	3.34			27,800	1,100		Note 1
Aug-01-69	2.57			24,700	1,500		Note 1
Aug-04-69	3.53			11,000	600		Note 1
Aug-05-69	3.53			11,700	600		Note 1
Aug-06-69	3.15			10,500	1,500		Note 1
Aug-07-69	3.25	4,500	5,000	10,800	1,600		Note 1
Aug-08-69	3.25			10,800	1,100		Note 1
Aug-11-69	3.34			11,100	1,600		Note 1
Aug-12-69	3.25	4,000	5,700	13,500	1,000		Note 1
Aug-13-69	3.25			13,500	500		Note 1
Aug-14-69	3.06			7,600	1,000		Note 1
Aug-15-69	3.15			7,900	1,000		Note 1
Aug-18-69	3.06			7,700	500		Note 1
Aug-19-69	3.15			5,100	1,000		Note 1
Aug-20-69	3.15	4,500	5,100	7,900	1,000		Note 1
Aug-21-69	3.25			10,800	500		Note 1
Aug-22-69	3.34			11,100	1,100		Note 1
Aug-25-69	3.15			7,900	1,000		Note 1
Aug-26-69	3.25			8,100	500		Note 1
Aug-27-69	3.25	3,000	1,800	5,400	500		Note 1
Aug-28-69	3.34			5,600	600		Note 1
Aug-29-69	3.34			5,600	600		Note 1
Sep-03-69	3.25	3,000	5,100	10,800	500		Note 1
Sep-04-69	2.97			4,900	500		Note 1
Sep-05-69	3.25			5,200	500		Note 1
Sep-06-69	2.97			7,400	500		Note 1
Sep-08-69	3.15			13,100	500		Note 1
Sep-09-69	3.06			9,000	500		Note 1
Sep-10-69	3.34	3,000	1,700	7,600	1,100		Note 1
Sep-11-69	3.34			8,100	500		Note 1
Sep-12-69	3.43			9,400	700		Note 1
Sep-15-69	3.34			8,400	600		Note 1
Sep-16-69	3.34			11,100	1,100		Note 1
Sep-17-69	3.43			11,400	600		Note 1
Sep-18-69	3.53	6,000	7,200	11,800	600		Note 1
Sep-19-69	3.43			17,600	900		Note 1
Sep-22-69	3.53			8,900	600		Note 1

Appendix 14a-C
Allied Monarch Mill Clarifier
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Sep-23-69	3 18	4,500	6,300	8,000	500		Note 1
Sep-24-69	3 18			10,600	500		Note 1
Sep-25-69	3 18			7,700	500		Note 1
Sep-26-69	3 18			10,700	500		Note 1
Sep-29-69	2 97				500		Note 1
Sep-29-69				9,900			SA011317
Sep-30-69	2 97			7,400	500		Note 1
Oct-01-69	2 97	5,000	4,300	4,900	500		Note 1
Oct-02-69	2 97			7,400	500		Note 1
Oct-03-69	2 97			11,700	500		Note 1
Oct-06-69	2 79			9,200	500		Note 1
Oct-07-69	2 79			7,000	900		Note 1
Oct-08-69	2 79			4,600	500		Note 1
Oct-09-69	2 79	4,300	8,900	4,500	900		Note 1
Oct-10-69	2 79			9,900	900		Note 1
Oct-13-69	3 34			11,200	1,100		Note 1
Oct-14-69	3 34	4,100	5,900	11,200	1 100		Note 1
Oct-15-69	3 34			13,900	500		Note 1
Oct-16-69	3 34			11,100	1,100		Note 1
Oct-17-69	3 34			11,200	400		Note 1
Oct-20-69	3 06			5,100	500		Note 1
Oct-21-69	3 06			2,600	500		Note 1
Oct-22-69	3 06	2,700	5,200	5,100	500		Note 1
Oct-23-69	3 06			7,600	1,500		Note 1
Oct-24-69	3 06			7,600	500		Note 1
Oct-27-69	2 88			7,100	900		Note 1
Oct-28-69	2 88			7,100	900		Note 1
Oct-29-69	2 88			9,500	900		Note 1
Oct-30-69	2 88	5 100	6,500	9,600	900		Note 1
Oct-31-69	2 88			12,000	900		Note 1
Nov-03-69	3 15			7,800	500		Note 1
Nov-04-69	3 15	4 400	9,600	5,100	500		Note 1
Nov-05-69	3 15			2,600	500		Note 1
Nov-06-69	3 15			5,200	500		Note 1
Nov-07-69	3 15			10,500	1 000		Note 1
Nov-10-69	3 15			13,100	1,000		Note 1
Nov-11-69	3 15			13,100	500		Note 1
Nov-12-69	3 15	20,200	6,900	5,400	1 000		Note 1
Nov-13-69	3 15			7,100	2,000		Note 1
Nov-14-69	3 15			2,600	2,000		Note 1
Nov-17-69	3 06			10,200	3,600		Note 1
Nov-18-69	3 06			10,200	3 600		Note 1
Nov-19-69	3 06			12,800	3 100		Note 1
Nov-21-69	3 06	4,600	15,800	7,700	1,300		Note 1
Nov-24-69	2 61			14,100	1,700		Note 1
Nov-25-69	2 61			8,600	500		Note 1
Nov-26-69	2 61			8,700	1 300		Note 1
Nov-27-69	2 61	5 900	8,600	10,900	1 300		Note 1
Nov-28-69	2 61			8,700	900		Note 1
Dec-01-69	3 34			13,900	500		Note 1
Dec-02-69	3 34	7 400	9,500	13,900	1 600		Note 1
Dec-03-69	3 34			5,600	500		Note 1

Appendix 14a-C
Allied Monarch Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Dec-04-69	3.34			5,600	300		Note 1
Dec-05-69	3.34			13,900	1,000		Note 1
Dec-08-69	3.53			14,700	1,600		Note 1
Dec-09-69	3.53			11,800	600		Note 1
Dec-10-69	3.53	5,900	10,100	11,800	600		Note 1
Dec-11-69	3.53			14,700	1,100		Note 1
Dec-12-69	3.53			11,800	600		Note 1
Dec-22-69	2.79			9,300	1,400		Note 1
Dec-23-69	2.79			11,600	500		Note 1
Dec-29-69	2.79			7,000	200		Note 1
Dec-30-69	2.79	2,900	9,800	9,300	100		Note 1
Dec-31-69	2.79			11,600	700		Note 1
Jan-01-70	2.79			7,000	500		Note 1
Jan-02-70	2.79			13,000	1,100		Note 1
Jan-12-70	3.34			14,000	600		Note 1
Jan-13-70	3.34			16,400	500		Note 1
Jan-14-70	3.34			11,100	500		Note 1
Jan-15-70	3.34	5,700	15,100	5,600	600		Note 1
Jan-16-70	3.34			94,000	1,000		Note 1
Jan-19-70				9,600	900		Note 1
Jan-20-70	2.88	9,100	12,000	9,600	500		Note 1
Jan-21-70	2.88			12,000	900		Note 1
Jan-22-70	2.88			14,400	600		Note 1
Jan-23-70	2.88			11,900	900		Note 1
Jan-26-70	2.79			11,600	900		Note 1
Jan-27-70	2.79			14,000	900		Note 1
Jan-28-70	2.77	7,300	4,000	9,300	1,400		Note 1
Jan-29-70	2.77			9,600	1,400		Note 1
Jan-30-70	2.79			9,600	1,000		Note 1
Feb-02-70	2.61			6,500	400		Note 1
Feb-03-70	2.61			10,900	1,300		Note 1
Feb-04-70	2.61			7,900	400		Note 1
Feb-05-70	2.61	3,700	7,400	6,600	400		Note 1
Feb-06-70	2.61			10,900	400		Note 1
Feb-23-70	3.06	20,400		20,400	500		Note 1
Feb-24-70	3.06	17,900		17,900	500		Note 1
Feb-25-70	3.06	15,300		15,300	500		Note 1
Feb-26-70	3.72	**4,200**	3,400	12,400	600	R	Note 1
Feb-27-70	3.72	21,600		21,600	600		Note 1
Mar-02-70	2.26	16,300	20,000	13,600	300		Note 1
Mar-03-70	2.25	13,100	18,400	10,500			Note 1
Mar-04-70	2.70	9,000	16,510	4,500	600		Note 1
Mar-05-70	2.70	12,500	15,300	11,200	800		Note 1
Mar-06-70	2.79	13,500	16,300	13,500	1,300		Note 1
Mar-09-70	3 34	27,900	15,100	19,500			Note 1
Mar-10-70			17,700	22,500	500		Note 1
Mar-11-70			20,300	17,700	500		Note 1
Mar-13-70	3.43				600		Note 1
Mar-16-70	3.22	20,000	17,200	11,500	300		Note 1
Mar-17-70	3.53	10,800	18,400	10,800	500		Note 1
Mar-18-70	3.53	17,500	18,800	12,000	600		Note 1
Mar-19-70	3.25	18,000	23,600	14,700	600		Note 1

Appendix 14a-C
Allied Monarch Mill Clarifier
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Mar-20-70	3.34	27,100	15,700	21,700	500		Note 1
Mar-23-70	3.82	16,700	18,700	13,700	600		Note 1
Mar-24-70	3.25	19,100	24,000	15,100	700		Note 1
Mar-25-70	3.34						Note 1
Mar-26-70	3.43	19,900	22,700	13,900	600		Note 1
Mar-27-70		28,000	18,600	17,200	300		Note 1
Apr-06-70	3.34	30,700	29,600	25,200	2,600		Note 1
Apr-07-70	3.34	27,800	26,700	27,800	1,000		Note 1
Apr-08-70	3.53	20,600	18,800	17,600	300		Note 1
Apr-09-70	3.72	16,200	18,600	13,100			Note 1
Apr-10-70	3.62	24,000	17,600	**18,100**	1,000	R	Note 1
Apr-13-70	3.73	21,600	16,200	15,100	600		Note 1
Apr-14-70	3.87	13,000	18,000	9,100	300		Note 1
Apr-15-70	3.72	18,800	14,200	13,400			Note 1
Apr-16-70	3.72	30,000	19,800	24,800			Note 1
Apr-17-70	3.81	23,400	16,300	25,400	600		Note 1
Apr-20-70	3.72	18,500	24,000	18,500	2,400		Note 1
Apr-21-70	3.01	22,700					Note 1
Apr-22-70	3.72	21,700			600		Note 1
Apr-23-70	3.51	19,400	17,000		700		Note 1
Apr-24-70	3.62	21,200	22,500	21,200	1,200		Note 1
Apr-27-70	4.11	20,500	22,700	17,100	600		Note 1
Apr-28-70	3.62	16,100	26,600	15,100			Note 1
Apr-29-70	3.91	16,400	16,900	13,100			Note 1
Apr-30-70	3.82	19,300	24,000	15,200	400		Note 1
May-01-70	4.11	20,600	21,600	17,100			Note 1
May-04-70	3.82	22,200	19,200	15,900			Note 1
May-05-70	3.82	25,400	17,800	23,900			Note 1
May-06-70	3.91	13,000	16,300	6,500			Note 1
May-07-70	3.62	27,200	22,900	24,100			Note 1
May-08-70	3.62	24,100	24,200	21,100			Note 1
May-11-70	3.72	24,700	19,800	21,600	300		Note 1
May-12-70	3.91	19,500	22,200	16,200	1,000		Note 1
May-13-70	3.82	19,100	21,600	7,000			Note 1
May-14-70	3.72	24,700	18,100	21,700	900		Note 1
May-15-70	3.82	31,700	24,700	22,200	1,300		Note 1
May-18-70		25,400	2,100	25,400	1,000		Note 1
May-19-70	3.76		18,500		900		Note 1
May-20-70	3.32	15,500	24,200				Note 1
May-21-70	3.71		26,400	24,700	600		Note 1
May-22-70	3.91	26,000	22,300	19,300	700		Note 1
May-25-70	3.81	28,500	19,100	25,400			Note 1
May-26-70	3.81	22,200	19,100	19,000			Note 1
May-27-70	3.53	17,700	16,500	14,700	600		Note 1
May-28-70	3.91	11,300	20,900	10,000	700		Note 1
May-29-70	3.81	38,200	21,600	25,300	700		Note 1
Jun-01-70	2.97	22,300	12,300	14,800	500		Note 1
Jun-02-70	3.72	34,100	22,300	24,700	600		Note 1
Jun-03-70	3.62	15,100	15,000	**6,000**	600	R	Note 1
Jun-04-70	3.91	13,100	18,900	13,100	700		Note 1
Jun-05-70	3.81	28,600	21,000	25,300	600		Note 1
Jun-08-70	3.72	24,700	12,700	24,700	800		Note 1

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Appendix 14a-C
Allied Monarch Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Jun-09-70	3.43	27,000	19,500	20,000			Note 1
Jun-10-70	2.25		23,400	36,000			Note 1
Jun-11-70	3.72	22,600	26,200	18,500			Note 1
Jun-12-70	3.90	26,000	26,700	22,900			Note 1
Jun-15-70	3.91	26,100	21,500	19,500	9,000		Note 1
Jun-16-70	3.72	21,600	21,000	18,500			Note 1
Jun-17-70	3.91	22,800	20,200	22,800			Note 1
Jun-18-70	3.81	15,800	29,800	12,700	600		Note 1
Jun-19-70	4.11	20,600	35,800	17,100	700		Note 1
Jun-22-70	3.72	21,600	21,700	18,500			Note 1
Jun-23-70	3.72	21,700	21,600	18,500			Note 1
Jun-24-70	3.62	18,100	21,700	18,100	600		Note 1
Jun-25-70	3.34	19,500	20,600	16,700	500		Note 1
Jun-26-70	3.43	31,400	29,200	28,600	900		Note 1
Jun-29-70	1.34	5,600	6,300	3,300	500		Note 1
Jun-30-70	1.41	5,900	6,100	4,700	200		Note 1
Jul-01-70	1.41	4,700	5,200	4,700			Note 1
Jul-06-70	1.63	10,800	13,700	**8,100**	300	R	Note 1
Jul-07-70	3.34	25,000	20,600	22,300	500		Note 1
Jul-08-70	3.15	18,300	28,900	15,700	500		Note 1
Jul-09-70	2.97	19,700	23,700	17,300	500		Note 1
Jul-10-70	2.79	16,300	17,300	14,000	900		Note 1
Jul-13-70	3.72	27,800	32,200	21,600	600		Note 1
Jul-14-70	3.53	26,500	25,400	26,500	500		Note 1
Jul-15-70	3.53	26,500	20,700	23,500	600		Note 1
Jul-16-70	3.34	36,200	19,500	27,800	1,000		Note 1
Jul-17-70	3.34	22,300	18,400	13,900	1,000		Note 1
Jul-20-70	2.79	16,300	17,300	11,600			Note 1
Jul-21-70	2.70	8,800	13,500	8,800	400		Note 1
Jul-22-70	2.61	8,700	15,200	8,700			Note 1
Jul-23-70	2.52	8,300	9,300	6,300			Note 1
Jul-24-70	2.97	17,300	13,900	12,300			Note 1
Jul-27-70	2.88	19,200	14,400	13,300			Note 1
Jul-28-70	2.97	19,900	13,800	15,000			Note 1
Jul-29-70	2.97	9,900	16,800	9,900			Note 1
Jul-30-70	2.70	4,550	19,000	4,500			Note 1
Jul-31-70	2.79			11,600			Note 1
Aug-03-70	3.25	19,000	16,700	13,500	500		Note 1
Aug-04-70	2.97	17,400	16,300	15,000	500		Note 1
Aug-05-70	2.79	16,200	25,200	11,000	400		Note 1
Aug-06-70	2.52	16,300	13,000	8,300			Note 1
Aug-07-70	2.61	13,100	25,500	10,900	400		Note 1
Aug-18-70	2.97	19,800	16,800	17,500			Note 1
Aug-19-70	1.91	15,000	25,700	10,000			Note 1
Aug-20-70	2.27	7,600	20,100	7,600	400		Note 1
Aug-21-70	2.61	13,100	22,200	10,900	500		Note 1
Aug-24-70	3.81	19,100	25,400	15,900	300		Note 1
Aug-25-70	3.34	19,500	23,000	19,500			Note 1
Aug-26-70	3.06	11,500	20,900	10,200			Note 1
Aug-27-70	3.15	9,200	18,400	6,700			Note 1
Aug-28-70	2.88	9,600	16,300	3,600			Note 1
Aug-31-70	3.25	10,500	21,000	10,500	500		Note 1

Appendix 14a-C
Allied Monarch Mill Clarifier
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Sep-01-70	3.25	15,500	19,000	13,600	500		Note 1
Sep-02-70	3.06	15,300	20,400	12,700			Note 1
Sep-03-70	2.42	12,100	8,400	12,100	400		Note 1
Sep-04-70	2.27	**13,900**	26,800	7,600		R	Note 1
Sep-08-70	3.52	17,000	17,400	11,800			Note 1
Sep-09-70	3.35	13,900	17,000	11,100			Note 1
Sep-10-70	3.54	13,900	17,400	11,100	500		Note 1
Sep-11-70	2.68	16,700	17,300	14,500			Note 1
Sep-15-70	3.43	25,700	21,800	22,500	500		Note 1
Sep-16-70	3.34	16,700	19,000	13,900			Note 1
Sep-16-70	**3.44**				**1,608**	R	**SA 032010-30 (WRC)**
Sep-17-70	3.62	15,600	21,700	9,200			Note 1
Sep-18-70	3.34	13,900	27,200	11,200			Note 1
Sep-22-70		18,000					Note 1
Sep-23-70	3.70	21,500					Note 1
Sep-24-70	3.30	11,300					Note 1
Sep-25-70	2.90			7,400	600		Note 1
Sep-28-70	3.53	14,700	22,400	14,700	300		Note 1
Sep-29-70	3.72	21,600	27,200	21,600	600		Note 1
Sep-30-70	3.62	15,100	22,800	12,100			Note 1
Oct-01-70	3.62	18,100	22,400	15,100	600		Note 1
Oct-02-70	3.34	22,300	19,600	13,800			Note 1
Oct-05-70	3.52	17,800	27,200	17,800	1,000		Note 1
Oct-06-70	3.53	17,900	25,500	14,700	600		Note 1
Oct-07-70	3.72	21,400	20,000	15,100	600		Note 1
Oct-08-70	3.72	31,000	24,800	27,700	600		Note 1
Oct-09-70	3.81	25,300	22,200	15,900	1,000		Note 1
Oct-12-70	3.72	12,400	19,200	12,400	300		Note 1
Oct-13-70	3.43	14,300	16,700	11,400			Note 1
Oct-14-70	3.34	11,200	22,300	11,200	600		Note 1
Oct-15-70	3.25	16,200	20,600	13,600	500		Note 1
Oct-16-70	3.15	16,800	22,000	13,100	500		Note 1
Oct-19-70	3.91	22,900	23,400	19,500	700		Note 1
Oct-20-70	3.81	15,900	19,000	15,900	600		Note 1
Oct-21-70	3.62	15,100	22,900	15,100	600		Note 1
Oct-22-70	3.91	19,600	23,400	16,300			Note 1
Oct-23-70	3.81	15,900	22,900	15,900	600		Note 1
Oct-26-70	3.82	15,900	29,800	15,900	600		Note 1
Oct-27-70	3.43	14,300	26,200	14,300	1,200		Note 1
Oct-28-70	3.15	13,100	20,000	13,100	300		Note 1
Oct-29-70	3 06	12,700	19,800	12,700	300		Note 1
Oct-30-70	3.00	14,800	27,800	14,800	500		Note 1
Nov-02-70	2.97	12,300	21,600	9,800	200		Note 1
Nov-03-70	3.01	17,500	19,700	15,000	500		Note 1
Nov-04-70	2.88	14,400	19,300	12,000	500		Note 1
Nov-05-70	4.01	13,400	18,800	10,000			Note 1
Nov-06-70	3.62	18,100	29,600	11,700			Note 1
Nov-09-70	3.91	16,300	29,200	16,300	350		Note 1
Nov-10-70	3 82	15,800	24,800	12,700	640		Note 1
Nov-11-70	3.91	16,300	27,400	19,600			Note 1
Nov-12-70	3.82	9,500	24,800	12,700			Note 1
Nov-13-70	3 82	15,900	31,700	15,900	1,300		Note 1

Appendix 14a-C
Allied Monarch Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Nov-16-70	3.91	13,100	37,900	9,800	600		Note 1
Nov-17-70	3.82	12,700	22,900	9,500	400		Note 1
Nov-18-70	3.91	13,100	23,400	6,600	400		Note 1
Nov-19-70	3.91	9,800	29,700	9,000			Note 1
Nov-20-70	3.82	12,400	22,700	12,400	600		Note 1
Nov-23-70	3.57	17,800	20,800	14,800	600		Note 1
Nov-24-70	3.57		22,700	5,900	600		Note 1
Nov-25-70	3.56	20,800	33,400	14,900	1,200		Note 1
Nov-30-70	**3.34**	13,800	21,100	13,800	600	R	Note 1
Dec-01-70	3.06	20,400	13,300	10,500			Note 1
Dec-02-70	3.25	10,900	17,400	10,900	500		Note 1
Dec-03-70	3.25	13,500	19,000	8,200	600		Note 1
Dec-04-70	3.25	12,900	28,400	8,400	600		Note 1
Dec-07-70	2.88	14,400	21,500	14,400	900		Note 1
Dec-08-70	2.97	17,300	16,300	12,400	300		Note 1
Dec-09-70	2.88	14,400	15,800	9,600			Note 1
Dec-10-70	3.25	13,600	18,100	10,500	500		Note 1
Dec-11-70	3.15	13,200	25,300	10,600	500		Note 1
Dec-14-70	3.24	13,600		13,600	300		Note 1
Dec-15-70		13,500	15,000	13,200			Note 1
Dec-16-70		13,200	17,500	10,500			Note 1
Dec-17-70	3.35			10,500			Note 1
Dec-18-70	3.25	13,500	10,500	10,900	700		Note 1
Dec-21-70	2.88	12,000	22,400	9,600			Note 1
Dec-22-70	2.70	20,300	15,800	11,300			Note 1
Dec-23-70	2.79	16,300	17,700	9,300			Note 1
Jan-04-71	3.53		26,400		600		Note 1
Jan-05-71		21,600	28,100	18,900	700		Note 1
Jan-06-71	2.52	14,700	20,200				Note 1
Jan-07-71	3.62	18,200	24,600	12,000	690		Note 1
Jan-08-71	3.82	19,100	25,400	19,100	600		Note 1
Jan-11-71	3.34	16,700	33,600	13,900	500		Note 1
Jan-12-71	3.25			13,500	1,000		Note 1
Jan-13-71	3.34	19,500	22,300	16,700	600		Note 1
Jan-14-71	3.33		23,200	17,400	600		Note 1
Jan-15-71	3.91	22,800	**39,200**	20,000	1,600	R	Note 1
Jan-18-71	3.34	22,300	17,900	16,700	600		Note 1
Jan-19-71	3.15	13,100	19,000	10,400	300		Note 1
Jan-20-71	3.34	19,500	27,300	13,900	500		Note 1
Jan-21-71	3.06	17,900	17,900	17,900	500		Note 1
Jan-22-71	3.25	16,300	16,500	13,500	300		Note 1
Feb-01-71	4.11	20,600	45,200	17,100	700		Note 1
Feb-02-71	4.22	24,600	22,400	17,500	700		Note 1
Feb-03-71	4.11	23,900	27,500	20,500	300		Note 1
Feb-04-71	4.11	24,100	24,000	20,500	700		Note 1
Feb-05-71	4.01	23,400	23,500	16,700	600		Note 1
Feb-08-71	3.72	15,500	22,300	12,400	600		Note 1
Feb-09-71	3.53	17,600	24,800	17,600			Note 1
Feb-10-71	3.34	13,900	30,000	11,100			Note 1
Feb-11-71	3.25	10,900	16,300	10,900	300		Note 1
Feb-12-71	3.91	22,800	19,600	19,500	600		Note 1
Feb-15-71	3.43	22,800	31,400	17,100	900		Note 1

Appendix 14a-C
Allied Monarch Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Feb-16-71	3.82	15,900	21,600	12,700	300		Note 1
Feb-17-71	3.53	17,700	20,600	14,700	300		Note 1
Feb-18-71	3.91	13,000	22,800	13,000	600		Note 1
Feb-19-71	3.91	16,300	24,100	16,300	600		Note 1
Mar-01-71	3.34	16,700	38,300	13,900	300		Note 1
Mar-02-71	2.97	12,400	24,200	12,400	200		Note 1
Mar-03-71	3.34	16,700	26,800	13,900	500		Note 1
Mar-04-71	3.25	13,600	27,000	10,800	500		Note 1
Mar-05-71	3.91	29,200	32,600	22,800	1,300		Note 1
Mar-08-71	3.36	14,000	37,600	14,000	500		Note 1
Mar-09-71	3.36	14,000	31,400	14,000	300		Note 1
Mar-10-71	2.97	17,400	20,300	12,400	200		Note 1
Mar-11-71	3.15	18,400	25,300	15,700	500		Note 1
Mar-12-71	3.25	13,600	18,500	13,600			Note 1
Mar-15-71	3.53	17,700	22,500	17,700	600		Note 1
Mar-16-71	3.62	18,100	31,100	15,000	600		Note 1
Mar-17-71	3.53	20,600	20,000	14,700	500		Note 1
Mar-18-71	3.43	20,000	21,200	14,200	1,100		Note 1
Mar-19-71	3.82	22,300	32,300	19,100	600		Note 1
Mar-22-71	3.34	14,000	22,300	14,000	500		Note 1
Mar-23-71	3.43		24,000	14,300			Note 1
Mar-24-71	2.91	22,300	28,300	19,500	600		Note 1
Mar-25-71	3.71	21,700	33,300	18,000			Note 1
Mar-26-71	3.53	20,600	28,700	17,600	400		Note 1
Apr-05-71	3.34	13,900	29,700	11,100			Note 1
Apr-06-71	3.06	12,800	20,900	10,400	1,000		Note 1
Apr-07-71	3.43	14,300	20,600	14,300	1,100		Note 1
Apr-08-71	3.34	11,100	23,400	11,100	600		Note 1
Apr-09-71	3.25	19,000	35,600	16,200	1,600		Note 1
Apr-12-71	3.82	22,300	19,700	15,900	300		Note 1
Apr-13-71	3.72	21,700	31,400	18,500	1,200		Note 1
Apr-14-71	3.72	24,800	19,200	21,500			Note 1
Apr-15-71	3.91	29,200	30,000	29,200	300		Note 1
Apr-16-71	3.91	19,500	32,600	19,500	1,000		Note 1
May-05-71				19,000			na
May-06-71		12,700		14,700			na
May-07-71		17,200		17,200			na
May-17-71	3.81			12,700	600		na
May-18-71	3.91			11,300			na
May-19-71	3.91	29,000	25,300	19,600	600		na
May-20-71				12,700			na
May-21-71	3.91	26,100	26,100	19,500	600		na
Jun-07-71	3.91	13,100	31,200	9,700	700		Note 1
Jun-08-71	3.72	12,400	19,800	9,300	600		Note 1
Jun-09-71	3.72	18,600	19,700	18,600	600		Note 1
Jun-10-71	3.91	19,600	22,800	19,600	300		Note 1
Jun-11-71	3.81	19,000	22,300	15,900			Note 1
Jun-14-71	3.72	15,500	19,300	15,500	300		Note 1
Jun-15-71	3.50	17,700	22,500	17,700	300		Note 1
Jun-16-71	3.81	19,100	45,200	15,100	300		Note 1
Jun-17-71	3.62	15,100	23,300	12,000	500		Note 1
Jun-18-71	3.91	16,300	35,400	16,300	600		Note 1

Appendix 14a-C
Allied Monarch Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Jul-12-71	4.01	23,400	26,700	20,000			Note 1
Jul-13-71	2.81	10,900	13,100	8,700			Note 1
Jul-14-71	3.06	15,000	14,800	10,200			Note 1
Jul-15-71	3.72	15,400	19,600	12,400	1,200		Note 1
Jul-16-71	3.91	16,300	22,200	13,100	1,300		Note 1
Jul-26-71	3.91	26,000	24,000	22,600			Note 1
Jul-27-71	3.72		19,000	21,600			Note 1
Jul-28-71	3.71			16,500			Note 1
Jul-29-71	**3.62**	15,200	**19,400**	12,100		R	Note 1
Jul-30-71	4.01	16,700	27,600	13,400			Note 1
Aug-02-71		19,500	25,400	19,500	700		Note 1
Aug-03-71				11,500	300		Note 1
Aug-04-71		15,900	27,400	12,700			Note 1
Aug-05-71		16,800	20,900	9,500	300		Note 1
Aug-06-71	3.90	16,300		9,800			Note 1
Aug-09-71	4.24		29,400	21,100	700		Note 1
Aug-10-71	4.02			13,400			Note 1
Aug-11-71	4.01	20,000	30,800	16,700			Note 1
Aug-12-71	3.62	12,100	24,100	12,100	600		Note 1
Aug-13-71	4.02		24,600	13,400	700		Note 1
Aug-16-71	3.91	19,500	32,500	16,300	600		Note 1
Aug-17-71	4.01	20,100	28,200	16,700	700		Note 1
Aug-18-71	4.22	24,600	32,400	21,100	1,400		Note 1
Aug-19-71	3.81	19,000	28,000	19,000	1,900		Note 1
Aug-20-71	3.53	17,700	27,100	17,700	900		Note 1
Aug-23-71	3.91	19,600	30,600	9,900	700		Note 1
Aug-24-71	3.62	15,100	31,300	12,000	1,200		Note 1
Aug-25-71	3.81	19,000	32,400	12,700	900		Note 1
Aug-26-71	3.72	18,600	23,000	12,300			Note 1
Aug-27-71	3.62	18,200	26,000	12,000	200		Note 1
Aug-30-71	3.72	18,600	24,200	15,500	600		Note 1
Aug-31-71	3.81	19,100	**23,000**	15,900		R	Note 1
Sep-01-71	3.53	20,600	28,200	14,700			Note 1
Sep-02-71	3.62	18,100	29,000	12,100	600		Note 1
Sep-03-71	4.01	23,500	33,400	20,000	700		Note 1
Sep-08-71	3.91	25,400	31,200	22,800	700		Note 1
Sep-09-71	3.81	26,300	28,600	22,200	600		Note 1
Sep-10-71	3.72	18,500	24,200	12,400	1,200		Note 1
Sep-13-71	3.81	19,200	24,700	15,800	1,270		Note 1
Sep-14-71	4.11	13,700	29,500	13,700	690		Note 1
Sep-15-71	3.62	15,100	23,000	12,100	600		Note 1
Sep-16-71	3.72	21,600	19,800	3,100			Note 1
Sep-17-71	3.81	35,000	32,400	19,200	640		Note 1
Sep-20-71	3.34	19,400	22,300	11,200			Note 1
Sep-21-71	3.72	18,500	30,800	15,400			Note 1
Sep-22-71	4.11	20,500	36,800	17,000			Note 1
Sep-23-71	3.72	18,500	38,400	12,400	300		Note 1
Sep-24-71	3.81	19,100	26,200	16,800	300		Note 1
Sep-27-71	3.81	19,100	24,100	15,900	900		Note 1
Sep-28-71	3.72	18,500	26,600	15,500	600		Note 1
Sep-29-71	4.01	20,100	37,500	16,700	300		Note 1
Sep-30-71	3.81	25,000	38,300	12,700			Note 1

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Appendix 14a-C
Allied Monarch Mill Clarifier.
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Oct-01-71	3.91	**19,600**	37,200	**16,300**		R	Note 1
Oct-04-71	3.72	18,600	30,300	15,400	300		Note 1
Oct-05-71	3.72	15,500	23,500	15,500	300		Note 1
Oct-06-71	3.91	19,500	25,100	19,500	300		Note 1
Oct-07-71	3.62	18,100	18,800	18,100	300		Note 1
Oct-08-71	3.91	19,500	24,800	16,300	300		Note 1
Nov 71	3.61				383		SA029359, SA029360, SA011299
Dec 71	3.64				250		SA029359, SA029360, SA011299
Jan 72	3.60				268		SA029359, SA029360
Feb 72	3.07				364		SA029359, SA029360
Mar 72	3.06				290		SA029359, SA029360
Apr 72	3.04				134		SA029359, SA029360
May 72	3.25				295		SA029359, SA029360
Jun 72	3.08				223		SA029359, SA029360
Jul 72	3.00				350		SA029359, SA029360
Aug 72	3.00				283		SA029359, SA029360
Sep 72	2.92				228		SA029359, SA029360
Oct 72	2.80				217		SA029359, SA029360
Nov 72	2.89				405		SA029359, SA029360
Dec 72	2.98				335		SA029359, SA029360
Jan 73	2.97				250		SA029359, SA029360
Feb 73	3.02				392		SA029359, SA029360
Mar 73	3.09				411		SA029359, SA029360
May-05-75	**2.78**				**556**	R	**SA 025249-54 (WRC)**
May-05-75				10,672		R	SA025246 - SA025248
May-06-75	**3.35**				**223**	R	**SA 025249-54 (WRC)**
May-06-75				9,651		R	SA025246 - SA025248
Aug-16-76	**3.64**			**14,190**	**182**	R	**SA 025249-54 (WRC)**
Aug-17-76	**4.28**			**15,972**	71	R	**SA 025249-54 (WRC)**
Jul-01-77	2.53						Monthly Operating Report MDNR004563
Jul-02-77	1.30						Monthly Operating Report MDNR004563
Jul-03-77	0.81				94		Monthly Operating Report MDNR004563
Jul-04-77	0.72				54		Monthly Operating Report MDNR004563
Jul-05-77	0.81				48		Monthly Operating Report MDNR004563
Jul-06-77	3.24						Monthly Operating Report MDNR004563
Jul-07-77	3.36				505		MDNR003963 - MDNR003964, Monthly Operating Report MDNR004563
Jul-08-77	3.88				491		Monthly Operating Report MDNR004563
Jul-09-77	3.62				423		Monthly Operating Report MDNR004563
Jul-10-77	1.32				476		Monthly Operating Report MDNR004563
Jul-11-77	2.70				366		Monthly Operating Report MDNR004563
Jul-12-77	3.00				357		Monthly Operating Report MDNR004563
Jul-13-77	2.71				504		MDNR003963 - MDNR003964
Jul-14-77	3.06						Monthly Operating Report MDNR004563
Jul-15-77	3.31				27		Monthly Operating Report MDNR004563
Jul-16-77	3.03						Monthly Operating Report MDNR004563
Jul-17-77	1.60						Monthly Operating Report MDNR004563
Jul-18-77	**3.04**			**11,886**	**177**	R	**SA 033502 (WRC)**
Jul-19-77	2.36						Monthly Operating Report MDNR004563
Jul-20-77	2.80						Monthly Operating Report MDNR004563
Jul-21-77	3.08				335		Monthly Operating Report MDNR004563
Jul-22-77	3.02						Monthly Operating Report MDNR004563

Appendix 14a-C
Allied Monarch Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Jul-23-77	1.83						Monthly Operating Report MDNR004563
Jul-24-77	2.60						Monthly Operating Report MDNR004563
Jul-25-77	2.45						Monthly Operating Report MDNR004563
Jul-26-77	1.16						Monthly Operating Report MDNR004563
Jul-28-77					605		MDNR003963 - MDNR003964
Jul-30-77					836		MDNR003963 - MDNR003964
Aug-01-77	1.51				398		Monthly Operating Report MDNR004562
Aug-02-77	3.20						Monthly Operating Report MDNR004562
Aug-03-77	3.40						Monthly Operating Report MDNR004562
Aug-04-77	3.10						Monthly Operating Report MDNR004562
Aug-05-77	2.80						Monthly Operating Report MDNR004562
Aug-06-77	2.60						Monthly Operating Report MDNR004562
Aug-07-77	2.40						Monthly Operating Report MDNR004562
Aug-08-77	3.10						Monthly Operating Report MDNR004562
Aug-09-77	2.00						Monthly Operating Report MDNR004562
Aug-10-77	2.20						Monthly Operating Report MDNR004562
Aug-11-77	2.50						Monthly Operating Report MDNR004562
Aug-12-77	2.80						Monthly Operating Report MDNR004562
Aug-13-77	2.90						Monthly Operating Report MDNR004562
Aug-14-77	1.56						Monthly Operating Report MDNR004562
Aug-15-77	2.41						Monthly Operating Report MDNR004562
Aug-16-77	3.10				81		Monthly Operating Report MDNR004562
Aug-17-77	2.89				3		Monthly Operating Report MDNR004562
Aug-18-77	2.00				83		Monthly Operating Report MDNR004562
Aug-19-77	2.70						Monthly Operating Report MDNR004562
Aug-20-77	2.50						Monthly Operating Report MDNR004562
Aug-21-77	2.80						Monthly Operating Report MDNR004562
Aug-22-77	2.60						Monthly Operating Report MDNR004562
Aug-23-77					272		Monthly Operating Report MDNR004562
Aug-24-77					486		Monthly Operating Report MDNR004562
Aug-25-77	2.90						Monthly Operating Report MDNR004562
Aug-26-77	3.40						Monthly Operating Report MDNR004562
Aug-27-77	3.77						Monthly Operating Report MDNR004562
Aug-30-77	0.27				29		Monthly Operating Report MDNR004562
Aug-31-77	0.24				20		Monthly Operating Report MDNR004562
Sep-01-77	2.45				12		Monthly Operating Report MDNR004561
Sep-02-77	2.80				48		Monthly Operating Report MDNR004561
Sep-03-77	1.11				9		Monthly Operating Report MDNR004561
Sep-04-77	0.76				20		Monthly Operating Report MDNR004561
Sep-05-77	2.70				21		Monthly Operating Report MDNR004561
Sep-06-77	3.41				46		Monthly Operating Report MDNR004561
Sep-07-77	3.47				57		Monthly Operating Report MDNR004561
Sep-08-77	3.10				483		Monthly Operating Report MDNR004561
Sep-09-77	2.89				29		Monthly Operating Report MDNR004561
Sep-10-77	3.50				159		Monthly Operating Report MDNR004561
Sep-11-77	3.52				217		Monthly Operating Report MDNR004561
Sep-12-77	3.15				293		Monthly Operating Report MDNR004561
Sep-13-77	3.52				30		Monthly Operating Report MDNR004561
Sep-14-77	3.15				237		Monthly Operating Report MDNR004561
Sep-15-77	2.91				20		Monthly Operating Report MDNR004561
Sep-16-77	3.06				332		Monthly Operating Report MDNR004561
Sep-17-77	1.85				371		Monthly Operating Report MDNR004561

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Appendix 14a-C
Allied Monarch Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Sep-18-77	0.92				41		Monthly Operating Report MDNR004561
Sep-19-77	3.06				77		Monthly Operating Report MDNR004561
Sep-20-77	3.10				52		Monthly Operating Report MDNR004561
Sep-21-77	2.94				98		Monthly Operating Report MDNR004561
Sep-22-77	2.74				69		Monthly Operating Report MDNR004561
Sep-23-77	3.09				77		Monthly Operating Report MDNR004561
Sep-24-77	1.56				91		Monthly Operating Report MDNR004561
Sep-25-77	1.04				17		Monthly Operating Report MDNR004561
Sep-26-77					338		Monthly Operating Report MDNR004561
Sep-27-77					26		Monthly Operating Report MDNR004561
Sep-28-77					93		Monthly Operating Report MDNR004561
Sep-29-77					176		Monthly Operating Report MDNR004561
Sep-30-77					108		Monthly Operating Report MDNR004561
Oct-01-77	2.98				274		Monthly Operating Report MDNR004560
Oct-02-77	0.84				42		Monthly Operating Report MDNR004560
Oct-03-77	3.19				30		Monthly Operating Report MDNR004560
Oct-04-77	2.74				46		Monthly Operating Report MDNR004560
Oct-05-77	2.91				24		Monthly Operating Report MDNR004560
Oct-06-77	3.16				26		Monthly Operating Report MDNR004560
Oct-07-77	2.89				27		Monthly Operating Report MDNR004560
Oct-08-77	1.91				64		Monthly Operating Report MDNR004560
Oct-09-77	1.69				28		Monthly Operating Report MDNR004560
Oct-10-77	3.38				197		Monthly Operating Report MDNR004560
Oct-11-77	2.42				141		Monthly Operating Report MDNR004560
Oct-12-77	2.90				170		Monthly Operating Report MDNR004560
Oct-13-77	2.99				150		Monthly Operating Report MDNR004560
Oct-14-77	2.63				110		Monthly Operating Report MDNR004560
Oct-15-77	1 45				112		Monthly Operating Report MDNR004560
Oct-16-77					10		Monthly Operating Report MDNR004560
Oct-17-77	3.80				191		Monthly Operating Report MDNR004560
Oct-18-77	3.60						Monthly Operating Report MDNR004560
Oct-19-77	2.99				25		Monthly Operating Report MDNR004560
Oct-20-77	3.20				107		Monthly Operating Report MDNR004560
Oct-21-77	3.30				111		Monthly Operating Report MDNR004560
Oct-22-77	1 40				159		Monthly Operating Report MDNR004560
Oct-23-77	0.87				20		Monthly Operating Report MDNR004560
Oct-24-77	3.04						Monthly Operating Report MDNR004560
Oct-25-77	2.94				172		Monthly Operating Report MDNR004560
Oct-26-77	2.70						Monthly Operating Report MDNR004560
Oct-27-77	3.08						Monthly Operating Report MDNR004560
Oct-28-77	2.70						Monthly Operating Report MDNR004560
Oct-29-77	3 13						Monthly Operating Report MDNR004560
Oct-30-77	2.90						Monthly Operating Report MDNR004560
Jan-28-78					330		Addendum to Monthly Operating Report
Jan-29-78					169		Addendum to Monthly Operating Report
Jan-30-78					397		Addendum to Monthly Operating Report
Jan-31-78					292		Addendum to Monthly Operating Report
Feb-27-78					448		Addendum to Monthly Operating Report
Feb-27-78	**3.96**			**16,164**	**231**	**R**	**MDNR 003987 (WRC)**
Feb-28-78					364		Addendum to Monthly Operating Report
May-01-78	1 34				22		Monthly Operating Report MDNR004558
May-02-78	0 62				6		Monthly Operating Report MDNR004558

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Appendix 14a-C
Allied Monarch Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
May-03-78	0.48				4		Monthly Operating Report MDNR004558
May-04-78	0.45				4		Monthly Operating Report MDNR004558
May-05-78	2.73				182		Monthly Operating Report MDNR004558
May-06-78	3.26				443		Monthly Operating Report MDNR004558
May-07-78	3.29				82		Monthly Operating Report MDNR004558
May-08-78	3.35				167		Monthly Operating Report MDNR004558
May-09-78	3.80				32		Monthly Operating Report MDNR004558
May-10-78	3.51				750		Monthly Operating Report MDNR004558
May-11-78	3.53				88		Monthly Operating Report MDNR004558
May-12-78	3.91				555		Monthly Operating Report MDNR004558
May-13-78	4.06				271		Monthly Operating Report MDNR004558
May-14-78	3.98				700		Monthly Operating Report MDNR004558
May-15-78	2.60				485		Monthly Operating Report MDNR004558
May-16-78	3.00				26		Monthly Operating Report MDNR004558
May-17-78	3.18				79		Monthly Operating Report MDNR004558
May-18-78	2.78				23		Monthly Operating Report MDNR004558
May-19-78	2.76				49		Monthly Operating Report MDNR004558
May-20-78	3.00				252		Monthly Operating Report MDNR004558
May-21-78	2.89				76		Monthly Operating Report MDNR004558
May-22-78	3.31				193		Monthly Operating Report MDNR004558
May-23-78	2.62				87		Monthly Operating Report MDNR004558
May-24-78	3.64				61		Monthly Operating Report MDNR004558
May-25-78	3.67				306		Monthly Operating Report MDNR004558
May-26-78	3.08				231		Monthly Operating Report MDNR004558
May-27-78	0.68				51		Monthly Operating Report MDNR004558
May-28-78	0.64				16		Monthly Operating Report MDNR004558
May-29-78	0.54				28		Monthly Operating Report MDNR004558
May-30-78	2.95				99		Monthly Operating Report MDNR004558
May-31-78	3.35				148		Monthly Operating Report MDNR004558
Jun-01-78	2.63				439		Monthly Operating Report MDNR004557
Jun-02-78	3.35				28		Monthly Operating Report MDNR004557
Jun-03-78	3.75				407		Monthly Operating Report MDNR004557
Jun-04-78	3.80				253		Monthly Operating Report MDNR004557
Jun-05-78	3.30				413		Monthly Operating Report MDNR004557
Jun-06-78	3.59				359		Monthly Operating Report MDNR004557
Jun-07-78	2.81				23		Monthly Operating Report MDNR004557
Jun-08-78	2.86				48		Monthly Operating Report MDNR004557
Jun-09-78	2.93				49		Monthly Operating Report MDNR004557
Jun-10-78	1.36				33		Monthly Operating Report MDNR004557
Jun-11-78	1.31				41		Monthly Operating Report MDNR004557
Jun-12-78	3.78				32		Monthly Operating Report MDNR004557
Jun-13-78	2.79				23		Monthly Operating Report MDNR004557
Jun-14-78	3.04				25		Monthly Operating Report MDNR004557
Jun-15-78	2.42				10		Monthly Operating Report MDNR004557
Jun-16-78	2.40				20		Monthly Operating Report MDNR004557
Jun-17-78	2.14				178		Monthly Operating Report MDNR004557
Jun-18-78	2 41				20		Monthly Operating Report MDNR004557
Jun-19-78	2.95				443		Monthly Operating Report MDNR004557
Jun-20-78	2.88				24		Monthly Operating Report MDNR004557
Jun-21-78	2.93				24		Monthly Operating Report MDNR004557
Jun-22-78	3.31				10		Monthly Operating Report MDNR004557
Jun-23-78	3.01				215		Monthly Operating Report MDNR004557

Appendix 14a-C
Allied Monarch Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Jun-24-78	3.20				27		Monthly Operating Report MDNR004557
Jun-25-78	2.68				22		Monthly Operating Report MDNR004557
Jun-26-78	3.19				27		Monthly Operating Report MDNR004557
Jun-27-78	2.93				24		Monthly Operating Report MDNR004557
Jun-28-78	3.09				26		Monthly Operating Report MDNR004557
Jun-29-78	3.64				243		Monthly Operating Report MDNR004557
Jun-30-78	4.15				138		Monthly Operating Report MDNR004557
Jul-01-78	1.56				26		Monthly Operating Report MDNR004559
Jul-02-78	1.07				9		Monthly Operating Report MDNR004559
Jul-03-78	0.67				5		Monthly Operating Report MDNR004559
Jul-04-78	0.66				6		Monthly Operating Report MDNR004559
Jul-05-78	0.80				23		Monthly Operating Report MDNR004559
Jul-06-78	0.67				22		Monthly Operating Report MDNR004559
Jul-07-78	2.84				24		Monthly Operating Report MDNR004559
Jul-08-78	2.93				25		Monthly Operating Report MDNR004559
Jul-09-78	2.62				22		Monthly Operating Report MDNR004559
Jul-10-78	2.63				22		Monthly Operating Report MDNR004559
Jul-11-78	2.93				24		Monthly Operating Report MDNR004559
Jul-12-78	3.26				27		Monthly Operating Report MDNR004559
Jul-13-78	3.91				78		Monthly Operating Report MDNR004559
Jul-14-78	3.14				15		Monthly Operating Report MDNR004559
Jul-15-78	1.85				227		Monthly Operating Report MDNR004559
Jul-16-78	1 95				27		Monthly Operating Report MDNR004559
Jul-17-78	3.28				27		Monthly Operating Report MDNR004559
Jul-18-78	3.18				30		Monthly Operating Report MDNR004559
Jul-19-78	3.59				23		Monthly Operating Report MDNR004559
Jul-20-78	2.81				23		Monthly Operating Report MDNR004559
Jul-21-78	3.44				29		Monthly Operating Report MDNR004559
Jul-22-78	3.33				111		Monthly Operating Report MDNR004559
Jul-23-78	3.82				32		Monthly Operating Report MDNR004559
Jul-24-78	3.36				28		Monthly Operating Report MDNR004559
Jul-25-78	3.03				25		Monthly Operating Report MDNR004559
Jul-26-78	3.35				28		Monthly Operating Report MDNR004559
Jul-27-78	3.33				28		Monthly Operating Report MDNR004559
Jul-28-78	3.67				61		Monthly Operating Report MDNR004559
Jul-29-78	2.87				96		Monthly Operating Report MDNR004559
Jul-30-78	1.65				55		Monthly Operating Report MDNR004559
Jul-31-78	5.19				173		Monthly Operating Report MDNR004559
Mar-01-79	4.00				401		Monthly Operating Report MDNR004556
Mar-02-79	2.54				678		Monthly Operating Report MDNR004556
Mar-03-79	2.42				725		Monthly Operating Report MDNR004556
Mar-04-79	1.94				452		Monthly Operating Report MDNR004556
Mar-05-79	2.71				452		Monthly Operating Report MDNR004556
Mar-06-79	2.59				259		Monthly Operating Report MDNR004556
Mar-07-79	2.42				326		Monthly Operating Report MDNR004556
Mar-08-79	2.42				243		Monthly Operating Report MDNR004556
Mar-09-79	2.29				305		Monthly Operating Report MDNR004556
Mar-10-79	2.17				579		Monthly Operating Report MDNR004556
Mar-11-79	2.03				203		Monthly Operating Report MDNR004556
Mar-12-79	2.38				555		Monthly Operating Report MDNR004556
Mar-13-79	2.24				224		Monthly Operating Report MDNR004556
Mar-14-79	2.74				183		Monthly Operating Report MDNR004556

Appendix 14a-C
Allied Monarch Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Mar-15-79	2.44				326		Monthly Operating Report MDNR004556
Mar-16-79	2.56				341		Monthly Operating Report MDNR004556
Mar-17-79	2.38				477		Monthly Operating Report MDNR004556
Mar-18-79	2.33				233		Monthly Operating Report MDNR004556
Mar-19-79	2.27				302		Monthly Operating Report MDNR004556
Mar-20-79	2.31				74		Monthly Operating Report MDNR004556
Mar-21-79	2.13				284		Monthly Operating Report MDNR004556
Mar-22-79	2.66				266		Monthly Operating Report MDNR004556
Mar-23-79	2.83				378		Monthly Operating Report MDNR004556
Mar-24-79	2.22				148		Monthly Operating Report MDNR004556
Mar-25-79	2.38				20		Monthly Operating Report MDNR004556
Mar-26-79	2.35				235		Monthly Operating Report MDNR004556
Mar-27-79	**2.02**			**7,749**	**118**	R	**Hesse Ex.32 9001457 - 61 (WRC)**
Mar-28-79	1.94				342		Monthly Operating Report MDNR004556
Mar-29-79	2.21				368		Monthly Operating Report MDNR004556
Mar-30-79	2.02				135		Monthly Operating Report MDNR004556
Mar-31-79	2.23				149		Monthly Operating Report MDNR004556
Apr-01-79	2.30				230		Monthly Operating Report MDNR004555
Apr-02-79	2.55				511		Monthly Operating Report MDNR004555
Apr-03-79	2.28				304		Monthly Operating Report MDNR004555
Apr-04-79	2.10				420		Monthly Operating Report MDNR004555
Apr-05-79	2.54				170		Monthly Operating Report MDNR004555
Apr-06-79	2.27				303		Monthly Operating Report MDNR004555
Apr-07-79	2.71				543		Monthly Operating Report MDNR004555
Apr-08-79	2.28				228		Monthly Operating Report MDNR004555
Apr-09-79	2.19				364		Monthly Operating Report MDNR004555
Apr-10-79	2.94				196		Monthly Operating Report MDNR004555
Apr-11-79	3.26				217		Monthly Operating Report MDNR004555
Apr-12-79	3.12				312		Monthly Operating Report MDNR004555
Apr-13-79	3.36				112		Monthly Operating Report MDNR004555
Apr-14-79	3.43				115		Monthly Operating Report MDNR004555
Apr-15-79	2.15				18		Monthly Operating Report MDNR004555
Apr-16-79	3.26				109		Monthly Operating Report MDNR004555
Apr-17-79	2.20				180		Monthly Operating Report MDNR004555
Apr-18-79	2.67				89		Monthly Operating Report MDNR004555
Apr-19-79	2.22				222		Monthly Operating Report MDNR004555
Apr-20-79	3.02				202		Monthly Operating Report MDNR004555
Apr-21-79	3.24				216		Monthly Operating Report MDNR004555
Apr-22-79	2.40				160		Monthly Operating Report MDNR004555
Apr-23-79	2.58				258		Monthly Operating Report MDNR004555
Apr-24-79	2.20				73		Monthly Operating Report MDNR004555
Apr-25-79	1.99				66		Monthly Operating Report MDNR004555
Apr-26-79	2.11				141		Monthly Operating Report MDNR004555
Apr-27-79	2.04				136		Monthly Operating Report MDNR004555
Apr-28-79	1.95				65		Monthly Operating Report MDNR004555
Apr-29-79	2.19				73		Monthly Operating Report MDNR004555
Apr-30-79	1.85				253		Monthly Operating Report MDNR004555
May-01-79	1.91				382		Monthly Operating Report MDNR004551
May-02-79	2.03				271		Monthly Operating Report MDNR004551
May-03-79	2.16				216		Monthly Operating Report MDNR004551
May-04-79	2.08				208		Monthly Operating Report MDNR004551
May-05-79	2.08				277		Monthly Operating Report MDNR004551

Appendix 14a-C
Allied Monarch Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
May-06-79	1.98				132		Monthly Operating Report MDNR004551
May-07-79	2.45				327		Monthly Operating Report MDNR004551
May-08-79	2.36				237		Monthly Operating Report MDNR004551
May-09-79	2.35				79		Monthly Operating Report MDNR004551
May-10-79	2.29				76		Monthly Operating Report MDNR004551
May-11-79	2.21				151		Monthly Operating Report MDNR004551
May-12-79	2.26				24		Monthly Operating Report MDNR004551
May-13-79	2.83				323		Monthly Operating Report MDNR004551
May-14-79	2.42				149		Monthly Operating Report MDNR004551
May-15-79	2.24				140		Monthly Operating Report MDNR004551
May-16-79	2.06				307		Monthly Operating Report MDNR004551
May-17-79	2.30				359		Monthly Operating Report MDNR004551
May-18-79	2.15				368		Monthly Operating Report MDNR004551
May-19-79	2.20				385		Monthly Operating Report MDNR004551
May-20-79	2.31				378		Monthly Operating Report MDNR004551
May-21-79	2.26				350		Monthly Operating Report MDNR004551
May-22-79	2.10				139		Monthly Operating Report MDNR004551
May-23-79	2.05				139		Monthly Operating Report MDNR004551
May-24-79	2.17				217		Monthly Operating Report MDNR004551
May-25-79	2.36				158		Monthly Operating Report MDNR004551
May-26-79	2.12				142		Monthly Operating Report MDNR004551
May-27-79	3.55				170		Monthly Operating Report MDNR004551
May-28-79	2.47				249		Monthly Operating Report MDNR004551
May-29-79	2.50				167		Monthly Operating Report MDNR004551
May-30-79	2 76				184		Monthly Operating Report MDNR004551
May-31-79	2.82				94		Monthly Operating Report MDNR004551
Oct-14-79					78		MDNR004553
Oct-31-79					137		MDNR004553
Jun-01-80	1.33				44		Monthly Operating Report MDNR004550
Jun-02-80	1.38				46		Monthly Operating Report MDNR004550
Jun-03-80	1.53				402		Monthly Operating Report MDNR004550
Jun-04-80	1.30				92		Monthly Operating Report MDNR004550
Jun-05-80	1.30				46		Monthly Operating Report MDNR004550
Jun-06-80	1.50				51		Monthly Operating Report MDNR004550
Jun-07-80	0.80				29		Monthly Operating Report MDNR004550
Jun-08-80					141		Monthly Operating Report MDNR004550
Jun-09-80					198		Monthly Operating Report MDNR004550
Jun-10-80					112		Monthly Operating Report MDNR004550
Jun-11-80	1.40				94		Monthly Operating Report MDNR004550
Jun-12-80	1.40				12		Monthly Operating Report MDNR004550
Jun-13-80	1.50				10		Monthly Operating Report MDNR004550
Jun-14-80	1.20				10		Monthly Operating Report MDNR004550
Jun-15-80	1.28				11		Monthly Operating Report MDNR004550
Jun-16-80	1.31				11		Monthly Operating Report MDNR004550
Jun-17-80	1.57				13		Monthly Operating Report MDNR004550
Jun-18-80	1.50				13		Monthly Operating Report MDNR004550
Jun-19-80					56		Monthly Operating Report MDNR004550
Jun-20-80	1.60				55		Monthly Operating Report MDNR004550
Jun-21-80	1.26				42		Monthly Operating Report MDNR004550
Jun-22-80	1.44				96		Monthly Operating Report MDNR004550
Jun-23-80	1 64				110		Monthly Operating Report MDNR004550
Jun-24-80	1 41				47		Monthly Operating Report MDNR004550

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Appendix 14a-C
Allied Monarch Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Jun-24-80	**1.60**			**5,968**	**0**	R	**WRC (Appendix 8a-1, no Bates number)**
Jun-25-80	1.70				115		Monthly Operating Report MDNR004550
Jun-26-80	1.30				46		Monthly Operating Report MDNR004550
Jun-27-80	1.40				12		Monthly Operating Report MDNR004550
Jun-28-80	1.26				11		Monthly Operating Report MDNR004550
Jun-29-80	1.20				43		Monthly Operating Report MDNR004550
Jun-30-80	1.40				12		Monthly Operating Report MDNR004550
Oct-14-80					131		MDNR004548
Oct-31-80					246		MDNR004548
Jan-26-81	**0.66**			**3,244**	**258**	R	**SA 034341 - 52 (WRC)**
May-14-81					381		MDNR004564-MDNR004568
May-31-81					222		MDNR004564-MDNR004568
Oct-14-81					184		MDNR004564-MDNR004568
Oct-19-81					**632**	R	**MDNR - WRC Notice of Noncompliance, 12/15/81 (see Allied Exhibit 520)**
Oct-20-81					**545**	R	**MDNR - WRC Notice of Noncompliance, 12/15/81 (see Allied Exhibit 520)**
Oct-31-81					332		MDNR004564-MDNR004568
Mar-01-82	**0.32**			**1,969**	**53**	R	**SA 033485-92 (WRC)**
May-14-82					129		MDNR004564-MDNR004568
May-31-82					157		MDNR004564-MDNR004568
Oct-14-82					77		MDNR004564-MDNR004568
Oct-25-82	**0.42**			**2,098**	**87**	R	**SA 033485-92 (WRC)**
Oct-31-82					116		MDNR004564-MDNR004568
Jan-31-83	0.47						Addendum to Monthly Operating Report
Feb-28-83	0.48						Addendum to Monthly Operating Report
Mar-31-83	0.62						Addendum to Monthly Operating Report
Apr-30-83	0.62						Addendum to Monthly Operating Report
May-31-83	0.52						Addendum to Monthly Operating Report
Jun-30-83	0.46						Addendum to Monthly Operating Report
Jul-31-83	0 44						Addendum to Monthly Operating Report
Jan-01-84	0.54				90		Monthly Operating Report SA048999-SA049005
Jan-02-84	0.50				33		Monthly Operating Report SA048999-SA049005
Jan-03-84	0 47				86		Monthly Operating Report SA048999-SA049005
Jan-04-84	0.58				142		Monthly Operating Report SA048999-SA049005
Jan-05-84	0.71				227		Monthly Operating Report SA048999-SA049005
Jan-06-84	0.76				262		Monthly Operating Report SA048999-SA049005
Jan-07-84	0.71				315		Monthly Operating Report SA048999-SA049005
Jan-08-84	0.86				209		Monthly Operating Report SA048999-SA049005
Jan-09-84	0.96				236		Monthly Operating Report SA048999-SA049005
Jan-10-84	0.71				89		Monthly Operating Report SA048999-SA049005
Jan-11-84	0.76				72		Monthly Operating Report SA048999-SA049005
Jan-12-84	0.72				96		Monthly Operating Report SA048999-SA049005
Jan-13-84	0.57				148		Monthly Operating Report SA048999-SA049005
Jan-14-84	0.55				46		Monthly Operating Report SA048999-SA049005
Jan-15-84	0 46				62		Monthly Operating Report SA048999-SA049005
Jan-16-84	0.46				98		Monthly Operating Report SA048999-SA049005
Jan-17-84	0.49				40		Monthly Operating Report SA048999-SA049005
Jan-18-84	0.48				40		Monthly Operating Report SA048999-SA049005
Jan-19-84	0.50				117		Monthly Operating Report SA048999-SA049005
Jan-20-84	0 49				81		Monthly Operating Report SA048999-SA049005
Jan-21-84	0.50				182		Monthly Operating Report SA048999-SA049005
Jan-22-84	0.51				203		Monthly Operating Report SA048999-SA049005

Appendix 14a-C
Allied Monarch Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Jan-23-84	0.59				147		Monthly Operating Report SA048999-SA049005
Jan-24-84	0.62				82		Monthly Operating Report SA048999-SA049005
Jan-25-84	0.52				26		Monthly Operating Report SA048999-SA049005
Jan-26-84	0.58				38		Monthly Operating Report SA048999-SA049005
Jan-27-84	0.60				121		Monthly Operating Report SA048999-SA049005
Jan-28-84	0.61				81		Monthly Operating Report SA048999-SA049005
Jan-29-84	0.61				121		Monthly Operating Report SA048999-SA049005
Jan-30-84	0.67				67		Monthly Operating Report SA048999-SA049005
Jan-31-84	0.68				68		Monthly Operating Report SA048999-SA049005
Feb-01-84	0 61				51		Monthly Operating Report SA048999-SA049005
Feb-02-84	0.63				125		Monthly Operating Report SA048999-SA049005
Feb-03-84	0.55				145		Monthly Operating Report SA048999-SA049005
Feb-04-84	0.61				122		Monthly Operating Report SA048999-SA049005
Feb-05-84	0.61				122		Monthly Operating Report SA048999-SA049005
Feb-06-84	0.61				174		Monthly Operating Report SA048999-SA049005
Feb-07-84	0.66				242		Monthly Operating Report SA048999-SA049005
Feb-08-84	0.68				80		Monthly Operating Report SA048999-SA049005
Feb-09-84	0.68				68		Monthly Operating Report SA048999-SA049005
Feb-10-84	0.69				114		Monthly Operating Report SA048999-SA049005
Feb-11-84	0.68				91		Monthly Operating Report SA048999-SA049005
Feb-12-84	0.68				91		Monthly Operating Report SA048999-SA049005
Feb-13-84	0.65				54		Monthly Operating Report SA048999-SA049005
Feb-14-84	0.61				163		Monthly Operating Report SA048999-SA049005
Feb-15-84	0.65				183		Monthly Operating Report SA048999-SA049005
Feb-16-84	0.56				158		Monthly Operating Report SA048999-SA049005
Feb-17-84	0 48				127		Monthly Operating Report SA048999-SA049005
Feb-18-84	0 48				79		Monthly Operating Report SA048999-SA049005
Feb-19-84	0.45				89		Monthly Operating Report SA048999-SA049005
Feb-20-84	0.40				319		Monthly Operating Report SA048999-SA049005
Feb-21-84	0.39				52		Monthly Operating Report SA048999-SA049005
Feb-22-84	0 42				42		Monthly Operating Report SA048999-SA049005
Feb-23-84	0.39				42		Monthly Operating Report SA048999-SA049005
Feb-24-84	0.46				100		Monthly Operating Report SA048999-SA049005
Feb-25-84	0 47				94		Monthly Operating Report SA048999-SA049005
Feb-26-84	0.48						Monthly Operating Report SA048999-SA049005
Feb-27-84	0.27						Monthly Operating Report SA048999-SA049005
Feb-28-84	0.64						Monthly Operating Report SA048999-SA049005
Feb-29-84	0.72				420		Monthly Operating Report SA048999-SA049005
Mar-01-84	0.54				144		Monthly Operating Report SA048999-SA049005
Mar-02-84	0.54				90		Monthly Operating Report SA048999-SA049005
Mar-03-84	0.60				140		Monthly Operating Report SA048999-SA049005
Mar-04-84	0.60				100		Monthly Operating Report SA048999-SA049005
Mar-05-84	0.60				175		Monthly Operating Report SA048999-SA049005
Mar-06-84	0.60				220		Monthly Operating Report SA048999-SA049005
Mar-07-84	0.48				144		Monthly Operating Report SA048999-SA049005
Mar-08-84	0.46				138		Monthly Operating Report SA048999-SA049005
Mar-09-84	0 46				214		Monthly Operating Report SA048999-SA049005
Mar-10-84	0.39				66		Monthly Operating Report SA048999-SA049005
Mar-11-84	0.38				203		Monthly Operating Report SA048999-SA049005
Mar-12-84	0.38				140		Monthly Operating Report SA048999-SA049005
Mar-13-84	0.38				38		Monthly Operating Report SA048999-SA049005
Mar-14-84	0.38				38		Monthly Operating Report SA048999-SA049005

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Appendix 14a-C
Allied Monarch Mill Clarifier
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Mar-15-84	0 38				51		Monthly Operating Report SA048999-SA049005
Mar-16-84	0 70				70		Monthly Operating Report SA048999-SA049005
Mar-17-84	0 75				100		Monthly Operating Report SA048999-SA049005
Mar-18-84	0 59				138		Monthly Operating Report SA048999-SA049005
Mar-19-84	0 55				173		Monthly Operating Report SA048999-SA049005
Mar-20-84	0 55				73		Monthly Operating Report SA048999-SA049005
Mar-21-84	0 51				34		Monthly Operating Report SA048999-SA049005
Mar-22-84	0 48				64		Monthly Operating Report SA048999-SA049005
Mar-23-84	0 46				108		Monthly Operating Report SA048999-SA049005
Mar-24-84	0 48				62		Monthly Operating Report SA048999-SA049005
Mar-25-84	0 46				77		Monthly Operating Report SA048999-SA049005
Mar-26-84	0 46				69		Monthly Operating Report SA048999-SA049005
Mar-27-84	0 46				68		Monthly Operating Report SA048999-SA049005
Mar-28-84	0 32				100		Monthly Operating Report SA048999-SA049005
Mar-29-84	0 46				31		Monthly Operating Report SA048999-SA049005
Mar-30-84	0 46				77		Monthly Operating Report SA048999-SA049005
Mar-31-84	0 46				31		Monthly Operating Report SA048999-SA049005
Apr-01-84	0 46				54		Monthly Operating Report SA048999-SA049005
Apr-02-84	0 46				46		Monthly Operating Report SA048999-SA049005
Apr-03-84	0 46				31		Monthly Operating Report SA048999-SA049005
Apr-04-84	0 46				38		Monthly Operating Report SA048999-SA049005
Apr-05-84	0 57				113		Monthly Operating Report SA048999-SA049005
Apr-06-84	0 59				158		Monthly Operating Report SA048999-SA049005
Apr-07-84	0 58				173		Monthly Operating Report SA048999-SA049005
Apr-08-84	0 62				229		Monthly Operating Report SA048999-SA049005
Apr-09-84	0 54				531		Monthly Operating Report SA048999-SA049005
Apr-10-84	0 60				220		Monthly Operating Report SA048999-SA049005
Apr-11-84	0 60				109		Monthly Operating Report SA048999-SA049005
Apr-12-84	0 60				80		Monthly Operating Report SA048999-SA049005
Apr-13-84	0 60				141		Monthly Operating Report SA048999-SA049005
Apr-14-84	0 60				60		Monthly Operating Report SA048999-SA049005
Apr-15-84	0 65				108		Monthly Operating Report SA048999-SA049005
Apr-16-84	0 60				131		Monthly Operating Report SA048999-SA049005
Apr-17-84	0 61				246		Monthly Operating Report SA048999-SA049005
Apr-18-84	0 67				211		Monthly Operating Report SA048999-SA049005
Apr-19-84	0 65				135		Monthly Operating Report SA048999-SA049005
Apr-20-84	0 33				55		Monthly Operating Report SA048999-SA049005
Apr-21-84	0 42				110		Monthly Operating Report SA048999-SA049005
Apr-22-84	0 47				70		Monthly Operating Report SA048999-SA049005
Apr-23-84	0 51				102		Monthly Operating Report SA048999-SA049005
Apr-24-84	0 37				49		Monthly Operating Report SA048999-SA049005
Apr-25-84	0 46				99		Monthly Operating Report SA048999-SA049005
Apr-26-84	0 22				15		Monthly Operating Report SA048999-SA049005
Apr-27-84	0 22				22		Monthly Operating Report SA048999-SA049005
Apr-28-84	0 38				25		Monthly Operating Report SA048999-SA049005
Apr-29-84	0 36				36		Monthly Operating Report SA048999-SA049005
Apr-30-84	0 47				86		Monthly Operating Report SA048999-SA049005
Oct-01-84	0 17				68		Monthly Operating Report SA048999-SA049005
Oct-02-84	0 18				54		Monthly Operating Report SA048999-SA049005
Oct-03-84	0 19				33		Monthly Operating Report SA048999-SA049005
Oct-04-84	0 27				77		Monthly Operating Report SA048999-SA049005
Oct-05-84	0 16				72		Monthly Operating Report SA048999-SA049005

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Appendix 14a-C
Allied Monarch Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Oct-06-84	0.60				134		Monthly Operating Report SA048999-SA049005
Oct-07-84	0.37				39		Monthly Operating Report SA048999-SA049005
Oct-08-84	0.38				51		Monthly Operating Report SA048999-SA049005
Oct-09-84	0.20				74		Monthly Operating Report SA048999-SA049005
Oct-10-84	0.22				58		Monthly Operating Report SA048999-SA049005
Oct-11-84	0.19				26		Monthly Operating Report SA048999-SA049005
Oct-12-84	0.31				127		Monthly Operating Report SA048999-SA049005
Oct-13-84	0.33				100		Monthly Operating Report SA048999-SA049005
Oct-14-84	0.28				119		Monthly Operating Report SA048999-SA049005
Oct-15-84	0.39				77		Monthly Operating Report SA048999-SA049005
Oct-16-84	0.42				39		Monthly Operating Report SA048999-SA049005
Oct-17-84	0.41				19		Monthly Operating Report SA048999-SA049005
Oct-18-84	0.30				19		Monthly Operating Report SA048999-SA049005
Oct-19-84	0.30				37		Monthly Operating Report SA048999-SA049005
Oct-20-84	0.38				50		Monthly Operating Report SA048999-SA049005
Oct-21-84	0.39				231		Monthly Operating Report SA048999-SA049005
Oct-22-84	0.39				264		Monthly Operating Report SA048999-SA049005
Oct-23-84	0.37				187		Monthly Operating Report SA048999-SA049005
Oct-24-84	0.45				162		Monthly Operating Report SA048999-SA049005
Oct-25-84	0.42				189		Monthly Operating Report SA048999-SA049005
Oct-26-84	0.46				129		Monthly Operating Report SA048999-SA049005
Oct-27-84	0.44				423		Monthly Operating Report SA048999-SA049005
Oct-28-84	0.37				149		Monthly Operating Report SA048999-SA049005
Oct-29-84	0.31				66		Monthly Operating Report SA048999-SA049005
Oct-30-84	0.27				46		Monthly Operating Report SA048999-SA049005
Oct-31-84	0.25				39		Monthly Operating Report SA048999-SA049005
Nov-01-84	0.42				191		Monthly Operating Report SA048999-SA049005
Nov-02-84	0.31				278		Monthly Operating Report SA048999-SA049005
Nov-03-84	0.22				193		Monthly Operating Report SA048999-SA049005
Nov-04-84	0.31				175		Monthly Operating Report SA048999-SA049005
Nov-05-84	0.46				234		Monthly Operating Report SA048999-SA049005
Nov-06-84	0.28				188		Monthly Operating Report SA048999-SA049005
Nov-07-84	0.37				153		Monthly Operating Report SA048999-SA049005
Nov-08-84	0.36				131		Monthly Operating Report SA048999-SA049005
Nov-09-84	0.28				148		Monthly Operating Report SA048999-SA049005
Nov-10-84	0.54				242		Monthly Operating Report SA048999-SA049005
Nov-11-84	0.45				131		Monthly Operating Report SA048999-SA049005
Nov-12-84	0.28				115		Monthly Operating Report SA048999-SA049005
Nov-13-84	0.27				125		Monthly Operating Report SA048999-SA049005
Nov-14-84	0.21				77		Monthly Operating Report SA048999-SA049005
Nov-15-84	0.17				50		Monthly Operating Report SA048999-SA049005
Nov-16-84	0 16				30		Monthly Operating Report SA048999-SA049005
Nov-17-84	0.21				45		Monthly Operating Report SA048999-SA049005
Nov-18-84	0.20				39		Monthly Operating Report SA048999-SA049005
Nov-19-84	0.18				44		Monthly Operating Report SA048999-SA049005
Nov-20-84	0.22				81		Monthly Operating Report SA048999-SA049005
Nov-21-84	0.13				46		Monthly Operating Report SA048999-SA049005
Nov-22-84	0.02				3		Monthly Operating Report SA048999-SA049005
Nov-23-84	0.29				41		Monthly Operating Report SA048999-SA049005
Nov-24-84	0.50				85		Monthly Operating Report SA048999-SA049005
Nov-25-84	0 46				115		Monthly Operating Report SA048999-SA049005
Nov-26-84	0.39				294		Monthly Operating Report SA048999-SA049005

Appendix 14a-C
Allied Monarch Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Nov-27-84	0.35				140		Monthly Operating Report SA048999-SA049005
Nov-28-84	0.46				121		Monthly Operating Report SA048999-SA049005
Nov-29-84	0 30				83		Monthly Operating Report SA048999-SA049005
Nov-30-84	0.26				161		Monthly Operating Report SA048999-SA049005
Dec-01-84	0.23				38		Monthly Operating Report SA048999-SA049005
Dec-02-84	0.27				108		Monthly Operating Report SA048999-SA049005
Dec-03-84	0.37				82		Monthly Operating Report SA048999-SA049005
Dec-04-84	0.34				172		Monthly Operating Report SA048999-SA049005
Dec-05-84	0 33				124		Monthly Operating Report SA048999-SA049005
Dec-06-84	0 44				177		Monthly Operating Report SA048999-SA049005
Dec-07-84	0 48				70		Monthly Operating Report SA048999-SA049005
Dec-08-84	0.43				146		Monthly Operating Report SA048999-SA049005
Dec-09-84	0 43				110		Monthly Operating Report SA048999-SA049005
Dec-10-84	0.49				144		Monthly Operating Report SA048999-SA049005
Dec-11-84	0.37				80		Monthly Operating Report SA048999-SA049005
Dec-12-84	0 31				182		Monthly Operating Report SA048999-SA049005
Dec-13-84	0.27				100		Monthly Operating Report SA048999-SA049005
Dec-14-84	0 25				109		Monthly Operating Report SA048999-SA049005
Dec-15-84	0.22				129		Monthly Operating Report SA048999-SA049005
Dec-16-84	0.21				132		Monthly Operating Report SA048999-SA049005
Dec-17-84	0.21				121		Monthly Operating Report SA048999-SA049005
Dec-18-84	0 21				85		Monthly Operating Report SA048999-SA049005
Dec-19-84	0 21				81		Monthly Operating Report SA048999-SA049005
Dec-20-84	0 25				105		Monthly Operating Report SA048999-SA049005
Dec-21-84	0 24				138		Monthly Operating Report SA048999-SA049005
Dec-22-84	0 19				102		Monthly Operating Report SA048999-SA049005
Dec-23-84	0.23				49		Monthly Operating Report SA048999-SA049005
Dec-24-84	0 14				73		Monthly Operating Report SA048999-SA049005
Dec-25-84	0.27				73		Monthly Operating Report SA048999-SA049005
Dec-26-84	0.20						Monthly Operating Report SA048999-SA049005
Dec-27-84	0 52						Monthly Operating Report SA048999-SA049005
Dec-28-84	0 39						Monthly Operating Report SA048999-SA049005
Dec-29-84	0 25						Monthly Operating Report SA048999-SA049005
Dec-30-84	0 30						Monthly Operating Report SA048999-SA049005
Dec-31-84	0 44						Monthly Operating Report SA048999-SA049005
Jan-01-85	0 43				216		Monthly Operating Report SA048995-SA048998
Jan-02-85	0 27				297		Monthly Operating Report SA048995-SA048998
Jan-03-85	0 25				186		Monthly Operating Report SA048995-SA048998
Jan-04-85	0 29				44		Monthly Operating Report SA048995-SA048998
Jan-05-85	0 21				125		Monthly Operating Report SA048995-SA048998
Jan-06-85	0 14				66		Monthly Operating Report SA048995-SA048998
Jan-07-85	0 22				132		Monthly Operating Report SA048995-SA048998
Jan-08-85	0 24				140		Monthly Operating Report SA048995-SA048998
Jan-09-85	0 28				177		Monthly Operating Report SA048995-SA048998
Jan-10-85	0 32				142		Monthly Operating Report SA048995-SA048998
Jan-11-85	0 29				64		Monthly Operating Report SA048995-SA048998
Jan-12-85	0 30				92		Monthly Operating Report SA048995-SA048998
Jan-13-85	0 23				140		Monthly Operating Report SA048995-SA048998
Jan-14-85	0 33				71		Monthly Operating Report SA048995-SA048998
Jan-15-85	0 31				99		Monthly Operating Report SA048995-SA048998
Jan-16-85	0 41				207		Monthly Operating Report SA048995-SA048998
Jan-17-85	0 22				66		Monthly Operating Report SA048995-SA048998

Appendix 14a-C
Allied Monarch Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Jan-18-85	0.19				109		Monthly Operating Report SA048995-SA048998
Jan-19-85	0.27				45		Monthly Operating Report SA048995-SA048998
Jan-20-85	0.44				377		Monthly Operating Report SA048995-SA048998
Jan-21-85	0.57				455		Monthly Operating Report SA048995-SA048998
Jan-22-85	0.71				369		Monthly Operating Report SA048995-SA048998
Jan-23-85	0.20				81		Monthly Operating Report SA048995-SA048998
Jan-24-85	0.34				260		Monthly Operating Report SA048995-SA048998
Jan-25-85	0.27				149		Monthly Operating Report SA048995-SA048998
Jan-26-85	0.24				194		Monthly Operating Report SA048995-SA048998
Jan-27-85	0.26				160		Monthly Operating Report SA048995-SA048998
Jan-28-85	0.29				213		Monthly Operating Report SA048995-SA048998
Jan-29-85	0.36				400		Monthly Operating Report SA048995-SA048998
Jan-30-85	0.14				154		Monthly Operating Report SA048995-SA048998
Jan-31-85	0.16				39		Monthly Operating Report SA048995-SA048998
Feb-01-85	0.31				238		Monthly Operating Report SA048995-SA048998
Feb-02-85	0.32				138		Monthly Operating Report SA048995-SA048998
Feb-03-85	0.35				117		Monthly Operating Report SA048995-SA048998
Feb-04-85	0.35				122		Monthly Operating Report SA048995-SA048998
Feb-05-85	0.46				74		Monthly Operating Report SA048995-SA048998
Feb-06-85	0.32				154		Monthly Operating Report SA048995-SA048998
Feb-07-85	0.28				152		Monthly Operating Report SA048995-SA048998
Feb-08-85	0.64				560		Monthly Operating Report SA048995-SA048998
Feb-09-85	0.61				478		Monthly Operating Report SA048995-SA048998
Feb-10-85	0.51				290		Monthly Operating Report SA048995-SA048998
Feb-11-85	0.30				152		Monthly Operating Report SA048995-SA048998
Feb-12-85	0.25						Monthly Operating Report SA048995-SA048998
Feb-13-85	0.45				318		Monthly Operating Report SA048995-SA048998
Feb-14-85	0.42				269		Monthly Operating Report SA048995-SA048998
Feb-15-85	0 42				256		Monthly Operating Report SA048995-SA048998
Feb-16-85	0 44				311		Monthly Operating Report SA048995-SA048998
Feb-17-85	0.41				320		Monthly Operating Report SA048995-SA048998
Feb-18-85	0.41				287		Monthly Operating Report SA048995-SA048998
Feb-19-85	0.38						Monthly Operating Report SA048995-SA048998
Feb-20-85	0.26				232		Monthly Operating Report SA048995-SA048998
Feb-21-85	0.33				259		Monthly Operating Report SA048995-SA048998
Feb-22-85	0.37				330		Monthly Operating Report SA048995-SA048998
Feb-23-85	0.37				334		Monthly Operating Report SA048995-SA048998
Feb-24-85	0.38						Monthly Operating Report SA048995-SA048998
Feb-25-85	0.37						Monthly Operating Report SA048995-SA048998
Feb-26-85	0.41						Monthly Operating Report SA048995-SA048998
Feb-27-85	0.43						Monthly Operating Report SA048995-SA048998
Feb-28-85	0.50						Monthly Operating Report SA048995-SA048998
Mar-01-85	0.50				147		Monthly Operating Report SA048995-SA048998
Mar-02-85	0.55				160		Monthly Operating Report SA048995-SA048998
Mar-03-85	0.55				594		Monthly Operating Report SA048995-SA048998
Mar-04-85	0.61				173		Monthly Operating Report SA048995-SA048998
Mar-05-85	0.51				388		Monthly Operating Report SA048995-SA048998
Mar-06-85	0.58				502		Monthly Operating Report SA048995-SA048998
Mar-07-85	0.36				277		Monthly Operating Report SA048995-SA048998
Mar-08-85	0.32				488		Monthly Operating Report SA048995-SA048998
Mar-09-85	0.51				726		Monthly Operating Report SA048995-SA048998
Mar-10-85	0.56				520		Monthly Operating Report SA048995-SA048998

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Appendix 14a-C
Allied Monarch Mill Clarifier
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Mar-11-85	0 33				366		Monthly Operating Report SA048995-SA048998
Mar-12-85	0 40				361		Monthly Operating Report SA048995-SA048998
Mar-13-85	0 37				226		Monthly Operating Report SA048995-SA048998
Mar-14-85	0 44				145		Monthly Operating Report SA048995-SA048998
Mar-15-85	0 47				365		Monthly Operating Report SA048995-SA048998
Mar-16-85	0 47				209		Monthly Operating Report SA048995-SA048998
Mar-17-85	0 45				105		Monthly Operating Report SA048995-SA048998
Mar-18-85	0 47				184		Monthly Operating Report SA048995-SA048998
Mar-19-85	0 42				196		Monthly Operating Report SA048995-SA048998
Mar-20-85	0 33				281		Monthly Operating Report SA048995-SA048998
Mar-21-85	0 37				92		Monthly Operating Report SA048995-SA048998
Mar-22-85	0 44				240		Monthly Operating Report SA048995-SA048998
Mar-23-85	0 44				184		Monthly Operating Report SA048995-SA048998
Mar-24-85	0 46				196		Monthly Operating Report SA048995-SA048998
Mar-25-85	0 43				173		Monthly Operating Report SA048995-SA048998
Mar-26-85	0 35				184		Monthly Operating Report SA048995-SA048998
Mar-27-85	0 33				122		Monthly Operating Report SA048995-SA048998
Mar-28-85	0 49				131		Monthly Operating Report SA048995-SA048998
Mar-29-85	0 43				171		Monthly Operating Report SA048995-SA048998
Mar-30-85	0 46				143		Monthly Operating Report SA048995-SA048998
Mar-31-85	0 39				189		Monthly Operating Report SA048995-SA048998
Apr-01-85	0 43				153		Monthly Operating Report SA048995-SA048998
Apr-02-85	0 48				204		Monthly Operating Report SA048995-SA048998
Apr-03-85	0 46				105		Monthly Operating Report SA048995-SA048998
Apr-04-85	0 42				58		Monthly Operating Report SA048995-SA048998
Apr-05-85	0 22				81		Monthly Operating Report SA048995-SA048998
Apr-06-85	0 50				290		Monthly Operating Report SA048995-SA048998
Apr-07-85	0 40				306		Monthly Operating Report SA048995-SA048998
Apr-08-85	0 39				280		Monthly Operating Report SA048995-SA048998
Apr-09-85	0 43				331		Monthly Operating Report SA048995-SA048998
Apr-10-85	0 30				250		Monthly Operating Report SA048995-SA048998
Apr-11-85	0 32				118		Monthly Operating Report SA048995-SA048998
Apr-12-85	0 33				81		Monthly Operating Report SA048995-SA048998
Apr-13-85	0 31				87		Monthly Operating Report SA048995-SA048998
Apr-14-85	0 48				66		Monthly Operating Report SA048995-SA048998
Apr-15-85	0 67				142		Monthly Operating Report SA048995-SA048998
Apr-16-85	0 42				132		Monthly Operating Report SA048995-SA048998
Apr-17-85	0 38				117		Monthly Operating Report SA048995-SA048998
Apr-18-85	0 44				278		Monthly Operating Report SA048995-SA048998
Apr-19-85	0 58				196		Monthly Operating Report SA048995-SA048998
Apr-20-85	0 36				152		Monthly Operating Report SA048995-SA048998
Apr-21-85	0 31				106		Monthly Operating Report SA048995-SA048998
Apr-22-85	0 34				204		Monthly Operating Report SA048995-SA048998
Apr-23-85	0 32				278		Monthly Operating Report SA048995-SA048998
Apr-24-85	0 29				127		Monthly Operating Report SA048995-SA048998
Apr-25-85	0 39				105		Monthly Operating Report SA048995-SA048998
Apr-26-85	0 39				68		Monthly Operating Report SA048995-SA048998
Apr-27-85	0 40				76		Monthly Operating Report SA048995-SA048998
Apr-28-85	0 37				80		Monthly Operating Report SA048995-SA048998
Apr-29-85	0 43				61		Monthly Operating Report SA048995-SA048998
Apr-30-85	0 37				51		Monthly Operating Report SA048995-SA048998
May-01-85	0 14				18		Monthly Operating Report SA049042-SA049045

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Appendix 14a-C
Allied Monarch Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
May-02-85	0 07				14		Monthly Operating Report SA049042-SA049045
May-03-85	0 17				35		Monthly Operating Report SA049042-SA049045
May-04-85	0 16				30		Monthly Operating Report SA049042-SA049045
May-05-85	0 15				31		Monthly Operating Report SA049042-SA049045
May-06-85	0 20				69		Monthly Operating Report SA049042-SA049045
May-07-85	0 28				66		Monthly Operating Report SA049042-SA049045
May-08-85	0 15				50		Monthly Operating Report SA049042-SA049045
May-09-85	0 15				59		Monthly Operating Report SA049042-SA049045
May-10-85	0 27				50		Monthly Operating Report SA049042-SA049045
May-11-85	0 38				71		Monthly Operating Report SA049042-SA049045
May-12-85	0 27				99		Monthly Operating Report SA049042-SA049045
May-13-85	0 28				78		Monthly Operating Report SA049042-SA049045
May-14-85	0 28				92		Monthly Operating Report SA049042-SA049045
May-15-85	0 17				61		Monthly Operating Report SA049042-SA049045
May-16-85	0 18				56		Monthly Operating Report SA049042-SA049045
May-17-85	0 18				64		Monthly Operating Report SA049042-SA049045
May-18-85	0 16				46		Monthly Operating Report SA049042-SA049045
May-19-85	0 17				27		Monthly Operating Report SA049042-SA049045
May-20-85	0 18				50		Monthly Operating Report SA049042-SA049045
May-21-85	0 20				33		Monthly Operating Report SA049042-SA049045
May-22-85	0 20				24		Monthly Operating Report SA049042-SA049045
May-23-85	0 22				31		Monthly Operating Report SA049042-SA049045
May-24-85	0 19				27		Monthly Operating Report SA049042-SA049045
May-25-85	0 15				18		Monthly Operating Report SA049042-SA049045
May-26-85	0 26				45		Monthly Operating Report SA049042-SA049045
May-27-85	0 25				54		Monthly Operating Report SA049042-SA049045
May-28-85	0 15				43		Monthly Operating Report SA049042-SA049045
May-29-85	0 20				35		Monthly Operating Report SA049042-SA049045
May-30-85	0 22				21		Monthly Operating Report SA049042-SA049045
May-31-85	0 18				24		Monthly Operating Report SA049042-SA049045
Jun-01-85	0 25				38		Monthly Operating Report SA049042-SA049045
Jun-02-85	0 22				34		Monthly Operating Report SA049042-SA049045
Jun-03-85	0 19				14		Monthly Operating Report SA049042-SA049045
Jun-04-85	0 26				28		Monthly Operating Report SA049042-SA049045
Jun-05-85	0 21				17		Monthly Operating Report SA049042-SA049045
Jun-06-85	0 17				19		Monthly Operating Report SA049042-SA049045
Jun-07-85	0 27				100		Monthly Operating Report SA049042-SA049045
Jun-08-85	0 38				149		Monthly Operating Report SA049042-SA049045
Jun-09-85	0 23				51		Monthly Operating Report SA049042-SA049045
Jun-10-85	0 25				20		Monthly Operating Report SA049042-SA049045
Jun-11-85	0 25				15		Monthly Operating Report SA049042-SA049045
Jun-12-85	0 21				26		Monthly Operating Report SA049042-SA049045
Jun-13-85	0 20				62		Monthly Operating Report SA049042-SA049045
Jun-14-85	0 15				95		Monthly Operating Report SA049042-SA049045
Jun-15-85	0 17				118		Monthly Operating Report SA049042-SA049045
Jun-16-85	0 19				101		Monthly Operating Report SA049042-SA049045
Jun-17-85	0 22				76		Monthly Operating Report SA049042-SA049045
Jun-18-85	0 22				107		Monthly Operating Report SA049042-SA049045
Jun-19-85	0 25				12		Monthly Operating Report SA049042-SA049045
Jun-20-85	0 22				45		Monthly Operating Report SA049042-SA049045
Jun-21-85	0 23				37		Monthly Operating Report SA049042-SA049045
Jun-22-85	0 16				30		Monthly Operating Report SA049042-SA049045

Appendix 14a-C
Allied Monarch Mill Clarifier
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Jun-23-85	0 23				41		Monthly Operating Report SA049042-SA049045
Jun-24-85	0 17				88		Monthly Operating Report SA049042-SA049045
Jun-25-85	0 19				60		Monthly Operating Report SA049042-SA049045
Jun-26-85	0 16				45		Monthly Operating Report SA049042-SA049045
Jun-27-85	0 16				14		Monthly Operating Report SA049042-SA049045
Jun-28-85	0 17				18		Monthly Operating Report SA049042-SA049045
Jun-29-85	0 19				13		Monthly Operating Report SA049042-SA049045
Jun-30-85	0 20				13		Monthly Operating Report SA049042-SA049045
Jul-01-85	0 17				23		Monthly Operating Report SA049042-SA049045
Jul-02-85	0 26				31		Monthly Operating Report SA049042-SA049045
Jul-03-85	0 28				5		Monthly Operating Report SA049042-SA049045
Jul-04-85	0 01						Monthly Operating Report SA049042-SA049045
Jul-05-85	0 28				64		Monthly Operating Report SA049042-SA049045
Jul-06-85	0 27				20		Monthly Operating Report SA049042-SA049045
Jul-07-85	0 25				19		Monthly Operating Report SA049042-SA049045
Jul-08-85	0 31				15		Monthly Operating Report SA049042-SA049045
Jul-09-85	0 28				66		Monthly Operating Report SA049042-SA049045
Jul-10-85	0 29				27		Monthly Operating Report SA049042-SA049045
Jul-11-85	0 30				86		Monthly Operating Report SA049042-SA049045
Jul-12-85	0 19				40		Monthly Operating Report SA049042-SA049045
Jul-13-85	0 15				10		Monthly Operating Report SA049042-SA049045
Jul-14-85	0 15				19		Monthly Operating Report SA049042-SA049045
Jul-15-85	0 16				28		Monthly Operating Report SA049042-SA049045
Jul-16-85	0 15				33		Monthly Operating Report SA049042-SA049045
Jul-17-85	0 15				24		Monthly Operating Report SA049042-SA049045
Jul-18-85	0 18				19		Monthly Operating Report SA049042-SA049045
Jul-19-85	0 16				22		Monthly Operating Report SA049042-SA049045
Jul-20-85	0 16				18		Monthly Operating Report SA049042-SA049045
Jul-21-85	0 16				15		Monthly Operating Report SA049042-SA049045
Jul-22-85	0 13				5		Monthly Operating Report SA049042-SA049045
Jul-23-85	0 16				31		Monthly Operating Report SA049042-SA049045
Jul-24-85	0 21				69		Monthly Operating Report SA049042-SA049045
Jul-25-85	0 18				15		Monthly Operating Report SA049042-SA049045
Jul-26-85	0 19				25		Monthly Operating Report SA049042-SA049045
Jul-27-85	0 19				14		Monthly Operating Report SA049042-SA049045
Jul-28-85	0 17				49		Monthly Operating Report SA049042-SA049045
Jul-29-85	0 20				29		Monthly Operating Report SA049042-SA049045
Jul-30-85	0 14				31		Monthly Operating Report SA049042-SA049045
Jul-31-85	0 16				28		Monthly Operating Report SA049042-SA049045
Aug-01-85	0 18				32		Monthly Operating Report SA049042-SA049045
Aug-02-85	0 18				12		Monthly Operating Report SA049042-SA049045
Aug-03-85	0 18				30		Monthly Operating Report SA049042-SA049045
Aug-04-85	0 19				48		Monthly Operating Report SA049042-SA049045
Aug-05-85	0 24				25		Monthly Operating Report SA049042-SA049045
Aug-06-85	0 17				17		Monthly Operating Report SA049042-SA049045
Aug-07-85	0 15				22		Monthly Operating Report SA049042-SA049045
Aug-08-85	0 26				39		Monthly Operating Report SA049042-SA049045
Aug-09-85	0 20				148		Monthly Operating Report SA049042-SA049045
Aug-10-85	0 37				11		Monthly Operating Report SA049042-SA049045
Aug-11-85	0 29				3		Monthly Operating Report SA049042-SA049045
Aug-12-85	0 22				26		Monthly Operating Report SA049042-SA049045
Aug-13-85	0 27				34		Monthly Operating Report SA049042-SA049045

Appendix 14a-C
Allied Monarch Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended and Dissolved Solids

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		Rev?	SOURCE
	(MGD)	DS	SS	DS	SS		
Aug-14-85	0.25				22		Monthly Operating Report SA049042-SA049045
Aug-15-85	0.19				44		Monthly Operating Report SA049042-SA049045
Aug-16-85	0.18				62		Monthly Operating Report SA049042-SA049045
Aug-17-85	0.20				58		Monthly Operating Report SA049042-SA049045
Aug-18-85	0.17				52		Monthly Operating Report SA049042-SA049045
Aug-19-85	0.12				46		Monthly Operating Report SA049042-SA049045
Aug-20-85	0.15				24		Monthly Operating Report SA049042-SA049045
Aug-21-85	0.13				47		Monthly Operating Report SA049042-SA049045
Aug-22-85	0.17				32		Monthly Operating Report SA049042-SA049045
Aug-23-85	0.21				60		Monthly Operating Report SA049042-SA049045
Aug-24-85	0.16				93		Monthly Operating Report SA049042-SA049045
Aug-25-85	0.23				86		Monthly Operating Report SA049042-SA049045
Aug-26-85	0.14				92		Monthly Operating Report SA049042-SA049045
Aug-27-85	0.26				58		Monthly Operating Report SA049042-SA049045
Aug-28-85	0.14				55		Monthly Operating Report SA049042-SA049045
Aug-29-85	0.19				39		Monthly Operating Report SA049042-SA049045
Aug-30-85	0.33				69		Monthly Operating Report SA049042-SA049045
Aug-31-85	0.29				132		Monthly Operating Report SA049042-SA049045

Notes:

Note 1 = Allied Data found in Bates # SA034834 to SA035050, SA035107 to SA035474, SA035584, SA035586, SA035615

Blanks indicate no monitoring data.

SS = Suspended solids; DS = Dissolved solids, BOD = Biolgical Oxygen Demand

Loads (lb/day) converted from PPM or mg/L using: Concentration (ppm or mg/L) x Flow (MGD) x 8.33.

WRC samples listed for 6/13/67 and 6/14/67 (SA 032024) in prior submittal were in error,
they are the same as those for 5/13/67 and 5/14/67.

Rev? = R indicates revision from original submittal (revision shown in bold).

APPENDIX 14A-D

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Bryant	Jul-20-55	24,168	18,897	SA 039019 (WRC)
Bryant	Jul-21-55	33,130	17,709	SA 039019 (WRC)
Bryant	Jul-22-55	28,381	18,771	SA 039019 (WRC)
Bryant	Jul-23-55	25,303	18,373	SA 039019 (WRC)
Bryant	Jul-24-55	5,292	4,730	SA 039019 (WRC)
Bryant	Jul-25-55	22,884	12,337	SA 039019 (WRC)
Bryant	Jul-26-55	27,879	14,940	SA 039019 (WRC)
Bryant	Fall 1955		16,838	Kendrick Exhibit 561 (see also KA04600383)
Bryant	Sept/Oct 1956	30,700	16,100	SA029195 (same as KA05001172)
Bryant	Feb-12-57	34,700	31,300	Note 1
Bryant	Feb-19-57	16,650		Note 1
Bryant	Feb-20-57	15,100		Note 1
Bryant	Feb-21-57	18,700	9,870	Note 1
Bryant	Feb-22-57		4,980	Note 1
Bryant	Feb-26-57	9,780	9,490	Note 1
Bryant	Feb-27-57	11,100	11,650	Note 1
Bryant	Feb-28-57	14,300	17,950	Note 1
Bryant	Mar-01-57		19,300	Note 1
Bryant	Mar-06-57	14,270	13,170	Note 1
Bryant	Mar-07-57	20,600	16,200	Note 1
Bryant	Mar-08-57		15,450	Note 1
Bryant	Mar-12-57		11,400	Note 1
Bryant	Mar-13-57	28,800	26,000	Note 1
Bryant	Mar-14-57		15,250	Note 1
Bryant	May 1957		12,391	KA04600384 (WRC)
Bryant	May-07-57		11,980	Note 1
Bryant	May-08-57		14,800	Note 1
Bryant	May-09-57		14,150	Note 1
Bryant	May-27-57	16,520	7,814	SA 039032 (WRC)
Bryant	May-28-57	23,231	16,939	SA 039032 (WRC)
Bryant	Nov'57-Jan'58		15,710	KA04600383
Bryant	Jan-09-58		19,700	Note 1
Bryant	Jan-10-58		8,700	Note 1
Bryant	Jan-14-58		17,690	Note 1
Bryant	Jan-15-58		24,600	Note 1
Bryant	Jan-16-58	33,600	20,650	Note 1
Bryant	Jan-21-58	21,600	19,500	Note 1
Bryant	Jan-22-58	21,800	22,750	Note 1
Bryant	Jan-28-58	30,100		Note 1
Bryant	Jan-29-58	25,700		Note 1
Bryant	Jan-30-58	33,500		Note 1
Bryant	Jan-31-58	37,700		Note 1
Bryant	Feb-04-58	28,550	27,700	Note 1
Bryant	Feb-05-58		29,350	Note 1
Bryant	Feb-27-58	31,300	26,750	Note 1
Bryant	Feb-28-58	38,000	25,500	Note 1
Bryant	Mar-04-58	31,800	24,850	Note 1
Bryant	May-20-58	24,500	15,700	Note 1
Bryant	May-21-58	25,600	24,200	Note 1
Bryant	May-22-58	18,350	15,800	Note 1
Bryant	May-23-58	16,100	17,200	Note 1
Bryant	May-26-58	31,200	21,000	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Bryant	May-27-58	36,500	30,900	Note 1
Bryant	Jun-02-58	28,700		Note 1
Bryant	Jun-03-58	23,100		Note 1
Bryant	Jun-04-58	32,800		Note 1
Bryant	Jun-05-58	32,850		Note 1
Bryant	Jun-09-58	32,600	12,500	Note 1
Bryant	Jun-10-58	38,400	19,600	Note 1
Bryant	Jun-11-58	40,800	29,100	Note 1
Bryant	Jun-17-58	35,400	19,500	Note 1
Bryant	Jun-18-58	26,700	21,650	Note 1
Bryant	Jun-19-58	38,400	25,600	Note 1
Bryant	Jun-24-58	33,100	19,400	Note 1
Bryant	Jun-25-58	38,400	24,150	Note 1
Bryant	Jun-26-58	35,100	19,130	Note 1
Bryant	Jul-08-58	28,450	21,500	Note 1
Bryant	Jul-09-58	27,250	23,800	Note 1
Bryant	Jul-10-58	33,500	25,300	Note 1
Bryant	Jul-11-58	30,300	20,500	Note 1
Bryant	Jul-30-58	38,700	19,100	Note 1
Bryant	Jul-31-58	46,300	35,100	Note 1
Bryant	Aug-05-58	43,800	29,700	Note 1
Bryant	Aug-07-58		19,500	Note 1
Bryant	Aug-08-58	40,200		Note 1
Bryant	Aug-13-58	40,600		Note 1
Bryant	Aug-14-58	35,150	20,700	Note 1
Bryant	Aug-26-58	27,600	14,750	Note 1
Bryant	Aug-27-58	21,950	16,080	Note 1
Bryant	Sep-09-58	35,800		Note 1
Bryant	Sep-11-58	39,000		Note 1
Bryant	Oct-01-58	39,500		Note 1
Bryant	Oct-28-58	27,400		Note 1
Bryant	Oct-29-58	33,250		Note 1
Bryant	Oct-30-58	32,000		Note 1
Bryant	Nov-04-58	34,400		Note 1
Bryant	Nov-05-58	39,000		Note 1
Bryant	Nov-06-58	40,200		Note 1
Bryant	Nov-11-58	30,750		Note 1
Bryant	Nov-18-58	33,750		Note 1
Bryant	Nov-19-58	28,250		Note 1
Bryant	Nov-20-58	34,300		Note 1
Bryant	Nov-25-58	23,900		Note 1
Bryant	Dec-02-58	40,600		Note 1
Bryant	Dec-03-58	34,000		Note 1
Bryant	Dec-04-58	38,400		Note 1
Bryant	Dec-09-58	25,000		Note 1
Bryant	Dec-10-58	25,050		Note 1
Bryant	Dec-16-58	40,800		Note 1
Bryant	Dec-17-58	33,000		Note 1
Bryant	Jan-07-59	16,400	10,900	Note 1
Bryant	Jan-28-59	16,800	15,900	Note 1
Bryant	Jan-29-59	10,900	4,500	Note 1
Bryant	Feb-17-59	18,800	10,850	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Bryant	Feb-25-59	27,800	19,400	Note 1
Bryant	Apr-14-59	34,700	24,200	Note 1
Bryant	Apr-21-59	20,900	16,800	Note 1
Bryant	Apr-30-59	30,800	22,000	Note 1
Bryant	May-13-59	37,560	24,420	Note 1
Bryant	May-26-59	26,000	17,300	Note 1
Bryant	Jun-04-59	38,200	17,750	Note 1
Bryant	Jun-10-59	20,700	9,250	Note 1
Bryant	Jun-17-59	36,300	17,200	Note 1
Bryant	Jul-08-59	26,000	14,600	Note 1
Bryant	Jul-14-59	27,200	20,600	Note 1
Bryant	Jul-28-59	22,800	5,900	Note 1
Bryant	Aug-19-59	20,000	8,580	Note 1
Bryant	Aug-25-59	53,200	29,200	Note 1
Bryant	Sep-10-59	23,400	14,700	Note 1
Bryant	Sep-16-59	22,300	17,500	Note 1
Bryant	Sep-23-59	17,000	9,600	Note 1
Bryant	Sep-30-59	24,600	13,000	Note 1
Bryant	Oct-06-59	24,000	13,500	Note 1
Bryant	Nov-03-59	29,100	15,600	Note 1
Bryant	Nov-17-59	21,800	11,700	Note 1
Bryant	Dec-08-59	16,000	8,000	Note 1
Bryant	Dec-17-59	24,900	16,500	Note 1
Bryant	Jan-06-60	25,000	11,000	Note 1
Bryant	Jan-13-60	33,000	29,700	Note 1
Bryant	Jan-27-60	36,200	20,000	Note 1
Bryant	Feb-04-60	35,700	20,600	Note 1
Bryant	Feb-25-60	33,900	28,700	Note 1
Bryant	Mar-09-60	28,800	9,600	Note 1
Bryant	Mar-22-60	30,400	18,700	Note 1
Bryant	Apr-06-60	15,300	9,600	Note 1
Bryant	Apr-12-60	16,000	8,800	Note 1
Bryant	Apr-28-60	18,400	9,700	Note 1
Bryant	May-18-60	13,500	6,600	Note 1
Bryant	May-26-60	37,800	21,400	Note 1
Bryant	Jun-01-60	24,100	10,000	Note 1
Bryant	Jun-07-60	33,300	20,900	Note 1
Bryant	Jun-15-60	29,200	8,600	Note 1
Bryant	Jun-22-60	21,800	10,300	Note 1
Bryant	Jun-28-60	26,700	15,800	Note 1
Bryant	Jul-05-60	27,600	19,100	Note 1
Bryant	Jul-12-60	34,500	20,200	Note 1
Bryant	Jul-19-60	35,600	15,400	Note 1
Bryant	Jul-27-60	26,400	10,800	Note 1
Bryant	Aug-03-60	20,800	4,600	Note 1
Bryant	Aug-10-60	24,600	8,700	Note 1
Bryant	Aug-24-60	15,300	10,100	Note 1
Bryant	Aug-31-60	22,000	7,800	Note 1
Bryant	Sep-07-60	17,700	12,000	Note 1
Bryant	Sep-14-60	49,400	21,600	Note 1
Bryant	Sep-27-60	27,700	20,100	Note 1
Bryant	Sep-29-60	31,600		Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Bryant	Oct-11-60	19,500	15,600	Note 1
Bryant	Oct-19-60	30,980	22,190	Note 1
Bryant	Oct-27-60	8,060	3,780	Note 1
Bryant	Nov-01-60	26,400	14,600	Note 1
Bryant	Nov-09-60	30,100	25,500	Note 1
Bryant	Nov-30-60	37,500	18,300	Note 1
Bryant	Dec-08-60	29,400	12,500	Note 1
Bryant	Dec-13-60	32,200	17,700	Note 1
Bryant	Dec-21-60	29,800	18,799	Note 1
Bryant	Dec-29-60	19,600	16,300	Note 1
Bryant	1961		16,500	Kendrick Exhibit 561
Bryant	Jun-27-61	25,119	14,170	SA 038997-039000 (WRC)
Bryant	Oct-03-62		13,400	NCASI000194
Bryant	Oct-04-62		14,700	NCASI000194
Bryant	Oct-05-62		12,550	NCASI000194
Bryant	Oct-10-62		12,750	NCASI000194
Bryant	Oct-11-62		12,100	NCASI000194
Bryant	Oct-18-62		17,600	NCASI000194
Bryant	Oct-19-62		13,600	NCASI000194
Bryant	Oct-24-62		12,500	NCASI000194
Bryant	Oct-25-62		14,000	NCASI000194
Bryant	Oct-26-62		12,200	NCASI000194
Bryant	Apr-22-63	4,520	1,695	Note 1
Bryant	Apr-23-63	8,950	907	Note 1
Bryant	Apr-24-63	8,030	1,305	Note 1
Bryant	Apr-25-63	6,260	1,300	Note 1
Bryant	May-01-63	8,200	980	Note 1
Bryant	May-02-63	10,300	1,000	Note 1
Bryant	May-06-63	8,170	710	Note 1
Bryant	May-07-63	10,500		Note 1
Bryant	May-13-63	5,160	2,980	Note 1
Bryant	May-14-63	3,800	3,210	Note 1
Bryant	May-15-63	5,350	3,650	Note 1
Bryant	May-16-63	3,080	780	Note 1
Bryant	May-20-63	5,000	623	Note 1
Bryant	May-21-63	7,500	880	Note 1
Bryant	May-22-63	10,300	1,030	Note 1
Bryant	May-23-63	8,150	1,030	Note 1
Bryant	Dec-10-63	7,125	1,090	SA 033416-19 (WRC)
Bryant	Jun-21-65	8,500	11,600	Note 1
Bryant	Jun-22-65	7,600	7,000	Note 1
Bryant	Jun-23-65	13,600	10,500	Note 1
Bryant	Jun-24-65	9,200	8,500	Note 1
Bryant	Jun-28-65	9,725	6,300	Note 1
Bryant	Jun-29-65	8,800	6,400	Note 1
Bryant	Jun-30-65	9,400	7,200	Note 1
Bryant	Jul-01-65	14,200	9,200	Note 1
Bryant	Jul-07-65	12,500	7,800	Note 1
Bryant	Jul-08-65	12,200	8,800	Note 1
Bryant	Aug-31-65	13,200	9,100	Note 1
Bryant	Sep-01-65	13,300	9,700	Note 1
Bryant	Sep-02-65	11,900	8,700	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED / CONFIDENTIAL
SETTLEMENT AN DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Bryant	Sep-07-65	17,600	9,600	Note 1
Bryant	Sep-08-65	16,800	9,600	Note 1
Bryant	Sep-09-65	12,600	5,200	Note 1
Bryant	Sep-13-65	6,700	5,600	Note 1
Bryant	Sep-14-65	13,700	8,100	Note 1
Bryant	Sep-16-65	7,900	4,000	Note 1
Bryant	Oct-05-65	10,000	5,700	Note 1
Bryant	Oct-06-65	13,100	11,700	Note 1
Bryant	Oct-07-65	12,200	7,900	Note 1
Bryant	Oct-12-65	12,300	9,000	Note 1
Bryant	Oct-13-65	9,200	8,200	Note 1
Bryant	Oct-14-65	9,600	9,000	Note 1
Bryant	Oct-27-65	16,400	14,100	Note 1
Bryant	Oct-28-65	14,900	13,500	Note 1
Bryant	Nov-02-65	17,500	15,200	Note 1
Bryant	Nov-03-65	18,400	14,000	Note 1
Bryant	Nov-04-65	17,600	11,700	Note 1
Bryant	Nov-09-65	10,500	12,100	Note 1
Bryant	Nov-10-65	18,300	12,300	Note 1
Bryant	Nov-11-65	15,400	10,600	Note 1
Bryant	Nov-30-65	21,800	29,500	Note 1
Bryant	Dec-01-65	20,600	13,200	Note 1
Bryant	Dec-02-65	17,100	13,000	Note 1
Bryant	Dec-07-65	22,600	11,200	Note 1
Bryant	Dec-08-65	15,100	5,100	Note 1
Bryant	Dec-09-65	13,900	14,500	Note 1
Bryant	Dec-14-65	19,000	16,700	Note 1
Bryant	Dec-15-65	20,800	17,500	Note 1
Bryant	Dec-16-65	20,000	17,000	Note 1
Bryant	Mar-01-66	13,400	13,600	Note 1
Bryant	Mar-02-66	20,200	15,100	Note 1
Bryant	Mar-03-66	37,600	18,000	Note 1
Bryant	Mar-08-66	13,700	9,800	Note 1
Bryant	Mar-09-66		10,700	Note 1
Bryant	Mar-10-66	30,000	12,700	Note 1
Bryant	Mar-11-66		16,500	Note 1
Bryant	Mar-14-66	27,200	19,600	Note 1
Bryant	Mar-15-66	23,300	17,600	Note 1
Bryant	Mar-16-66	39,300	16,400	Note 1
Bryant	Mar-17-66	21,000	12,600	Note 1
Bryant	Mar-18-66	32,800	13,800	Note 1
Bryant	Mar-21-66	17,600	16,400	Note 1
Bryant	Mar-22-66	36,200	16,800	Note 1
Bryant	Mar-23-66	23,000	24,500	Note 1
Bryant	Mar-24-66	25,900	21,600	Note 1
Bryant	Mar-25-66	25,900	16,600	Note 1
Bryant	Mar-28-66	25,700	14,200	Note 1
Bryant	Mar-29-66	25,000	21,700	Note 1
Bryant	Mar-30-66	24,800	18,800	Note 1
Bryant	Mar-31-66	27,500	20,300	Note 1
Bryant	Apr-01-66	27,700	20,900	Note 1
Bryant	Apr-04-66	19,500	12,600	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Bryant	Apr-05-66	25,700	15,500	Note 1
Bryant	Apr-06-66	24,200	16,100	Note 1
Bryant	Apr-07-66	29,400	19,300	Note 1
Bryant	Apr-08-66	24,200	14,880	Note 1
Bryant	Apr-11-66	22,900	14,800	Note 1
Bryant	Apr-12-66	22,800	15,300	Note 1
Bryant	Apr-13-66	16,800	14,600	Note 1
Bryant	Apr-14-66	22,600	15,300	Note 1
Bryant	Apr-15-66	23,600	16,300	Note 1
Bryant	Apr-18-66	23,000	12,900	Note 1
Bryant	Apr-19-66	25,800	15,400	Note 1
Bryant	Apr-20-66	20,300	21,500	Note 1
Bryant	Apr-21-66	18,900	15,500	Note 1
Bryant	Apr-22-66	26,300	21,200	Note 1
Bryant	Apr-25-66	25,100	14,200	Note 1
Bryant	Apr-26-66	22,800	12,900	Note 1
Bryant	Apr-27-66	23,700	12,300	Note 1
Bryant	Apr-28-66	19,600	13,800	Note 1
Bryant	Apr-29-66	25,300	16,000	Note 1
Bryant	May-02-66	20,200	11,000	Note 1
Bryant	May-03-66	28,600	10,000	Note 1
Bryant	May-04-66	21,300	12,500	Note 1
Bryant	May-05-66	21,000	11,800	Note 1
Bryant	May-06-66	56,800	15,300	Note 1
Bryant	May-09-66	66,300	18,200	Note 1
Bryant	May-10-66	62,500	13,800	Note 1
Bryant	May-11-66	67,300	15,800	Note 1
Bryant	May-12-66	59,700	13,700	Note 1
Bryant	May-13-66	15,700	11,200	Note 1
Bryant	May-16-66	7,200	7,100	Note 1
Bryant	May-17-66	7,000	4,200	Note 1
Bryant	May-18-66	12,100	7,300	Note 1
Bryant	May-19-66	11,800	9,600	Note 1
Bryant	May-20-66	16,500	6,100	Note 1
Bryant	May-23-66	31,400	15,000	Note 1
Bryant	May-24-66	26,900	16,200	Note 1
Bryant	May-25-66	24,200	15,700	Note 1
Bryant	May-26-66	31,200	10,500	Note 1
Bryant	May-27-66	17,400	12,700	Note 1
Bryant	May-30-66	12,100	4,200	Note 1
Bryant	May-31-66	9,500	9,500	Note 1
Bryant	Jun-01-66	11,800	10,900	Note 1
Bryant	Jun-02-66	12,400	12,400	Note 1
Bryant	Jun-03-66	13,500	14,700	Note 1
Bryant	Jun-06-66	9,300	8,400	Note 1
Bryant	Jun-07-66	8,750	9,500	Note 1
Bryant	Jun-08-66	9,100	8,200	Note 1
Bryant	Jun-09-66	9,650	9,950	Note 1
Bryant	Jun-10-66	13,100	9,300	Note 1
Bryant	Jun-13-66	6,700	9,700	Note 1
Bryant	Jun-14-66	8,800	11,700	Note 1
Bryant	Jun-15-66	11,100	10,000	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Bryant	Jun-16-66	8,100	8,100	Note 1
Bryant	Jun-17-66	10,900	9,400	Note 1
Bryant	Jun-20-66	13,900	7,500	Note 1
Bryant	Jun-21-66	19,000	7,900	Note 1
Bryant	Jun-22-66	17,500	9,600	Note 1
Bryant	Jun-23-66	14,600	93,000	Note 1
Bryant	Jun-24-66	14,800	6,800	Note 1
Bryant	Jun-27-66	17,500	8,200	Note 1
Bryant	Jun-28-66	14,200	8,100	Note 1
Bryant	Jun-29-66	14,700	9,300	Note 1
Bryant	Jun-30-66	17,600	10,900	Note 1
Bryant	Jul-05-66	16,300	6,600	Note 1
Bryant	Jul-06-66	9,000	5,300	Note 1
Bryant	Jul-07-66	16,300	8,400	Note 1
Bryant	Jul-08-66	11,900	6,900	Note 1
Bryant	Jul-11-66	12,800	6,200	Note 1
Bryant	Jul-12-66	13,500	9,100	Note 1
Bryant	Jul-13-66	17,500	13,000	Note 1
Bryant	Jul-14-66	8,400	2,400	Note 1
Bryant	Jul-15-66	7,100	6,200	Note 1
Bryant	Jul-18-66	11,000	9,200	Note 1
Bryant	Jul-19-66	22,200	13,100	Note 1
Bryant	Jul-20-66	13,800	10,200	Note 1
Bryant	Jul-21-66	15,800	10,300	Note 1
Bryant	Jul-22-66	12,400	9,600	Note 1
Bryant	Jul-25-66	14,400	9,500	Note 1
Bryant	Jul-26-66	14,500	10,200	Note 1
Bryant	Jul-27-66	14,300	10,500	Note 1
Bryant	Jul-28-66	14,900	10,900	Note 1
Bryant	Jul-29-66	15,100	12,900	Note 1
Bryant	Aug-01-66	12,200	5,400	Note 1
Bryant	Aug-02-66		8,500	Note 1
Bryant	Aug-03-66	15,600	9,100	Note 1
Bryant	Aug-04-66	18,900	12,500	Note 1
Bryant	Aug-05-66	14,900	9,000	Note 1
Bryant	Aug-08-66	8,700	5,000	Note 1
Bryant	Aug-09-66	14,800	11,500	Note 1
Bryant	Aug-10-66	20,400	11,300	Note 1
Bryant	Aug-11-66	9,600	6,200	Note 1
Bryant	Aug-12-66	15,500	12,000	Note 1
Bryant	Aug-15-66	15,800	10,900	Note 1
Bryant	Aug-16-66	22,600	8,500	Note 1
Bryant	Aug-17-66	13,800	6,300	Note 1
Bryant	Aug-18-66	12,200	9,800	Note 1
Bryant	Aug-19-66	19,000	6,500	Note 1
Bryant	Aug-22-66	12,400	6,400	Note 1
Bryant	Aug-23-66	17,400	9,300	Note 1
Bryant	Aug-24-66	18,700	11,800	Note 1
Bryant	Aug-25-66	12,100	13,500	Note 1
Bryant	Aug-26-66	18,600	13,400	Note 1
Bryant	Aug-29-66	13,200	7,000	Note 1
Bryant	Aug-30-66	12,900	12,200	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Bryant	Aug-31-66	12,300	8,700	Note 1
Bryant	Sep-01-66	17,900	8,400	Note 1
Bryant	Sep-02-66	13,400	9,800	Note 1
Bryant	Sep-06-66	16,800	11,000	Note 1
Bryant	Sep-07-66	14,900	11,500	Note 1
Bryant	Sep-08-66	14,100	11,300	Note 1
Bryant	Sep-09-66	13,100	8,100	Note 1
Bryant	Sep-12-66	14,100	9,100	Note 1
Bryant	Sep-13-66	13,200	9,100	Note 1
Bryant	Sep-14-66	15,100	9,200	Note 1
Bryant	Sep-15-66	11,300	6,300	Note 1
Bryant	Sep-21-66	15,800	11,700	Note 1
Bryant	Sep-26-66	13,100	8,500	Note 1
Bryant	Sep-27-66	15,900	11,100	Note 1
Bryant	Sep-28-66	16,200	8,200	Note 1
Bryant	Sep-29-66	16,000	9,102	Note 1
Bryant	Sep-30-66	20,000	7,500	Note 1
Bryant	Oct-03-66	14,700	12,300	Note 1
Bryant	Oct-04-66	17,900	10,800	Note 1
Bryant	Oct-05-66	16,700	10,800	Note 1
Bryant	Oct-06-66	15,300	12,400	Note 1
Bryant	Oct-10-66	17,800	11,100	Note 1
Bryant	Oct-14-66	8,200	6,200	Note 1
Bryant	Oct-17-66	13,400	4,000	Note 1
Bryant	Oct-18-66	10,200	5,100	Note 1
Bryant	Oct-19-66	13,300	9,000	Note 1
Bryant	Oct-20-66	15,600	11,100	Note 1
Bryant	Oct-21-66	15,800	5,900	Note 1
Bryant	Oct-24-66	15,900	14,200	Note 1
Bryant	Oct-25-66	13,000	10,900	Note 1
Bryant	Oct-26-66	15,200	10,800	Note 1
Bryant	Oct-27-66	19,500	13,000	Note 1
Bryant	Oct-28-66	19,000	12,100	Note 1
Bryant	Oct-31-66	13,900	11,700	Note 1
Bryant	Nov-01-66	14,000	9,600	Note 1
Bryant	Nov-02-66	13,000	9,900	Note 1
Bryant	Nov-03-66	12,000	9,200	Note 1
Bryant	Nov-11-66	13,500	11,100	Note 1
Bryant	Nov-14-66	9,200	7,000	Note 1
Bryant	Nov-15-66	12,000	5,600	Note 1
Bryant	Nov-16-66	12,100	9,800	Note 1
Bryant	Nov-17-66	11,400	9,200	Note 1
Bryant	Nov-21-66	16,000	10,800	Note 1
Bryant	Nov-28-66	12,200	8,700	Note 1
Bryant	Nov-29-66	12,400	7,900	Note 1
Bryant	Nov-30-66	7,500	6,000	Note 1
Bryant	Dec-01-66	11,400	9,400	Note 1
Bryant	Dec-02-66	14,400	10,700	Note 1
Bryant	Dec-05-66	13,400	7,000	Note 1
Bryant	Dec-06-66	9,000	8,300	Note 1
Bryant	Dec-07-66	13,400	9,800	Note 1
Bryant	Dec-08-66	16,100	9,000	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Bryant	Dec-09-66	12,700	7,000	Note 1
Bryant	Dec-12-66	9,000	6,200	Note 1
Bryant	Dec-13-66	9,300	5,900	Note 1
Bryant	Dec-14-66	10,500	6,100	Note 1
Bryant	Dec-15-66	11,100	5,300	Note 1
Bryant	Dec-16-66	18,600	12,900	Note 1
Bryant	Dec-19-66	13,400	7,200	Note 1
Bryant	Dec-20-66	10,100	6,500	Note 1
Bryant	Dec-21-66	9,500	6,700	Note 1
Bryant	Dec-22-66	10,100	7,500	Note 1
Bryant	Apr-03-67	11,400	6,000	Note 1
Bryant	Apr-04-67	13,600	7,400	Note 1
Bryant	Apr-05-67	11,100	7,500	Note 1
Bryant	Apr-06-67	11,100	7,900	Note 1
Bryant	Apr-07-67	13,600	9,500	Note 1
Bryant	May-13-67		11,172	MDNR 003652-56 (WRC)
Bryant	May-14-67		6,857	MDNR 003652-56 (WRC)
Bryant	Nov-27-67	13,300	5,900	Note 1
Bryant	Nov-28-67	16,500	10,300	Note 1
Bryant	Nov-29-67	12,200	6,700	Note 1
Bryant	Nov-30-67	15,500	7,500	Note 1
Bryant	Dec-01-67	11,100	7,300	Note 1
Bryant	Dec-11-67		9,600	Note 1
Bryant	Dec-12-67		11,600	Note 1
Bryant	Dec-13-67		13,400	Note 1
Bryant	Dec-14-67		14,600	Note 1
Bryant	Dec-15-67		12,900	Note 1
Bryant	Jun-04-68		7,005	SA 029206-15 (WRC)
Bryant	Jun-05-68		6,818	SA 029206-15 (WRC)
Bryant	Aug-20-68		10,008	SA 032010-30 (WRC)
Bryant	Dec-16-68		3,300	Note 1
Bryant	Dec-17-68		3,400	Note 1
Bryant	Dec-18-68		3,600	Note 1
Bryant	Dec-19-68		3,300	Note 1
Bryant	Dec-20-68		3,300	Note 1
Bryant	Dec-26-68		4,400	Note 1
Bryant	Dec-27-68		4,400	Note 1
Bryant	Dec-30-68	10,900	6,400	Note 1
Bryant	Dec-31-68	9,700	5,500	Note 1
Bryant	Jan-01-69	11,800	6,300	Note 1
Bryant	Jan-02-69		6,100	Note 1
Bryant	Jan-03-69		6,300	Note 1
Bryant	Jan-06-69		6,300	Note 1
Bryant	Jan-07-69	10,300	6,600	Note 1
Bryant	Jan-08-69	8,300	6,600	Note 1
Bryant	Jan-09-69	8,800	6,100	Note 1
Bryant	Jan-10-69	10,700	6,600	Note 1
Bryant	Jan-13-69	14,500	4,600	Note 1
Bryant	Jan-14-69	14,500	4,000	Note 1
Bryant	Jan-15-69	11,900	6,000	Note 1
Bryant	Jan-16-69	12,800	3,600	Note 1
Bryant	Jan-17-69	11,300	5,000	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND
SETTLEMENT AND
CONFIDENTIAL

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Bryant	Jan-20-69	17,700	6,300	Note 1
Bryant	Jan-21-69	21,000	9,600	Note 1
Bryant	Jan-22-69	23,200	9,500	Note 1
Bryant	Jan-23-69	13,700	10,200	Note 1
Bryant	Jan-24-69	22,500	9,000	Note 1
Bryant	Jan-12-70	7,400	6,500	Note 1
Bryant	Jan-13-70	13,400	7,900	Note 1
Bryant	Jan-14-70	12,000	6,800	Note 1
Bryant	Jan-15-70	7,300	3,600	Note 1
Bryant	Jan-16-70	13,700	7,000	Note 1
Bryant	Jan-19-70	15,700	7,200	Note 1
Bryant	Jan-20-70	13,800	7,900	Note 1
Bryant	Jan-21-70	14,400	9,100	Note 1
Bryant	Jan-22-70	13,300	8,700	Note 1
Bryant	Jan-23-70	14,700	7,500	Note 1
Bryant	Jan-26-70	10,500		Note 1
Bryant	Jan-27-70	16,900	8,100	Note 1
Bryant	Jan-28-70	15,200	8,300	Note 1
Bryant	Jan-29-70	15,700	8,200	Note 1
Bryant	Jan-30-70	13,500	5,900	Note 1
Bryant	Feb-02-70	10,900	5,600	Note 1
Bryant	Feb-03-70	16,000	8,500	Note 1
Bryant	Feb-04-70	15,600	7,000	Note 1
Bryant	Feb-05-70	15,000	5,100	Note 1
Bryant	Feb-06-70	15,800	8,700	Note 1
Bryant	Feb-09-70	11,800	3,400	Note 1
Bryant	Feb-10-70	9,700	7,800	Note 1
Bryant	Feb-11-70	12,700	7,800	Note 1
Bryant	Feb-12-70	11,200	4,000	Note 1
Bryant	Feb-13-70	16,700	8,700	Note 1
Bryant	Feb-16-70	17,200	7,500	Note 1
Bryant	Feb-17-70	17,100	9,200	Note 1
Bryant	Feb-18-70	20,500	8,500	Note 1
Bryant	Feb-19-70	20,200	8,100	Note 1
Bryant	Feb-20-70	16,100	6,500	Note 1
Bryant	Feb-23-70	11,600	6,800	Note 1
Bryant	Feb-24-70	10,000	7,700	Note 1
Bryant	Feb-25-70	10,700	8,000	Note 1
Bryant	Feb-26-70	11,200	3,200	Note 1
Bryant	Feb-27-70	13,400	8,100	Note 1
Bryant	Mar-03-70	19,500	8,000	Note 1
Bryant	Mar-05-70	11,500	7,400	Note 1
Bryant	Mar-09-70	16,500	10,300	Note 1
Bryant	Mar-11-70	24,000	12,000	Note 1
Bryant	Mar-17-70		15,300	Note 1
Bryant	Mar-19-70	18,700	11,100	Note 1
Bryant	Mar-24-70	13,300	6,100	Note 1
Bryant	Mar-26-70	14,500	7,000	Note 1
Bryant	Apr-07-70	20,000	11,800	Note 1
Bryant	Apr-09-70	19,800	10,700	Note 1
Bryant	Apr-14-70	11,000	10,900	Note 1
Bryant	Apr-16-70	26,300	9,700	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Bryant	Apr-21-70		10,000	Note 1
Bryant	Apr-23-70		13,200	Note 1
Bryant	Apr-28-70		10,900	Note 1
Bryant	Apr-30-70		13,700	Note 1
Bryant	May-05-70		11,600	Note 1
Bryant	May-07-70		12,600	Note 1
Bryant	May-12-70		8,500	Note 1
Bryant	May-14-70		12,300	Note 1
Bryant	May-19-70		9,000	Note 1
Bryant	May-21-70		10,400	Note 1
Bryant	May-26-70	17,300	9,600	Note 1
Bryant	May-28-70	10,700	7,900	Note 1
Bryant	Jun-02-70	8,000	5,700	Note 1
Bryant	Jun-04-70	9,500	8,000	Note 1
Bryant	Jun-09-70		10,900	Note 1
Bryant	Jun-11-70		12,600	Note 1
Bryant	Jun-16-70		11,600	Note 1
Bryant	Jun-18-70		11,200	Note 1
Bryant	Jun-23-70		11,300	Note 1
Bryant	Jun-25-70	17,300	11,600	Note 1
Bryant	Jul-07-70		12,300	Note 1
Bryant	Jul-09-70		8,700	Note 1
Bryant	Jul-14-70		13,300	Note 1
Bryant	Jul-16-70	28,300	12,100	Note 1
Bryant	Jul-21-70		15,300	Note 1
Bryant	Jul-23-70		12,000	Note 1
Bryant	Jul-28-70		14,300	Note 1
Bryant	Jul-30-70		13,700	Note 1
Bryant	Aug-18-70	18,500	13,200	Note 1
Bryant	Aug-20-70	23,000	10,800	Note 1
Bryant	Aug-25-70		6,400	Note 1
Bryant	Aug-27-70		5,700	Note 1
Bryant	Sep-01-70		6,100	Note 1
Bryant	Sep-03-70		14,300	Note 1
Bryant	Sep-15-70	11,700	5,100	Note 1
Bryant	Sep-17-70	11,500	6,100	Note 1
Bryant	Sep-22-70	19,400	12,400	Note 1
Bryant	Sep-24-70	22,800	9,700	Note 1
Bryant	Sep-29-70	25,600	19,800	Note 1
Bryant	Oct-01-70	22,500	15,000	Note 1
Bryant	Oct-13-70	14,300	9,200	Note 1
Bryant	Oct-15-70	13,200	8,900	Note 1
Bryant	Oct-20-70	16,200	11,000	Note 1
Bryant	Oct-22-70	13,400	11,600	Note 1
Bryant	Oct-27-70	13,600	10,800	Note 1
Bryant	Oct-29-70	16,800	12,600	Note 1
Bryant	Nov-03-70	17,200	12,300	Note 1
Bryant	Nov-05-70	17,200	11,600	Note 1
Bryant	Nov-10-70	16,700	15,100	Note 1
Bryant	Nov-12-70	10,000	13,800	Note 1
Bryant	Nov-17-70	13,900	12,800	Note 1
Bryant	Nov-19-70	10,700	6,500	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Bryant	Nov-24-70	9,500	8,100	Note 1
Bryant	Dec-01-70	2,900	1,500	Note 1
Bryant	Dec-03-70	13,900	9,000	Note 1
Bryant	Dec-08-70	12,600	11,300	Note 1
Bryant	Dec-10-70	18,000	11,300	Note 1
Bryant	Dec-15-70	14,100	10,700	Note 1
Bryant	Dec-17-70	14,600	11,800	Note 1
Bryant	Dec-22-70	9,700	7,600	Note 1
Bryant	Dec-29-70	9,600	6,800	Note 1
Bryant	Jan-12-71	11,900	9,000	Note 1
Bryant	Jan-14-71		10,000	Note 1
Bryant	Jan-19-71	8,600	5,400	Note 1
Bryant	Jan-21-71	4,800	3,800	Note 1
Bryant	Jan-26-71	6,400	4,200	Note 1
Bryant	Jan-28-71	7,600	5,200	Note 1
Bryant	Feb-02-71	10,700	6,500	Note 1
Bryant	Feb-04-71	7,500	5,300	Note 1
Bryant	Feb-09-71	6,800	3,800	Note 1
Bryant	Feb-11-71	7,800	6,900	Note 1
Bryant	Feb-16-71	9,000	5,900	Note 1
Bryant	Feb-18-71	10,100	5,800	Note 1
Bryant	Feb-23-71	4,300	3,800	Note 1
Bryant	Feb-25-71	3,700	3,000	Note 1
Bryant	Mar-02-71		4,800	Note 1
Bryant	Mar-04-71		5,800	Note 1
Bryant	Mar-09-71	6,500	3,100	Note 1
Bryant	Mar-11-71	4,900	4,000	Note 1
Bryant	Mar-16-71		7,100	Note 1
Bryant	Mar-18-71		9,100	Note 1
Bryant	Mar-23-71	4,200	2,300	Note 1
Bryant	Mar-25-71	7,600	5,100	Note 1
Bryant	Apr-06-71	4,700	4,000	Note 1
Bryant	Apr-08-71	4,200	2,600	Note 1
Bryant	Apr-27-71	3,000	2,300	Note 1
Bryant	Apr-29-71	2,300	2,000	Note 1
Bryant	Jun-15-71	17,200	7,000	Note 1
Bryant	Jun-17-71	19,800	3,900	Note 1
Bryant	Jul-15-71	7,100	2,600	Note 1
Bryant	Jul-20-71	9,000		Note 1
Bryant	Jul-22-71	7,000	6,700	Note 1
Bryant	Jul-29-71	8,400	1,200	Note 1
Bryant	Aug-03-71	4,700	4,300	Note 1
Bryant	Aug-04-71	15,000	8,000	Note 1
Bryant	Aug-07-71	15,400	5,100	Note 1
Bryant	Aug-08-71	10,800	400	Note 1
Bryant	Aug-11-71		6,300	Note 1
Bryant	Aug-13-71	26,700	13,600	Note 1
Bryant	Aug-15-71	10,900	7,600	Note 1
Bryant	Aug-17-71	12,700	9,700	Note 1
Bryant	Aug-24-71	24,500	6,900	Note 1
Bryant	Aug-26-71	16,300	8,500	Note 1
Bryant	Aug-31-71		5,200	Note 1

CONFIDENTIAL BUSINESS INFORMATIO

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Bryant	Sep-02-71	17 400	9 400	Note 1
Bryant	Sep-07-71		7,700	Note 1
Bryant	Sep-09-71		7 700	Note 1
Bryant	Sep-14-71	20,900	6,770	Note 1
Bryant	Sep-16-71	7,700	8,150	Note 1
Bryant	Sep-21-71	11,200	4,700	Note 1
Bryant	Sep-23-71	19 800	8,900	Note 1
Bryant	Sep-28-71	25,100	11,000	Note 1
Bryant	Sep-30-71	15,300	7,400	Note 1
Bryant	Oct-05-71	10,200	2,500	Note 1
Bryant	Oct-07-71	10,000	1,500	Note 1
Bryant	Oct-12-71	15,000	6,500	Note 1
Bryant	Oct-14-71	12,500	5,500	Note 1
Bryant	Oct-19-71	10,700	8,200	Note 1
Bryant	Oct-21-71	4,300	2,300	Note 1
Bryant	Oct-26-71	15,200	7,700	Note 1
Bryant	Oct-28-71	8,700	4,800	Note 1
Bryant	Nov-16-71	10,200	8,000	Note 1
Bryant	Nov-18-71	9,600	7,700	Note 1
Bryant	Nov-23-71	5,200	2,800	Note 1
Bryant	Nov-25-71	6,400	2,600	Note 1
Bryant	Nov-30-71	1,500	1,200	Note 1
Bryant	Dec-02-71	4,300	1,600	Note 1
Bryant	Dec-14-71	4,400	400	Note 1
Bryant	Dec-16-71	2,600	200	Note 1
Bryant	Dec-21-71	100	70	Note 1
Bryant	Dec-23-71	400	230	Note 1
Bryant	Mar-05-74	540	245	066037
Bryant	Mar-07-74	860	405	066037
Bryant	Mar-12-74	890	320	066037
Bryant	Mar-19-74	955	330	066037
Bryant	Mar-26-74	960	305	066037
Bryant	Mar-28-74	910	360	066037
Bryant	Apr-02-74	830	435	066037
Bryant	Apr-04-74	890	475	066037
Bryant	Apr-09-74	1,250	535	066037
Bryant	Apr-11-74	1,110	470	066037
Bryant	Apr-16-74	730	370	066037
Bryant	Apr-18-74	700	365	066037
Bryant	Apr-23-74	1,465	430	066037
Bryant	Apr-25-74	1,200	400	066037
Bryant	Jul-18-77		1,935	SA 033502 (WRC)
Bryant	Jun-24-80		3,002	WRC (Appendix 8a-1 no Bates number)
Bryant	Jan-26-81		1,404	SA 034341 - 52 (WRC)
Bryant	Mar-01-82		1,632	SA 033485-92 (WRC)
Bryant	Oct-25-82		1,291	SA 033485-92 (WRC)
King	1955		15,491	Kendrick Exhibit 561
King	Jan 1956		15,501	KA04600382 (WRC)
King	Jan-10-56		13,333	063792 - 063796 (WRC)
King	Jan-11-56	26,285	9,474	063792 - 063796 (WRC)
King	Jan-12-56	21,836	17,543	063792 - 063796 (WRC)
King	Jan-13-56	16,741	18,437	063792 - 063796 (WRC)

CONFIDENTIAL BUSINESS INFORMATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
King	Jan-14-56	11,475	14,948	063792 - 063796 (WRC)
King	Jan-16-56	30,700	19,210	063792 - 063796 (WRC)
King	June-Sept 1956	16,400	10,700	SA029196
King	May 1957	25,050	15,948	KA04600382 (WRC)
King	Nov '57-Jan'58	23,150	17,410	KA04600382
King	Jan-09-58	18,400	14,500	Note 1
King	Jan-10-58		14,900	Note 1
King	Jan-14-58	24,100	18,750	Note 1
King	Jan-15-58	25,800	17,450	Note 1
King	Jan-16-58	27,050	15,930	Note 1
King	Jan-21-58	34,900	17,900	Note 1
King	Jan-22-58	32,600	18,670	Note 1
King	Jan-28-58	29,700		Note 1
King	Feb-04-58	40,300	22,200	Note 1
King	Feb-05-58		17,870	Note 1
King	Feb-27-58		15,800	Note 1
King	Feb-28-58	34,000	15,400	Note 1
King	Mar-04-58	29,800	13,380	Note 1
King	May-20-58	17,420	14,260	Note 1
King	May-21-58	18,600	17,600	Note 1
King	May-22-58	17,700	16,850	Note 1
King	May-23-58	15,800	15,800	Note 1
King	May-26-58	30,500	16,820	Note 1
King	May-27-58	26,500	20,500	Note 1
King	Jun-02-58	23,300	19,560	Note 1
King	Jun-03-58		20,500	Note 1
King	Jun-04-58	24,300	16,400	Note 1
King	Jun-05-58	27,300	22,000	Note 1
King	Jun-09-58		13,700	Note 1
King	Jun-10-58	28,100	16,800	Note 1
King	Jun-11-58	25,500	15,400	Note 1
King	Jun-17-58	22,600		Note 1
King	Jun-18-58	18,400		Note 1
King	Jun-19-58	22,800	13,150	Note 1
King	Jun-24-58		10,230	Note 1
King	Jun-25-58	28,800	13,800	Note 1
King	Jun-26-58	30,200	13,400	Note 1
King	Jul-30-58	31,800	20,250	Note 1
King	Jul-31-58	34,800	21,200	Note 1
King	Aug-05-58	36,700	25,000	Note 1
King	Aug-07-58	29,400	18,630	Note 1
King	Aug-08-58	25,700	18,170	Note 1
King	Aug-26-58	28,950	23,300	Note 1
King	Aug-27-58	36,100	31,600	Note 1
King	Oct-01-58		26,000	Note 1
King	Oct-02-58	35,200		Note 1
King	Oct-28-58	27,300	20,700	Note 1
King	Oct-29-58		23,350	Note 1
King	Oct-30-58	29,200	23,900	Note 1
King	Nov-04-58		33,600	Note 1
King	Nov-06-58		16,100	Note 1
King	Nov-11-58	34,000		Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
King	Nov-12-58	25,950	20,700	Note 1
King	Nov-19-58	24,000	11,650	Note 1
King	Nov-20-58	22,350	11,790	Note 1
King	Nov-25-58		18,450	Note 1
King	Dec-04-58	48,000	26,700	Note 1
King	Dec-10-58		26,000	Note 1
King	Dec-16-58	40,500	53,800	Note 1
King	Dec-17-58	44,800	37,800	Note 1
King	Dec-30-58	26,200		Note 1
King	Jan-28-59	27,950	15,000	Note 1
King	Jan-29-59	30,300	16,750	Note 1
King	Feb-25-59	35,800	35,200	Note 1
King	Nov-17-59	46,700	40,000	Note 1
King	Dec-08-59	41,200	38,400	Note 1
King	Dec-17-59	37,000	22,400	Note 1
King	Jan-06-60	31,200	29,100	Note 1
King	Jan-13-60	24,900	48,700	Note 1
King	Jan-27-60	32,900	30,000	Note 1
King	Feb-04-60	36,800	41,300	Note 1
King	Feb-25-60	31,700	36,400	Note 1
King	Mar-09-60	35,600	42,600	Note 1
King	Mar-22-60	64,200	31,500	Note 1
King	Apr-28-60	35,400	27,200	Note 1
King	May-18-60	32,300	30,200	Note 1
King	May-26-60	42,700	22,700	Note 1
King	Jun-01-60	34,300	27,500	Note 1
King	Jun-07-60	27,500	35,300	Note 1
King	Jun-15-60	34,700	25,100	Note 1
King	Jun-22-60	28,100	19,900	Note 1
King	Jun-28-60	43,300	25,200	Note 1
King	Jul-13-60	29,600	17,300	Note 1
King	Jul-14-60		22,000	Note 1
King	Jul-27-60		26,900	Note 1
King	Aug-24-60	36,700	16,900	Note 1
King	Aug-30-60		29,700	Note 1
King	Aug-31-60	26,700	29,700	Note 1
King	Sep-01-60		31,200	Note 1
King	Sep-06-60		15,100	Note 1
King	Sep-07-60	20,100	16,300	Note 1
King	Sep-08-60		14,700	Note 1
King	Sep-13-60		18,300	Note 1
King	Sep-14-60	36,800	29,100	Note 1
King	Sep-15-60		26,900	Note 1
King	Sep-27-60	30,200	36,000	Note 1
King	Oct-06-60	32,000	21,700	Note 1
King	Oct-11-60	47,800	36,600	Note 1
King	Oct-19-60	42,560	24,480	Note 1
King	Oct-27-60	38,190	29,700	Note 1
King	Nov-01-60	79,300	34,200	Note 1
King	Nov-09-60	43,600	43,600	Note 1
King	Nov-17-60	34,300	36,000	Note 1
King	Nov-22-60	41,600	23,200	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
King	Nov-30-60	38,400	33,000	Note 1
King	Dec-21-60	51,100	48,900	Note 1
King	1961		28,400	Kendrick Exhibit 561
King	Jun-27-61	43,144	28,351	SA 038997-039000 (WRC)
King	Oct-03-62		7,950	NCASI000194
King	Oct-04-62		10,400	NCASI000194
King	Oct-05-62		9,880	NCASI000194
King	Oct-12-62		10,100	NCASI000194
King	Oct-17-62		12,750	NCASI000194
King	Oct-18-62		19,100	NCASI000194
King	Oct-19-62		8,330	NCASI000194
King	Oct-24-62		8,360	NCASI000194
King	Oct-25-62		15,000	NCASI000194
King	Oct-26-62		16,200	NCASI000194
King	Jan-08-63	34,420	25,300	NCASI000170-NCASI000172
King	Jan-18-63	25,800	14,175	NCASI000170-NCASI000172
King	Jan-24-63	61,850	25,600	NCASI000170-NCASI000172
King	Mar-12-63	41,000	24,200	Note 1
King	Mar-13-63	37,400	24,300	Note 1
King	Mar-14-63	39,600	23,400	Note 1
King	Mar-18-63	26,800	16,800	Note 1
King	Apr-21-63	38,300	18,000	Note 1
King	Apr-22-63	18,700	16,900	Note 1
King	Apr-23-63	24,200	14,565	Note 1
King	Apr-24-63	23,600	20,600	Note 1
King	Apr-25-63	24,000	18,500	Note 1
King	Apr-29-63		20,200	Note 1
King	Apr-30-63		14,800	Note 1
King	May-01-63	38,000	18,000	Note 1
King	May-02-63	38,000	13,600	Note 1
King	May-06-63	63,000	34,400	Note 1
King	May-07-63	41,600	22,800	Note 1
King	May-08-63	43,000	21,500	Note 1
King	May-13-63	25,600	15,400	Note 1
King	May-14-63	22,600	14,700	Note 1
King	May-15-63	34,300	13,400	Note 1
King	May-16-63	25,600		Note 1
King	May-20-63	40,000	20,700	Note 1
King	May-21-63	30,500	21,800	Note 1
King	May-22-63	39,600		Note 1
King	May-23-63	29,100	18,400	Note 1
King	Jun-03-63	26,600	12,400	Note 1
King	Jun-04-63	23,800	15,600	Note 1
King	Jun-05-63	27,700	20,200	Note 1
King	Jun-06-63	18,600	15,200	Note 1
King	Jun-10-63	34,400	22,300	Note 1
King	Jun-11-63	22,600	13,000	Note 1
King	Jun-12-63	26,000	22,000	Note 1
King	Jun-13-63	31,800	22,100	Note 1
King	Jun-18-63	17,000	16,000	Note 1
King	Jun-19-63	35,800	14,800	Note 1
King	Jun-20-63	23,100	14,800	Note 1

CONFIDENTIAL BUSINESS INFORMATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
King	Apr-24-65	6,400	1,800	Note 1
King	Apr-25-65	14,900	11,100	Note 1
King	Apr-26-65	21,500	14,200	Note 1
King	Apr-27-65	13,400	10,700	Note 1
King	Apr-28-65	19,600	12,800	Note 1
King	May-05-65	13,000	11,100	Note 1
King	May-06-65	13,600	4,200	Note 1
King	May-07-65	3,200	1,100	Note 1
King	May-08-65	2,800	1,100	Note 1
King	May-10-65	9,800	5,900	Note 1
King	May-11-65	14,800	11,000	Note 1
King	May-12-65	16,400	8,900	Note 1
King	Jun-09-65	6,900	2,100	Note 1
King	Jun-10-65	7,800	1,770	Note 1
King	Jun-21-65	9,100	2,100	Note 1
King	Jun-22-65	6,300	1,000	Note 1
King	Jun-23-65	6,800	800	Note 1
King	Jun-24-65	8,900	3,100	Note 1
King	Jun-28-65	2,900	1,000	Note 1
King	Jun-29-65	6,200	2,600	Note 1
King	Jun-30-65	6,500	1,800	Note 1
King	Jul-01-65	10,600	240	Note 1
King	Jul-07-65	5,600	3,300	Note 1
King	Jul-08-65	4,800	2,600	Note 1
King	Jul-13-65	8,300	3,000	Note 1
King	Jul-14-65	6,900	4,000	Note 1
King	Jul-15-65	7,500	5,100	Note 1
King	Jul-20-65	4,500	2,900	Note 1
King	Jul-21-65	12,600	3,400	Note 1
King	Jul-22-65	10,000	2,400	Note 1
King	Jul-27-65	9,850	2,870	Note 1
King	Jul-28-65	5,250	2,550	Note 1
King	Jul-29-65	7,520	2,650	Note 1
King	Aug-09-65	5,200	1,770	Note 1
King	Aug-10-65	8,900	2,900	Note 1
King	Aug-11-65	7,600	2,300	Note 1
King	Aug-12-65	9,000	3,200	Note 1
King	Aug-16-65	7,900	4,450	Note 1
King	Aug-17-65	5,050	1,600	Note 1
King	Aug-18-65	4,250	2,400	Note 1
King	Aug-19-65	6,000	3,200	Note 1
King	Aug-23-65	7,700	2,200	Note 1
King	Aug-24-65	4,900	2,500	Note 1
King	Aug-25-65	5,100	2,600	Note 1
King	Aug-26-65	5,900	3,000	Note 1
King	Aug-30-65	5,500	1,700	Note 1
King	Aug-31-65	4,200	1,600	Note 1
King	Sep-01-65	3,700	1,800	Note 1
King	Sep-02-65	5,000	2,100	Note 1
King	Sep-07-65	4,250	1,950	Note 1
King	Sep-08-65	4,500	2,200	Note 1
King	Sep-09-65	5,900	1,850	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
King	Sep-13-65	3,500	2,500	Note 1
King	Sep-14-65	5,200	2,700	Note 1
King	Sep-16-65	4,100	1,350	Note 1
King	Oct-05-65	5,900	1,600	Note 1
King	Oct-06-65	7,700	2,000	Note 1
King	Oct-07-65	5,700	2,800	Note 1
King	Oct-12-65	7,100	3,500	Note 1
King	Oct-13-65	5,600	3,200	Note 1
King	Oct-14-65	7,100	3,100	Note 1
King	Oct-27-65	3,700	3,400	Note 1
King	Oct-28-65	5,600	2,400	Note 1
King	Nov-02-65	9,150	1,600	Note 1
King	Nov-03-65	6,100	2,200	Note 1
King	Nov-04-65	7,700	3,300	Note 1
King	Nov-09-65	5,200	3,100	Note 1
King	Nov-10-65	4,900	2,800	Note 1
King	Nov-11-65	5,700	1,900	Note 1
King	Nov-30-65	6,050	2,100	Note 1
King	Dec-01-65	5,700	2,700	Note 1
King	Dec-02-65	5,900	3,500	Note 1
King	Dec-14-65	3,300	3,300	Note 1
King	Dec-15-65	5,300	4,200	Note 1
King	Dec-16-65	4,600	2,800	Note 1
King	Mar-08-66	5,000	28,000	Note 1
King	Mar-09-66	8,200	3,300	Note 1
King	Mar-10-66	9,300	4,900	Note 1
King	Mar-11-66	6,700	4,300	Note 1
King	Mar-14-66	6,800	3,300	Note 1
King	Mar-15-66	7,600	3,500	Note 1
King	Mar-16-66	4,800	2,800	Note 1
King	Mar-17-66	6,600	3,400	Note 1
King	Mar-18-66	5,700	3,700	Note 1
King	Mar-21-66	7,400	2,700	Note 1
King	Mar-22-66	8,200	2,500	Note 1
King	Mar-23-66	8,800	7,600	Note 1
King	Mar-24-66	10,300	4,500	Note 1
King	Mar-25-66	5,500	2,000	Note 1
King	Mar-28-66	7,100	2,600	Note 1
King	Mar-29-66	7,100	4,000	Note 1
King	Mar-30-66	6,700	4,100	Note 1
King	Mar-31-66	5,200	3,100	Note 1
King	Apr-01-66	6,700	2,000	Note 1
King	Apr-04-66	6,000	2,700	Note 1
King	Apr-05-66	4,000	2,300	Note 1
King	Apr-06-66	5,100	3,400	Note 1
King	Apr-07-66	5,000	1,500	Note 1
King	Apr-08-66	3,100	2,200	Note 1
King	Apr-11-66	3,600	2,200	Note 1
King	Apr-12-66	3,100	2,000	Note 1
King	Apr-13-66	1,200	1,350	Note 1
King	Apr-14-66	1,900	1,500	Note 1
King	Apr-15-66	4,000	1,650	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
King	Apr-18-66	3,400	1,800	Note 1
King	Apr-19-66	3,900	1,900	Note 1
King	Apr-20-66	3,400	2,200	Note 1
King	Apr-21-66	5,200	2,200	Note 1
King	Apr-22-66	4,200	2,200	Note 1
King	Apr-25-66	2,800	1,700	Note 1
King	Apr-26-66	2,800	1,900	Note 1
King	Apr-27-66	2,700	1,800	Note 1
King	Apr-28-66	370	1,400	Note 1
King	Apr-29-66	3,600	1,800	Note 1
King	May-02-66	4,000	1,600	Note 1
King	May-03-66	5,600	2,800	Note 1
King	May-04-66	4,500	2,000	Note 1
King	May-05-66	3,500	1,900	Note 1
King	May-06-66	2,500	1,450	Note 1
King	May-09-66	4,400	1,550	Note 1
King	May-10-66	6,000	2,200	Note 1
King	May-11-66	250	1,400	Note 1
King	May-12-66	6,100	2,700	Note 1
King	May-13-66	2,900	2,000	Note 1
King	May-16-66	2,700	1,600	Note 1
King	May-17-66	2,300	1,900	Note 1
King	May-18-66	3,000	2,000	Note 1
King	May-19-66	4,500	2,000	Note 1
King	May-27-66	3,300	2,200	Note 1
King	May-30-66	3,900		Note 1
King	May-31-66	5,100	3,200	Note 1
King	Jun-01-66	4,000	2,500	Note 1
King	Jun-02-66	5,100	2,700	Note 1
King	Jun-03-66	5,700	1,940	Note 1
King	Jun-06-66	4,100	1,600	Note 1
King	Jun-07-66	9,600	2,300	Note 1
King	Jun-08-66	3,100	1,700	Note 1
King	Jun-09-66	3,300	1,350	Note 1
King	Jun-13-66	3,500	1,900	Note 1
King	Jun-14-66	5,100	1,900	Note 1
King	Jun-15-66	4,300	2,400	Note 1
King	Jun-16-66	5,600	2,400	Note 1
King	Jun-17-66	4,000	2,200	Note 1
King	Jun-20-66	4,300	2,300	Note 1
King	Jun-21-66	2,900	1,900	Note 1
King	Jun-22-66	2,700	2,500	Note 1
King	Jun-23-66	3,800	2,200	Note 1
King	Jun-27-66	4,700	1,900	Note 1
King	Jun-28-66	6,600	2,500	Note 1
King	Jun-29-66	6,400	3,800	Note 1
King	Jun-30-66	4,900	3,300	Note 1
King	Jul-01-66	4,700	1,600	Note 1
King	Jul-05-66	5,500	2,300	Note 1
King	Jul-13-66	4,300	2,800	Note 1
King	Jul-21-66	3,100	2,500	Note 1
King	Aug-02-66	5,900	4,000	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AN[illegible]ENTIAL
SETTLEMENT AND [illegible]EFENSE
COMM[illegible]ICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
King	Aug-10-66	5,100	3,700	Note 1
King	Aug-18-66	4,300	2,900	Note 1
King	Aug-23-66	4,500	3,100	Note 1
King	Sep-06-66	3,400	2,800	Note 1
King	Sep-07-66	3,200	2,200	Note 1
King	Sep-08-66	3,100	2,200	Note 1
King	Sep-13-66	4,200	2,500	Note 1
King	Sep-29-66	3,700	3,500	Note 1
King	Oct-04-66	10,000	2,900	Note 1
King	Oct-12-66	7,300	3,400	Note 1
King	Oct-13-66	4,700	2,500	Note 1
King	Oct-17-66	2,300	1,300	Note 1
King	Oct-18-66	3,000	1,300	Note 1
King	Oct-19-66	4,100	2,200	Note 1
King	Oct-20-66	6,100	2,500	Note 1
King	Oct-21-66	3,700	1,900	Note 1
King	Oct-24-66	4,100	2,500	Note 1
King	Nov-08-66	3,000	2,300	Note 1
King	Nov-11-66	4,800	3,900	Note 1
King	Nov-22-66	2,600	1,800	Note 1
King	Dec-12-66	690	380	Note 1
King	Dec-14-66		570	Note 1
King	Dec-16-66	1,700	850	Note 1
King	Dec-19-66	400	330	Note 1
King	Dec-21-66	670	600	Note 1
King	May-13-67		972	MDNR 003652-56 (WRC)
King	May-14-67		809	MDNR 003652-56 (WRC)
King	1968		2,190	Kendrick Exhibit 561
King	Jun-04-68		1,234	SA 029223-30 (WRC)
King	Jun-05-68		1,973	SA 029223-30 (WRC)
King	Jan-05-70	3,800	7,200	Note 1
King	Jan-07-70	1,800	6,400	Note 1
King	Jan-12-70	3,900	1,900	Note 1
King	Jan-14-70	6,200	1,400	Note 1
King	Jan-19-70	7,100	1,400	Note 1
King	Jan-21-70	6,800	2,600	Note 1
King	Jan-23-70	9,800	1,700	Note 1
King	Jan-26-70	6,400	1,100	Note 1
King	Jan-28-70		2,200	Note 1
King	Jan-30-70	5,200		Note 1
King	Feb-02-70	9,200	1,200	Note 1
King	Feb-04-70	6,200	1,300	Note 1
King	Feb-06-70	4,600	900	Note 1
King	Feb-09-70	6,800	800	Note 1
King	Feb-11-70	5,000	500	Note 1
King	Feb-23-70	7,200	1,200	Note 1
King	Feb-25-70	5,700	1,100	Note 1
King	Feb-27-70	6,100	1,300	Note 1
King	Mar-06-70	6,100	1,300	Note 1
King	Apr-06-70	6,200	900	Note 1
King	Apr-08-70	4,500	1,300	Note 1
King	Apr-10-70	5,300	1,200	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED
SETTLEMENT AND
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
King	Apr-13-70		1,100	Note 1
King	Apr-15-70		800	Note 1
King	Apr-17-70	6,700	800	Note 1
King	Apr-27-70	6,200	1,100	Note 1
King	Apr-29-70	3,400	6,400	Note 1
King	May-04-70	5,100	2,050	Note 1
King	May-06-70	5,500	1,400	Note 1
King	May-08-70	5,900	1,300	Note 1
King	May-11-70	5,300	2,300	Note 1
King	May-13-70	6,600	900	Note 1
King	May-15-70	4,000	1,100	Note 1
King	May-18-70	3,800	700	Note 1
King	May-20-70	4,300	1,100	Note 1
King	May-22-70	5,100	600	Note 1
King	May-25-70	4,100	700	Note 1
King	May-27-70	3,900	300	Note 1
King	May-29-70	6,000	800	Note 1
King	Jun-01-70	4,000	9,000	Note 1
King	Jun-03-70	3,900	900	Note 1
King	Jun-05-70	2,100	800	Note 1
King	Jun-08-70	2,600	600	Note 1
King	Jun-10-70	4,700	800	Note 1
King	Jun-12-70	2,700		Note 1
King	Jul-08-70	3,000	500	Note 1
King	Jul-10-70	2,900	200	Note 1
King	Jul-13-70	3,400	400	Note 1
King	Jul-15-70	3,700	500	Note 1
King	Jul-17-70	4,400	500	Note 1
King	Jul-22-70	3,100	1,100	Note 1
King	Jul-24-70		800	Note 1
King	Jul-27-70	4,100	900	Note 1
King	Jul-29-70	3,500	700	Note 1
King	Jul-31-70	3,800	1,900	Note 1
King	Aug-07-70	3,700	1,400	Note 1
King	Aug-19-70	3,700	700	Note 1
King	Aug-21-70	3,900	1,300	Note 1
King	Aug-24-70	3,400		Note 1
King	Aug-26-70	4,000	500	Note 1
King	Aug-28-70	4,700	1,000	Note 1
King	Sep-02-70	320	900	Note 1
King	Sep-04-70		1,000	Note 1
King	Sep-09-70	2,100	400	Note 1
King	Sep-11-70	2,200	500	Note 1
King	Sep-20-70	3,900	900	Note 1
King	Sep-22-70	5,000		Note 1
King	Sep-24-70	4,300	900	Note 1
King	Sep-28-70	4,000	700	Note 1
King	Sep-30-70	540	900	Note 1
King	Oct-02-70	2,300	700	Note 1
King	Oct-12-70	5,100	900	Note 1
King	Oct-14-70	5,500	600	Note 1
King	Oct-19-70	6,400	900	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED
SETTLEMENT AN

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
King	Oct-21-70	6,200	700	Note 1
King	Oct-26-70	4,200	700	Note 1
King	Oct-28-70	4,700	600	Note 1
King	Nov-16-70	6,800	1,100	Note 1
King	Nov-18-70	3,400	900	Note 1
King	Nov-20-70	6,200	1,000	Note 1
King	Nov-23-70	5,600	800	Note 1
King	Nov-25-70	5,500	600	Note 1
King	Nov-30-70	5,600	700	Note 1
King	Dec-02-70	5,900	400	Note 1
King	Dec-04-70	3,000	1,200	Note 1
King	Dec-07-70	5,000	1,000	Note 1
King	Dec-09-70	5,000	600	Note 1
King	Dec-11-70	3,600	500	Note 1
King	Dec-14-70	5,300	500	Note 1
King	Dec-16-70	4,500		Note 1
King	Dec-21-70	2,400	900	Note 1
King	Dec-23-70	4,100	1,300	Note 1
King	Dec-30-70		200	Note 1
King	Jan-11-71	5,300	1,000	Note 1
King	Jan-18-71	7,200	1,200	Note 1
Monarch	1955		13,671	Kendrick Exhibit 561
Monarch	Jul-28-55	23,543	11,956	063803 - 063808 (WRC)
Monarch	Jul-29-55	22,774	12,128	063803 - 063808 (WRC)
Monarch	Jul-30-55	20,000	14,115	063803 - 063808 (WRC)
Monarch	Jul-31-55	636	873	063803 - 063808 (WRC)
Monarch	Augl-01-55	14,188	11,299	063803 - 063808 (WRC)
Monarch	Augl-02-55	14,118	11,886	063803 - 063808 (WRC)
Monarch	Augl-03-55	8,189	6,832	063803 - 063808 (WRC)
Monarch	Jan 1956		9,140	KA04600384 (WRC)
Monarch	Jan-10-56	12,373	10,028	063797 - 063802 (WRC)
Monarch	Jan-11-56	11,817	9,029	063797 - 063802 (WRC)
Monarch	Jan-12-56	15,199	11,374	063797 - 063802 (WRC)
Monarch	Jan-13-56	8,371	6,617	063797 - 063802 (WRC)
Monarch	Jan-14-56	8,148	6,440	063797 - 063802 (WRC)
Monarch	Jan-15-56	162		063797 - 063802 (WRC)
Monarch	Jan-16-56	13,314	9,618	063797 - 063802 (WRC)
Monarch	Dec-09-59	3,940	1,290	Note 1
Monarch	Dec-17-59	7,600	2,300	Note 1
Monarch	Jan-06-60	6,250	285	Note 1
Monarch	Jan-13-60	5,100	2,800	Note 1
Monarch	Jan-27-60	11,700	560	Note 1
Monarch	Feb-25-60		66	Note 1
Monarch	Mar-09-60	3,200	500	Note 1
Monarch	Mar-22-60	1,760	280	Note 1
Monarch	Apr-12-60	2,450	270	Note 1
Monarch	Apr-28-60	2,500	300	Note 1
Monarch	May-18-60	3,400	300	Note 1
Monarch	May-26-60	2,800	200	Note 1
Monarch	Jun-07-60	1,400	130	Note 1
Monarch	Jun-15-60		90	Note 1
Monarch	Jun-22-60	4,300	340	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Monarch	Jun-28-60	1,700	460	Note 1
Monarch	Jul-06-60		250	Note 1
Monarch	Jul-07-60	1,130	610	Note 1
Monarch	Jul-12-60	2,000		Note 1
Monarch	Jul-27-60	2,620	200	Note 1
Monarch	Aug-04-60	5,300	190	Note 1
Monarch	Aug-31-60	3,800	170	Note 1
Monarch	Sep-07-60	1,800	250	Note 1
Monarch	Sep-14-60	1,800	50	Note 1
Monarch	Sep-27-60	2,400	110	Note 1
Monarch	Oct-11-60	1,200	370	Note 1
Monarch	Oct-20-60	2,850	98	Note 1
Monarch	Oct-27-60	1,480		Note 1
Monarch	Nov-01-60	280	230	Note 1
Monarch	Nov-09-60	1,530	170	Note 1
Monarch	Nov-17-60	430	280	Note 1
Monarch	Nov-22-60	730	270	Note 1
Monarch	Nov-30-60	1,230	120	Note 1
Monarch	Dec-08-60	1,300	290	Note 1
Monarch	Dec-13-60	2,330	540	Note 1
Monarch	Dec-21-60	890	140	Note 1
Monarch	Dec-29-60	580	420	Note 1
Monarch	1961		780	Kendrick Exhibit 561
Monarch	Jun-27-61		778	SA 038997-039000 (WRC)
Monarch	March 1963	2,000	125	NCASI 000128-31
Monarch	Mar-16-63	2,800	134	Note 1
Monarch	Mar-17-63	2,060	125	Note 1
Monarch	Mar-18-63	2,190	937	Note 1
Monarch	Apr-03-63	1,050		Note 1
Monarch	Apr-04-63	725		Note 1
Monarch	Apr-05-63	1,210		Note 1
Monarch	Jun-21-65	3,200		Note 1
Monarch	Jun-22-65	2,600	350	Note 1
Monarch	Jun-23-65	5,000	200	Note 1
Monarch	Jun-24-65	5,700		Note 1
Monarch	Jun-28-65	1,660		Note 1
Monarch	Jun-29-65	2,000	300	Note 1
Monarch	Jun-30-65	2,500	250	Note 1
Monarch	Jul-01-65	1,700	300	Note 1
Monarch	Jul-07-65	2,000	200	Note 1
Monarch	Jul-08-65	4,700	200	Note 1
Monarch	Jul-13-65	2,400	200	Note 1
Monarch	Jul-14-65	3,500	200	Note 1
Monarch	Jul-15-65	2,300	250	Note 1
Monarch	Jul-20-65	2,100	180	Note 1
Monarch	Jul-21-65	2,500	250	Note 1
Monarch	Jul-22-65	3,100	380	Note 1
Monarch	Jul-27-65	2,100	350	Note 1
Monarch	Jul-28-65	2,230	80	Note 1
Monarch	Jul-29-65	2,500	89	Note 1
Monarch	Aug-09-65	2,100	170	Note 1
Monarch	Aug-10-65	2,200	150	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Monarch	Aug-11-65	3,100	260	Note 1
Monarch	Aug-12-65	3,500	290	Note 1
Monarch	Aug-16-65	5,950	460	Note 1
Monarch	Aug-17-65	6,250	250	Note 1
Monarch	Aug-18-65	3,600	750	Note 1
Monarch	Aug-19-65	2,600	480	Note 1
Monarch	Aug-23-65	3,900	200	Note 1
Monarch	Aug-24-65	4,100	80	Note 1
Monarch	Aug-25-65	2,500	120	Note 1
Monarch	Aug-26-65	3,300	260	Note 1
Monarch	Aug-30-65	2,500	150	Note 1
Monarch	Aug-31-65	2,100	90	Note 1
Monarch	Sep-01-65	2,400	225	Note 1
Monarch	Sep-02-65	1,700	460	Note 1
Monarch	Sep-07-65	3,100	310	Note 1
Monarch	Sep-08-65	2,500	150	Note 1
Monarch	Sep-09-65	2,700	150	Note 1
Monarch	Sep-13-65	2,600	150	Note 1
Monarch	Sep-14-65	2,700	155	Note 1
Monarch	Sep-16-65	2,350	125	Note 1
Monarch	Oct-05-65	1,200	240	Note 1
Monarch	Oct-06-65	2,700	600	Note 1
Monarch	Oct-07-65	2,800	330	Note 1
Monarch	Oct-12-65	2,400	160	Note 1
Monarch	Oct-13-65	2,800	450	Note 1
Monarch	Oct-14-65	3,100	550	Note 1
Monarch	Oct-27-65	3,300	270	Note 1
Monarch	Oct-28-65	3,300	450	Note 1
Monarch	Nov-02-65	2,100	660	Note 1
Monarch	Nov-03-65	2,900	370	Note 1
Monarch	Nov-04-65	3,500	560	Note 1
Monarch	Nov-09-65	3,000	200	Note 1
Monarch	Nov-10-65	2,600	340	Note 1
Monarch	Nov-11-65	2,500	640	Note 1
Monarch	Nov-30-65	2,300	420	Note 1
Monarch	Dec-01-65		830	Note 1
Monarch	Dec-02-65	2,800	500	Note 1
Monarch	Dec-07-65	3,300	600	Note 1
Monarch	Dec-08-65	1,100	800	Note 1
Monarch	Dec-09-65	1,800	800	Note 1
Monarch	Dec-14-65	4,400	470	Note 1
Monarch	Dec-15-65	2,600	340	Note 1
Monarch	Dec-16-65	1,900	270	Note 1
Monarch	Mar-08-66	1,900	480	Note 1
Monarch	Mar-09-66	2,600	650	Note 1
Monarch	Mar-10-66	3,600	320	Note 1
Monarch	Mar-11-66	3,000	2,200	Note 1
Monarch	Mar-14-66	2,900	250	Note 1
Monarch	Mar-15-66	5,600	470	Note 1
Monarch	Mar-16-66	2,900	220	Note 1
Monarch	Mar-17-66	2,700	210	Note 1
Monarch	Mar-18-66	2,400	240	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Monarch	Mar-21-66	2,100	150	Note 1
Monarch	Mar-22-66	3,300	90	Note 1
Monarch	Mar-23-66	2,900	280	Note 1
Monarch	Mar-24-66	2,200	510	Note 1
Monarch	Mar-25-66	1,600	260	Note 1
Monarch	Mar-28-66	2,200	360	Note 1
Monarch	Mar-29-66	2,700	250	Note 1
Monarch	Mar-30-66	2,700	330	Note 1
Monarch	Mar-31-66	2,700	300	Note 1
Monarch	Apr-01-66	3,000	280	Note 1
Monarch	Apr-04-66	2,400	220	Note 1
Monarch	Apr-05-66	2,900	200	Note 1
Monarch	Apr-06-66	1,300	450	Note 1
Monarch	Apr-07-66	800	450	Note 1
Monarch	Apr-08-66	1,600	600	Note 1
Monarch	Apr-11-66	1,300	600	Note 1
Monarch	Apr-12-66	1,250	610	Note 1
Monarch	Apr-13-66	460	420	Note 1
Monarch	Apr-14-66	2,700	600	Note 1
Monarch	Apr-15-66	2,100	240	Note 1
Monarch	Apr-18-66	1,700	100	Note 1
Monarch	Apr-19-66	2,200	90	Note 1
Monarch	Apr-20-66	2,400	60	Note 1
Monarch	Apr-21-66	3,000	160	Note 1
Monarch	Apr-22-66	2,200	1,500	Note 1
Monarch	Apr-25-66	2,000	850	Note 1
Monarch	Apr-26-66	2,600	340	Note 1
Monarch	Apr-27-66	2,600	420	Note 1
Monarch	Apr-28-66	2,800	360	Note 1
Monarch	Apr-29-66	2,700	350	Note 1
Monarch	May-02-66	3,000	460	Note 1
Monarch	May-03-66	2,700	290	Note 1
Monarch	May-04-66	2,600	200	Note 1
Monarch	May-05-66	3,100	260	Note 1
Monarch	May-06-66	3,000	200	Note 1
Monarch	May-09-66	3,200	190	Note 1
Monarch	May-10-66	3,000	310	Note 1
Monarch	May-11-66	3,000	300	Note 1
Monarch	May-12-66	3,400	400	Note 1
Monarch	May-13-66	2,400	300	Note 1
Monarch	May-16-66	600	260	Note 1
Monarch	May-17-66	2,000	200	Note 1
Monarch	May-18-66	1,000	200	Note 1
Monarch	May-19-66	1,400	150	Note 1
Monarch	May-20-66	3,200	100	Note 1
Monarch	May-23-66	4,300	200	Note 1
Monarch	May-24-66	3,000	100	Note 1
Monarch	May-25-66	3,100	250	Note 1
Monarch	May-26-66	3,300	100	Note 1
Monarch	May-27-66	2,700	230	Note 1
Monarch	May-30-66	1,800	500	Note 1
Monarch	May-31-66	2,700	740	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AN
SETTLEMENT AN
COMM

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Monarch	Jun-01-66	2,100	330	Note 1
Monarch	Jun-02-66	2,600	120	Note 1
Monarch	Jun-03-66	2,200	60	Note 1
Monarch	Jun-06-66	2,840	120	Note 1
Monarch	Jun-07-66	4,400	120	Note 1
Monarch	Jun-08-66	2,700	40	Note 1
Monarch	Jun-09-66	3,000	150	Note 1
Monarch	Jun-10-66	3,200	60	Note 1
Monarch	Jun-13-66	4,200	30	Note 1
Monarch	Jun-14-66	3,300	30	Note 1
Monarch	Jun-15-66	3,000	90	Note 1
Monarch	Jun-16-66	3,000	60	Note 1
Monarch	Jun-17-66	2,100	20	Note 1
Monarch	Jun-20-66	3,300	90	Note 1
Monarch	Jun-21-66	2,500	150	Note 1
Monarch	Jun-22-66	3,100	170	Note 1
Monarch	Jun-23-66	3,000	180	Note 1
Monarch	Jun-27-66	3,000	600	Note 1
Monarch	Jun-29-66	2,700	80	Note 1
Monarch	Jun-30-66	2,800	90	Note 1
Monarch	Jul-01-66	2,700	150	Note 1
Monarch	Jul-05-66	2,300	130	Note 1
Monarch	Jul-13-66	2,400	250	Note 1
Monarch	Jul-21-66	3,400	400	Note 1
Monarch	Aug-02-66	2,200	75	Note 1
Monarch	Aug-10-66	4,200	150	Note 1
Monarch	Aug-18-66	5,300	300	Note 1
Monarch	Aug-23-66	2,100	270	Note 1
Monarch	Aug-31-66	2,100	110	Note 1
Monarch	Sep-08-66	5,100	150	Note 1
Monarch	Oct-04-66	2,700	130	Note 1
Monarch	Oct-20-66	2,600	260	Note 1
Monarch	Oct-25-66	2,800	100	Note 1
Monarch	Nov-15-66	3,300	100	Note 1
Monarch	Nov-22-66	1,000	160	Note 1
Monarch	Dec-13-66	1,100	300	Note 1
Monarch	Dec-21-66	1,700	130	Note 1
Monarch	May-13-67		567	MDNR 003652-56 (WRC)
Monarch	May-14-67		201	MDNR 003652-56 (WRC)
Monarch	Jun-04-68		583	SA 029223-30 (WRC)
Monarch	Jun-05-68		709	SA 029223-30 (WRC)
Monarch	Aug-20-68		456	SA 032010-30 (WRC)
Monarch	Jan-12-70		1,000	Note 1
Monarch	Jan-13-70		900	Note 1
Monarch	Jan-14-70		900	Note 1
Monarch	Jan-15-70	900	800	Note 1
Monarch	Jan-16-70		800	Note 1
Monarch	Jan-19-70		400	Note 1
Monarch	Jan-20-70	1,900	600	Note 1
Monarch	Jan-21-70		500	Note 1
Monarch	Jan-22-70		600	Note 1
Monarch	Jan-23-70		800	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Monarch	Jan-27-70		800	Note 1
Monarch	Jan-28-70	1,800	1,100	Note 1
Monarch	Jan-29-70		1,100	Note 1
Monarch	Jan-30-70		1,000	Note 1
Monarch	Feb-02-70		350	Note 1
Monarch	Feb-03-70		700	Note 1
Monarch	Feb-04-70		400	Note 1
Monarch	Feb-05-70	1,500	450	Note 1
Monarch	Feb-06-70		600	Note 1
Monarch	Feb-23-70		2,600	Note 1
Monarch	Feb-24-70		3,800	Note 1
Monarch	Feb-25-70		3,500	Note 1
Monarch	Feb-26-70	1,800	2,600	Note 1
Monarch	Feb-27-70		3,400	Note 1
Monarch	Mar-06-70	5,900	2,500	Note 1
Monarch	Mar-16-70	8,200	4,400	Note 1
Monarch	Mar-17-70	9,700	4,600	Note 1
Monarch	Mar-18-70	10,600	5,000	Note 1
Monarch	Mar-19-70	8,700	5,600	Note 1
Monarch	Mar-20-70	7,300	3,500	Note 1
Monarch	Apr-06-70	6,800	2,300	Note 1
Monarch	Apr-07-70	5,600	2,800	Note 1
Monarch	Apr-08-70	6,100	2,900	Note 1
Monarch	Apr-09-70	5,900	3,400	Note 1
Monarch	Apr-10-70	6,000	3,100	Note 1
Monarch	Apr-24-70	6,800	3,500	Note 1
Monarch	Apr-27-70	9,100	4,800	Note 1
Monarch	Apr-28-70	5,600	3,900	Note 1
Monarch	Apr-29-70	6,900	3,900	Note 1
Monarch	Apr-30-70	7,500	3,600	Note 1
Monarch	May-01-70	7,300	3,800	Note 1
Monarch	May-04-70	8,000	3,900	Note 1
Monarch	May-05-70	6,800	4,400	Note 1
Monarch	May-06-70	6,400	4,900	Note 1
Monarch	May-07-70	6,600	3,400	Note 1
Monarch	May-08-70	6,900	4,100	Note 1
Monarch	May-11-70	4,000	1,900	Note 1
Monarch	May-12-70	3,400	2,100	Note 1
Monarch	May-13-70	4,100	2,200	Note 1
Monarch	May-14-70	4,700	2,000	Note 1
Monarch	May-15-70	5,700	3,400	Note 1
Monarch	May-25-70	4,100	2,300	Note 1
Monarch	May-26-70	3,600	2,300	Note 1
Monarch	May-27-70	2,600	2,100	Note 1
Monarch	May-28-70	2,700	2,400	Note 1
Monarch	May-29-70	5,200	2,700	Note 1
Monarch	Jun-01-70	5,400	1,900	Note 1
Monarch	Jun-02-70	5,300	3,200	Note 1
Monarch	Jun-03-70	5,900	4,200	Note 1
Monarch	Jun-04-70	4,900	3,900	Note 1
Monarch	Jun-05-70	7,300	4,400	Note 1
Monarch	Jun-15-70	7,800	2,800	Note 1

CONFIDENTIAL BUSINESS INFORMATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Monarch	Jun-16-70	7,400	4,900	Note 1
Monarch	Jun-17-70	8,100	3,900	Note 1
Monarch	Jun-18-70	10,400	3,700	Note 1
Monarch	Jun-19-70	9,400	2,000	Note 1
Monarch	Jun-22-70	6,500	4,800	Note 1
Monarch	Jun-23-70	6,300	3,400	Note 1
Monarch	Jun-24-70	6,500	4,100	Note 1
Monarch	Jun-25-70	5,400	3,500	Note 1
Monarch	Jun-26-70	5,900	4,000	Note 1
Monarch	Jun-29-70	2,600	180	Note 1
Monarch	Jun-30-70	2,200	190	Note 1
Monarch	Jul-01-70	2,000	190	Note 1
Monarch	Jul-06-70	3,700	1,800	Note 1
Monarch	Jul-07-70	6,100	3,700	Note 1
Monarch	Jul-08-70	6,800	3,900	Note 1
Monarch	Jul-09-70	4,900	3,200	Note 1
Monarch	Jul-10-70	5,600	2,900	Note 1
Monarch	Jul-13-70	8,000	3,700	Note 1
Monarch	Jul-14-70	7,900	4,100	Note 1
Monarch	Jul-15-70	6,600	4,400	Note 1
Monarch	Jul-16-70	5,000	3,600	Note 1
Monarch	Jul-17-70	4,400	2,100	Note 1
Monarch	Jul-20-70	4,900	1,800	Note 1
Monarch	Jul-21-70	3,200	1,200	Note 1
Monarch	Jul-22-70	3,500	900	Note 1
Monarch	Jul-23-70	2,900	1,100	Note 1
Monarch	Jul-24-70	3,700	1,400	Note 1
Monarch	Jul-27-70	3,900	1,000	Note 1
Monarch	Jul-28-70	4,300	1,100	Note 1
Monarch	Jul-29-70	3,600	1,800	Note 1
Monarch	Jul-30-70	3,800	1,600	Note 1
Monarch	Jul-31-70		1,400	Note 1
Monarch	Aug-05-70	3,700	1,100	Note 1
Monarch	Aug-06-70	2,700	1,000	Note 1
Monarch	Aug-07-70	3,200	1,200	Note 1
Monarch	Aug-19-70	4,200	1,200	Note 1
Monarch	Aug-20-70	3,100	1,100	Note 1
Monarch	Aug-21-70	3,800	1,100	Note 1
Monarch	Aug-24-70	4,600	350	Note 1
Monarch	Aug-25-70	4,100	450	Note 1
Monarch	Aug-26-70	4,000	460	Note 1
Monarch	Aug-27-70	4,000	460	Note 1
Monarch	Aug-28-70	4,000	430	Note 1
Monarch	Sep-01-70	5,200	1,500	Note 1
Monarch	Sep-02-70	4,300	1,000	Note 1
Monarch	Sep-03-70	2,400	800	Note 1
Monarch	Sep-04-70	3,200	1,200	Note 1
Monarch	Sep-10-70	4,600	1,000	Note 1
Monarch	Sep-11-70	3,000	1,000	Note 1
Monarch	Sep-15-70	3,100	1,000	Note 1
Monarch	Sep-16-70	2,400	1,000	Note 1
Monarch	Sep-16-70		1,636	SA 032010-30 (WRC)

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Monarch	Sep-17-70	3,200	1,100	Note 1
Monarch	Sep-18-70	4,900	1,000	Note 1
Monarch	Sep-28-70	5,000	1,600	Note 1
Monarch	Sep-29-70	5,700	3,200	Note 1
Monarch	Sep-30-70	5,400	2,300	Note 1
Monarch	Oct-01-70	5,700	2,200	Note 1
Monarch	Oct-02-70	4,800	2,300	Note 1
Monarch	Oct-05-70	5,600	1,500	Note 1
Monarch	Oct-06-70	5,600	1,200	Note 1
Monarch	Oct-07-70	5,900	1,900	Note 1
Monarch	Oct-08-70	5,400	2,300	Note 1
Monarch	Oct-09-70	5,400	1,800	Note 1
Monarch	Oct-12-70	4,500	1,100	Note 1
Monarch	Oct-13-70	4,200	1,600	Note 1
Monarch	Oct-14-70	4,400	1,600	Note 1
Monarch	Oct-15-70	3,700	1,300	Note 1
Monarch	Oct-16-70	3,900	1,200	Note 1
Monarch	Oct-19-70	5,400	1,200	Note 1
Monarch	Oct-20-70	5,300	1,600	Note 1
Monarch	Oct-21-70	5,100	1,800	Note 1
Monarch	Oct-22-70	5,900	2,000	Note 1
Monarch	Oct-23-70	5,600	1,400	Note 1
Monarch	Oct-26-70	6,000	900	Note 1
Monarch	Oct-27-70	5,400	1,900	Note 1
Monarch	Oct-28-70	5,800	1,800	Note 1
Monarch	Oct-29-70	5,100	1,900	Note 1
Monarch	Oct-30-70	6,800	2,000	Note 1
Monarch	Nov-02-70	4,100	900	Note 1
Monarch	Nov-03-70	4,900	2,000	Note 1
Monarch	Nov-04-70	4,400	1,700	Note 1
Monarch	Nov-05-70	7,400	2,300	Note 1
Monarch	Nov-06-70	7,800	2,600	Note 1
Monarch	Nov-09-70	5,450	2,260	Note 1
Monarch	Nov-10-70	7,600	2,340	Note 1
Monarch	Nov-11-70	7,700	2,200	Note 1
Monarch	Nov-12-70	8,400	1,900	Note 1
Monarch	Nov-13-70	2,200	1,200	Note 1
Monarch	Nov-16-70	8,000	1,500	Note 1
Monarch	Nov-17-70	5,700	1,400	Note 1
Monarch	Nov-18-70	6,400	1,900	Note 1
Monarch	Nov-19-70	5,400	1,900	Note 1
Monarch	Nov-20-70	6,300	1,500	Note 1
Monarch	Nov-23-70	3,300	1,900	Note 1
Monarch	Nov-24-70	3,200	800	Note 1
Monarch	Nov-25-70	5,500	2,400	Note 1
Monarch	Nov-30-70	3,300	1,300	Note 1
Monarch	Dec-01-70	3,100	900	Note 1
Monarch	Dec-02-70	3,800	1,000	Note 1
Monarch	Dec-03-70	4,000	1,500	Note 1
Monarch	Dec-04-70	5,000	1,700	Note 1
Monarch	Dec-07-70	3,100	1,200	Note 1
Monarch	Dec-08-70	3,600	1,200	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Monarch	Dec-09-70	3,700	1,700	Note 1
Monarch	Dec-10-70	4,600	2,000	Note 1
Monarch	Dec-11-70	4,100	1,000	Note 1
Monarch	Dec-21-70	2,600	800	Note 1
Monarch	Dec-22-70	3,100	600	Note 1
Monarch	Dec-23-70	2,800	1,000	Note 1
Monarch	Jan-11-71	5,400	1,200	Note 1
Monarch	Jan-12-71		1,800	Note 1
Monarch	Jan-13-71	5,500	1,900	Note 1
Monarch	Jan-15-71	7,800	1,600	Note 1
Monarch	Jan-18-71	3,200	2,000	Note 1
Monarch	Jan-19-71	4,600	1,300	Note 1
Monarch	Jan-20-71	5,200	2,000	Note 1
Monarch	Jan-21-71	4,200	1,500	Note 1
Monarch	Jan-22-71	5,000	2,100	Note 1
Monarch	Feb-01-71	5,300	900	Note 1
Monarch	Feb-02-71	4,400	1,300	Note 1
Monarch	Feb-03-71	4,800	1,100	Note 1
Monarch	Feb-04-71	3,300	2,300	Note 1
Monarch	Feb-05-71	3,500	1,700	Note 1
Monarch	Feb-08-71	4,700	1,700	Note 1
Monarch	Feb-09-71	6,000	2,000	Note 1
Monarch	Feb-10-71	7,200	1,500	Note 1
Monarch	Feb-11-71	4,500	1,200	Note 1
Monarch	Feb-12-71	5,700	1,600	Note 1
Monarch	Feb-15-71	4,100	1,200	Note 1
Monarch	Feb-16-71	3,900	1,400	Note 1
Monarch	Feb-17-71	4,000	1,400	Note 1
Monarch	Feb-18-71	4,800	1,000	Note 1
Monarch	Feb-19-71	5,400	1,000	Note 1
Monarch	Mar-01-71	5,100	1,000	Note 1
Monarch	Mar-02-71	4,300	1,100	Note 1
Monarch	Mar-03-71	3,600	1,100	Note 1
Monarch	Mar-04-71	5,300	1,400	Note 1
Monarch	Mar-05-71	10,800	900	Note 1
Monarch	Mar-08-71	7,800	1,700	Note 1
Monarch	Mar-09-71	8,100	1,700	Note 1
Monarch	Mar-10-71	3,800	1,500	Note 1
Monarch	Mar-11-71	6,300	800	Note 1
Monarch	Mar-12-71	4,700	1,700	Note 1
Monarch	Mar-15-71	7,300	2,400	Note 1
Monarch	Mar-16-71	9,400	2,400	Note 1
Monarch	Mar-17-71	8,700	2,100	Note 1
Monarch	Mar-18-71	7,700	2,000	Note 1
Monarch	Mar-19-71	6,300	1,700	Note 1
Monarch	Mar-22-71	5,100	1,600	Note 1
Monarch	Mar-23-71	4,400	1,900	Note 1
Monarch	Mar-24-71	5,200	1,800	Note 1
Monarch	Mar-25-71	4,000	1,300	Note 1
Monarch	Mar-26-71	4,300	1,200	Note 1
Monarch	Apr-05-71	5,900	1,400	Note 1
Monarch	Apr-06-71	5,000	1,500	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Monarch	Apr-07-71	6,300	1,900	Note 1
Monarch	Apr-08-71	5,400	1,700	Note 1
Monarch	Apr-09-71	8,400	2,100	Note 1
Monarch	Apr-12-71	5,200	1,300	Note 1
Monarch	Apr-13-71	5,000	1,100	Note 1
Monarch	Apr-14-71	5,500	1,000	Note 1
Monarch	Apr-15-71	6,400	2,000	Note 1
Monarch	Apr-16-71	7,200	2,200	Note 1
Monarch	May-03-71		1,900	Note 1
Monarch	May-04-71		2,200	Note 1
Monarch	May-05-71		1,700	Note 1
Monarch	May-06-71		1,900	Note 1
Monarch	May-17-71		1,400	Note 1
Monarch	May-18-71	5,500		Note 1
Monarch	May-19-71	5,400	2,700	Note 1
Monarch	May-20-71	7,200	1,500	Note 1
Monarch	May-21-71		2,400	Note 1
Monarch	Jun-07-71	5,800	1,800	Note 1
Monarch	Jun-08-71	6,500	2,200	Note 1
Monarch	Jun-09-71	7,300	1,200	Note 1
Monarch	Jun-10-71	8,300	2,000	Note 1
Monarch	Jun-11-71	7,900	1,800	Note 1
Monarch	Jun-14-71	6,000	1,700	Note 1
Monarch	Jun-15-71	5,900	1,400	Note 1
Monarch	Jun-16-71	11,100	1,900	Note 1
Monarch	Jun-17-71	2,900	1,900	Note 1
Monarch	Jun-18-71	9,000	2,400	Note 1
Monarch	Jul-26-71		1,200	Note 1
Monarch	Jul-27-71	4,000		Note 1
Monarch	Jul-28-71	4,500		Note 1
Monarch	Jul-29-71	5,000	2,200	Note 1
Monarch	Jul-30-71	6,400	2,200	Note 1
Monarch	Aug-02-71	4,200	1,400	Note 1
Monarch	Aug-03-71		1,300	Note 1
Monarch	Aug-04-71		1,900	Note 1
Monarch	Aug-05-71	6,600	1,600	Note 1
Monarch	Aug-06-71	5,200	1,100	Note 1
Monarch	Aug-09-71	4,900	900	Note 1
Monarch	Aug-10-71		1,100	Note 1
Monarch	Aug-11-71	5,000	900	Note 1
Monarch	Aug-12-71	3,900	500	Note 1
Monarch	Aug-13-71	6,200	1,100	Note 1
Monarch	Aug-16-71	5,400	1,100	Note 1
Monarch	Aug-17-71	6,100	1,200	Note 1
Monarch	Aug-18-71	6,700	1,100	Note 1
Monarch	Aug-19-71	6,200	700	Note 1
Monarch	Aug-20-71	5,400	800	Note 1
Monarch	Aug-23-71	6,700	1,000	Note 1
Monarch	Aug-24-71	5,900	900	Note 1
Monarch	Aug-25-71	7,500	1,300	Note 1
Monarch	Aug-26-71	6,700	1,500	Note 1
Monarch	Aug-27-71	5,800	900	Note 1

CONFIDENTIAL BUSINESS INFORMATION

SETTLEMENT AND ... FENSE
... CATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Monarch	Aug-30-71	5,800	1,300	Note 1
Monarch	Aug-31-71	5,000	1,200	Note 1
Monarch	Sep-01-71	5,600	1,500	Note 1
Monarch	Sep-02-71	3,700	1,500	Note 1
Monarch	Sep-03-71	6,900	1,600	Note 1
Monarch	Sep-07-71	5,900	600	Note 1
Monarch	Sep-08-71	5,600	800	Note 1
Monarch	Sep-09-71	4,000	500	Note 1
Monarch	Sep-10-71	4,900	800	Note 1
Monarch	Sep-13-71	4,140	2,000	Note 1
Monarch	Sep-14-71	5,710	1,240	Note 1
Monarch	Sep-15-71	3,020	1,360	Note 1
Monarch	Sep-16-71	4,600	1,330	Note 1
Monarch	Sep-17-71	8,015	1,710	Note 1
Monarch	Sep-20-71	6,200	1,500	Note 1
Monarch	Sep-21-71	7,000	1,800	Note 1
Monarch	Sep-22-71	10,700	1,900	Note 1
Monarch	Sep-23-71	10,000	1,600	Note 1
Monarch	Sep-24-71	6,500	2,000	Note 1
Monarch	Sep-27-71	5,800	800	Note 1
Monarch	Sep-28-71	5,500	800	Note 1
Monarch	Sep-29-71	9,400	1,300	Note 1
Monarch	Sep-30-71	7,900	600	Note 1
Monarch	Oct-01-71	8,900	1,900	Note 1
Monarch	Oct-04-71	3,900	1,000	Note 1
Monarch	Oct-05-71	3,100	800	Note 1
Monarch	Oct-06-71	4,200	800	Note 1
Monarch	Oct-07-71	6,100	600	Note 1
Monarch	Oct-08-71	3,600	1,000	Note 1
Monarch	Oct-11-71	5,600	2,200	Note 1
Monarch	Oct-12-71	6,200	1,700	Note 1
Monarch	Oct-13-71	5,700	1,200	Note 1
Monarch	Oct-14-71	5,600	1,300	Note 1
Monarch	Oct-15-71	6,800	1,600	Note 1
Monarch	Oct-18-71	6,200	1,600	Note 1
Monarch	Oct-19-71	6,200	1,700	Note 1
Monarch	Oct-20-71	5,100	1,500	Note 1
Monarch	Oct-21-71	5,700	1,700	Note 1
Monarch	Oct-22-71	5,200	1,500	Note 1
Monarch	Oct-25-71	6,700	1,500	Note 1
Monarch	Oct-26-71	5,600	1,700	Note 1
Monarch	Oct-27-71	6,500	1,300	Note 1
Monarch	Oct-28-71	6,900	1,300	Note 1
Monarch	Oct-29-71	8,300	1,900	Note 1
Monarch	Nov-15-71	6,000	1,000	Note 1
Monarch	Nov-16-71	5,200	1,200	Note 1
Monarch	Nov-17-71	6,000	1,400	Note 1
Monarch	Nov-18-71	6,500	1,100	Note 1
Monarch	Nov-19-71	6,300	1,000	Note 1
Monarch	Nov-22-71	6,600	1,600	Note 1
Monarch	Nov-23-71	6,800	2,000	Note 1
Monarch	Nov-24-71	5,700	1,100	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Monarch	Nov-25-71	3,400	1,000	Note 1
Monarch	Nov-26-71	5,000	1,700	Note 1
Monarch	Nov-29-71	5,800	1,300	Note 1
Monarch	Nov-30-71	7,300	1,500	Note 1
Monarch	Dec-01-71	7,300	1,800	Note 1
Monarch	Dec-02-71	3,000	1,300	Note 1
Monarch	Dec-03-71	7,700		Note 1
Monarch	Dec-13-71	5,500	1,000	Note 1
Monarch	Dec-14-71	3,400	1,000	Note 1
Monarch	Dec-15-71	5,800	2,200	Note 1
Monarch	Dec-16-71	5,800	1,300	Note 1
Monarch	Dec-17-71	5,500	1,800	Note 1
Monarch	Dec-20-71	5,700	1,500	Note 1
Monarch	Dec-21-71	5,800	1,500	Note 1
Monarch	Dec-22-71	6,200	2,000	Note 1
Monarch	Dec-23-71	5,300	1,700	Note 1
Monarch	May-05-75		533	SA 025249-54 (WRC)
Monarch	May-06-75		977	SA 025249-54 (WRC)
Monarch	Aug-16-76		424	SA 025249-54 (WRC)
Monarch	Aug-17-76		606	SA 025249-54 (WRC)
Monarch	Jul-01-77		298	Note 1
Monarch	Jul-02-77		380	Note 1
Monarch	Jul-03-77		132	Note 1
Monarch	Jul-04-77		36	Note 1
Monarch	Jul-05-77		26	Note 1
Monarch	Jul-06-77		216	Note 1
Monarch	Jul-07-77		871	Note 1
Monarch	Jul-08-77		369	Note 1
Monarch	Jul-09-77		196	Note 1
Monarch	Jul-10-77		232	Note 1
Monarch	Jul-11-77		96	Note 1
Monarch	Jul-12-77		77	Note 1
Monarch	Jul-13-77		409	Note 1
Monarch	Jul-14-77		463	MDNR - WRC Notice of Noncompliance, 11/3/77 (see Allied Exhibit 520)
Monarch	Jul-15-77		358	Note 1
Monarch	Jul-16-77		92	Note 1
Monarch	Jul-17-77		470	Note 1
Monarch	Jul-18-77		141	Note 1
Monarch	Jul-18-77		481	SA 033502 (WRC)
Monarch	Jul-19-77		173	Note 1
Monarch	Jul-20-77		249	Note 1
Monarch	Jul-21-77		276	Note 1
Monarch	Jul-22-77		293	Note 1
Monarch	Jul-23-77		293	Note 1
Monarch	Jul-24-77		381	Note 1
Monarch	Jul-25-77		168	Note 1
Monarch	Jul-28-77		735	MDNR - WRC Notice of Noncompliance 11/3/77 (see Allied Exhibit 520)
Monarch	Jul-29-77		702	MDNR - WRC Notice of Noncompliance, 11/3/77 (see Allied Exhibit 520
Monarch	Jul-30-77		671	MDNR - WRC Notice of Noncompliance 11/3/77 (see Allied Exhibit 520)
Monarch	Aug-03-77		414	MDNR - WRC Notice of Noncompliance 11/3/77 (see Allied Exhibit 520
Monarch	Aug-07-77		399	MDNR - WRC Notice of Noncompliance 11/3/77 (see Allied Exhibit 520)
Monarch	Aug-08-77		483	MDNR - WRC Notice of Noncompliance 11/3/77 (see Allied Exhibit 520

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Monarch	Aug-09-77		411	MDNR - WRC Notice of Noncompliance, 11/3/77 (see Allied Exhibit 520)
Monarch	Aug-10-77		407	MDNR - WRC Notice of Noncompliance 11/3/77 (see Allied Exhibit 520)
Monarch	Aug-11-77		447	MDNR - WRC Notice of Noncompliance 11/3/77 (see Allied Exhibit 520)
Monarch	Aug-12-77		478	MDNR - WRC Notice of Noncompliance 11/3/77 (see Allied Exhibit 520)
Monarch	Aug-13-77		481	Note 1
Monarch	Aug-14-77		200	Note 1
Monarch	Aug-15-77		330	Note 1
Monarch	Aug-18-77		257	Note 1
Monarch	Aug-21-77		397	MDNR - WRC Notice of Noncompliance, 11/3/77 (see Allied Exhibit 520)
Monarch	Aug-24-77		424	MDNR - WRC Notice of Noncompliance, 11/3/77 (see Allied Exhibit 520)
Monarch	Aug-25-77		393	MDNR - WRC Notice of Noncompliance 11/3/77 (see Allied Exhibit 520)
Monarch	Aug-26-77		428	MDNR - WRC Notice of Noncompliance, 11/3/77 (see Allied Exhibit 520)
Monarch	Aug-27-77		415	MDNR - WRC Notice of Noncompliance, 11/3/77 (see Allied Exhibit 520)
Monarch	Sep-01-77		390	Note 1
Monarch	Sep-02-77		474	Note 1
Monarch	Sep-03-77		369	Note 1
Monarch	Sep-04-77		212	Note 1
Monarch	Sep-05-77		150	Note 1
Monarch	Sep-06-77		183	Note 1
Monarch	Sep-07-77		295	Note 1
Monarch	Sep-08-77		399	Note 1
Monarch	Sep-09-77		392	Note 1
Monarch	Sep-10-77		423	Note 1
Monarch	Sep-11-77		370	Note 1
Monarch	Sep-12-77		293	Note 1
Monarch	Sep-13-77		490	Note 1
Monarch	Sep-14-77		366	Note 1
Monarch	Sep-15-77		350	Note 1
Monarch	Sep-16-77		356	Note 1
Monarch	Sep-17-77		389	Note 1
Monarch	Sep-18-77		361	Note 1
Monarch	Sep-19-77		254	Note 1
Monarch	Sep-20-77		306	Note 1
Monarch	Sep-21-77		377	Note 1
Monarch	Sep-22-77		379	Note 1
Monarch	Sep-23-77		418	Note 1
Monarch	Sep-24-77		455	Note 1
Monarch	Sep-25-77		388	Note 1
Monarch	Sep-26-77		300	Note 1
Monarch	Sep-27-77		420	Note 1
Monarch	Sep-28-77		150	Note 1
Monarch	Sep-29-77		185	Note 1
Monarch	Sep-30-77		352	Note 1
Monarch	Oct-01-77		274	Note 1
Monarch	Oct-02-77		86	Note 1
Monarch	Oct-03-77		281	Note 1
Monarch	Oct-04-77		365	Note 1
Monarch	Oct-05-77		334	Note 1
Monarch	Oct-06-77		417	Note 1
Monarch	Oct-07-77		385	Note 1
Monarch	Oct-08-77		376	Note 1
Monarch	Oct-09-77		145	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Monarch	Oct-11-77		124	Note 1
Monarch	Oct-12-77		299	Note 1
Monarch	Oct-13-77		382	Note 1
Monarch	Oct-14-77		384	Note 1
Monarch	Oct-15-77		573	Note 1
Monarch	Oct-16-77		99	Note 1
Monarch	Oct-17-77		534	Note 1
Monarch	Oct-18-77		611	Note 1
Monarch	Oct-19-77		374	Note 1
Monarch	Oct-20-77		533	Note 1
Monarch	Oct-21-77		603	Note 1
Monarch	Oct-22-77		628	Note 1
Monarch	Oct-23-77		252	Note 1
Monarch	Oct-24-77		299	Note 1
Monarch	Oct-25-77		299	Note 1
Monarch	Oct-26-77		249	Note 1
Monarch	Oct-27-77		480	Note 1
Monarch	Oct-28-77		368	Note 1
Monarch	Oct-29-77		412	Note 1
Monarch	Oct-30-77		396	Note 1
Monarch	Feb-27-78		1,385	MDNR 003987 (WRC)
Monarch	May-01-78		251	Note 1
Monarch	May-02-78		180	Note 1
Monarch	May-03-78		132	Note 1
Monarch	May-04-78		135	Note 1
Monarch	May-05-78		367	Note 1
Monarch	May-06-78		364	Note 1
Monarch	May-07-78		477	Note 1
Monarch	May-08-78		542	Note 1
Monarch	May-09-78		768	Note 1
Monarch	May-10-78		758	Note 1
Monarch	May-11-78		677	Note 1
Monarch	May-12-78		470	Note 1
Monarch	May-13-78		770	Note 1
Monarch	May-14-78		750	Note 1
Monarch	May-15-78		274	Note 1
Monarch	May-16-78		378	Note 1
Monarch	May-17-78		383	Note 1
Monarch	May-18-78		369	Note 1
Monarch	May-19-78		257	Note 1
Monarch	May-20-78		305	Note 1
Monarch	May-21-78		342	Note 1
Monarch	May-22-78		381	Note 1
Monarch	May-23-78		375	Note 1
Monarch	May-24-78		381	Note 1
Monarch	May-25-78		377	Note 1
Monarch	May-26-78		383	Note 1
Monarch	May-27-78		383	Note 1
Monarch	May-28-78		310	Note 1
Monarch	May-29-78		233	Note 1
Monarch	May-30-78		380	Note 1
Monarch	May-31-78		371	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Monarch	Jun-01-78		385	Note 1
Monarch	Jun-02-78		383	Note 1
Monarch	Jun-03-78		382	Note 1
Monarch	Jun-04-78		378	Note 1
Monarch	Jun-05-78		296	Note 1
Monarch	Jun-06-78		343	Note 1
Monarch	Jun-07-78		380	Note 1
Monarch	Jun-08-78		379	Note 1
Monarch	Jun-09-78		381	Note 1
Monarch	Jun-10-78		373	Note 1
Monarch	Jun-11-78		249	Note 1
Monarch	Jun-12-78		360	Note 1
Monarch	Jun-13-78		382	Note 1
Monarch	Jun-14-78		371	Note 1
Monarch	Jun-15-78		376	Note 1
Monarch	Jun-16-78		382	Note 1
Monarch	Jun-17-78		278	Note 1
Monarch	Jun-18-78		285	Note 1
Monarch	Jun-19-78		362	Note 1
Monarch	Jun-20-78		383	Note 1
Monarch	Jun-21-78		293	Note 1
Monarch	Jun-22-78		296	Note 1
Monarch	Jun-23-78		379	Note 1
Monarch	Jun-24-78		343	Note 1
Monarch	Jun-25-78		346	Note 1
Monarch	Jun-26-78		384	Note 1
Monarch	Jun-27-78		380	Note 1
Monarch	Jun-28-78		385	Note 1
Monarch	Jun-29-78		370	Note 1
Monarch	Jun-30-78		355	Note 1
Monarch	Jul-01-78		164	Note 1
Monarch	Jul-02-78		136	Note 1
Monarch	Jul-03-78		69	Note 1
Monarch	Jul-04-78		55	Note 1
Monarch	Jul-05-78		140	Note 1
Monarch	Jul-06-78		187	Note 1
Monarch	Jul-07-78		277	Note 1
Monarch	Jul-08-78		381	Note 1
Monarch	Jul-09-78		385	Note 1
Monarch	Jul-10-78		381	Note 1
Monarch	Jul-11-78		382	Note 1
Monarch	Jul-12-78		380	Note 1
Monarch	Jul-13-78		361	Note 1
Monarch	Jul-14-78		380	Note 1
Monarch	Jul-15-78		385	Note 1
Monarch	Jul-16-78		329	Note 1
Monarch	Jul-17-78		371	Note 1
Monarch	Jul-18-78		378	Note 1
Monarch	Jul-19-78		384	Note 1
Monarch	Jul-20-78		375	Note 1
Monarch	Jul-21-78		380	Note 1
Monarch	Jul-22-78		385	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Monarch	Jul-23-78		365	Note 1
Monarch	Jul-24-78		376	Note 1
Monarch	Jul-25-78		311	Note 1
Monarch	Jul-26-78		383	Note 1
Monarch	Jul-27-78		361	Note 1
Monarch	Jul-28-78		381	Note 1
Monarch	Jul-29-78		383	Note 1
Monarch	Jul-30-78		338	Note 1
Monarch	Jul-31-78		380	Note 1
Monarch	Mar-01-79		385	Note 1
Monarch	Mar-02-79		468	Note 1
Monarch	Mar-03-79		615	Note 1
Monarch	Mar-04-79		300	Note 1
Monarch	Mar-05-79		366	Note 1
Monarch	Mar-06-79		437	Note 1
Monarch	Mar-07-79		379	Note 1
Monarch	Mar-08-79		392	Note 1
Monarch	Mar-09-79		481	Note 1
Monarch	Mar-10-79		554	Note 1
Monarch	Mar-11-79		461	Note 1
Monarch	Mar-12-79		460	Note 1
Monarch	Mar-13-79		433	Note 1
Monarch	Mar-14-79		611	Note 1
Monarch	Mar-15-79		570	Note 1
Monarch	Mar-16-79		606	Note 1
Monarch	Mar-17-79		664	Note 1
Monarch	Mar-18-79		521	Note 1
Monarch	Mar-19-79		437	Note 1
Monarch	Mar-20-79		480	Note 1
Monarch	Mar-21-79		491	Note 1
Monarch	Mar-22-79		483	Note 1
Monarch	Mar-23-79		512	Note 1
Monarch	Mar-24-79		708	Note 1
Monarch	Mar-25-79		546	Note 1
Monarch	Mar-26-79		494	Note 1
Monarch	Mar-27-79		339	Note 1
Monarch	Mar-27-79		573	Hesse Ex.32 9001457 - 61 (WRC)
Monarch	Mar-28-79		399	Note 1
Monarch	Mar-29-79		401	Note 1
Monarch	Mar-30-79		381	Note 1
Monarch	Mar-31-79		406	Note 1
Monarch	Apr-01-79		483	Note 1
Monarch	Apr-02-79		302	Note 1
Monarch	Apr-03-79		399	Note 1
Monarch	Apr-04-79		397	Note 1
Monarch	Apr-05-79		422	Note 1
Monarch	Apr-06-79		415	Note 1
Monarch	Apr-07-79		601	Note 1
Monarch	Apr-08-79		360	Note 1
Monarch	Apr-09-79		180	Note 1
Monarch	Apr-10-79		562	Note 1
Monarch	Apr-11-79		639	Note 1

CONFIDENTIAL BUSINESS INFORMATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Monarch	Apr-12-79		528	Note 1
Monarch	Apr-13-79		566	Note 1
Monarch	Apr-14-79		613	Note 1
Monarch	Apr-15-79		360	Note 1
Monarch	Apr-16-79		513	Note 1
Monarch	Apr-17-79		578	Note 1
Monarch	Apr-18-79		587	Note 1
Monarch	Apr-19-79		487	Note 1
Monarch	Apr-20-79		769	Note 1
Monarch	Apr-21-79		618	Note 1
Monarch	Apr-22-79		560	Note 1
Monarch	Apr-23-79		521	Note 1
Monarch	Apr-24-79		489	Note 1
Monarch	Apr-25-79		429	Note 1
Monarch	Apr-26-79		452	Note 1
Monarch	Apr-27-79		456	Note 1
Monarch	Apr-28-79		460	Note 1
Monarch	Apr-29-79		554	Note 1
Monarch	Apr-30-79		575	Note 1
Monarch	May-01-79		505	Note 1
Monarch	May-02-79		629	Note 1
Monarch	May-03-79		590	Note 1
Monarch	May-04-79		530	Note 1
Monarch	May-05-79		671	Note 1
Monarch	May-06-79		408	Note 1
Monarch	May-07-79		368	Note 1
Monarch	May-08-79		428	Note 1
Monarch	May-09-79		500	Note 1
Monarch	May-10-79		514	Note 1
Monarch	May-11-79		695	Note 1
Monarch	May-12-79		569	Note 1
Monarch	May-13-79		609	Note 1
Monarch	May-14-79		619	Note 1
Monarch	May-15-79		375	Note 1
Monarch	May-16-79		384	Note 1
Monarch	May-17-79		374	Note 1
Monarch	May-18-79		384	Note 1
Monarch	May-19-79		375	Note 1
Monarch	May-20-79		372	Note 1
Monarch	May-21-79		375	Note 1
Monarch	May-22-79		385	Note 1
Monarch	May-23-79		377	Note 1
Monarch	May-24-79		384	Note 1
Monarch	May-25-79		381	Note 1
Monarch	May-26-79		370	Note 1
Monarch	May-27-79		384	Note 1
Monarch	May-28-79		359	Note 1
Monarch	May-29-79		344	Note 1
Monarch	May-30-79		347	Note 1
Monarch	May-31-79		451	Note 1
Monarch	Jun-01-80		349	Note 1
Monarch	Jun-02-80		385	Note 1

PRIVILEGED
SETTLEMENT AN
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Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Monarch	Jun-03-80		319	Note 1
Monarch	Jun-04-80		379	Note 1
Monarch	Jun-06-80		295	Note 1
Monarch	Jun-17-80		358	Note 1
Monarch	Jun-18-80		312	Note 1
Monarch	Jun-19-80		347	Note 1
Monarch	Jun-20-80		330	Note 1
Monarch	Jun-21-80		313	Note 1
Monarch	Jun-24-80		276	Note 1
Monarch	Jun-24-80		335	WRC (Appendix 8a-1, no Bates number)
Monarch	Jun-25-80		311	Note 1
Monarch	Jun-26-80		366	Note 1
Monarch	Jun-27-80		304	Note 1
Monarch	Jun-28-80		143	Note 1
Monarch	Jun-29-80		331	Note 1
Monarch	Jun-30-80		335	Note 1
Monarch	Jan-26-81		341	SA 034341 - 52 (WRC)
Monarch	Oct-15-81		616	MDNR - WRC Notice of Noncompliance, 12/15/81 (see Allied Exhibit
Monarch	Oct-16-81		527	MDNR - WRC Notice of Noncompliance, 12/15/81 (see Allied Exhibit 52
Monarch	Oct-17-81		574	MDNR - WRC Notice of Noncompliance, 12/15/81 (see Allied Exhibit 52
Monarch	Oct-19-81		435	MDNR - WRC Notice of Noncompliance, 12/15/81 (see Allied Exhibit
Monarch	Oct-20-81		598	MDNR - WRC Notice of Noncompliance, 12/15/81 (see Allied Exhibit
Monarch	Oct-21-81		565	MDNR - WRC Notice of Noncompliance, 12/15/81 (see Allied Exhibit
Monarch	Oct-22-81		527	MDNR - WRC Notice of Noncompliance, 12/15/81 (see Allied Exhibit 520
Monarch	Oct-23-81		513	MDNR - WRC Notice of Noncompliance, 12/15/81 (see Allied Exhibit
Monarch	Oct-24-81		497	MDNR - WRC Notice of Noncompliance, 12/15/81 (see Allied Exhibit
Monarch	Oct-25-81		486	MDNR - WRC Notice of Noncompliance, 12/15/81 (see Allied Exhibit 52
Monarch	Oct-26-81		472	MDNR - WRC Notice of Noncompliance, 12/15/81 (see Allied Exhibit
Monarch	Oct-27-81		625	MDNR - WRC Notice of Noncompliance, 12/15/81 (see Allied Exhibit
Monarch	Oct-28-81		671	MDNR - WRC Notice of Noncompliance, 12/15/81 (see Allied Exhibit
Monarch	Oct-30-81		392	MDNR - WRC Notice of Noncompliance, 12/15/81 (see Allied Exhibit
Monarch	Mar-01-82		373	SA 033485-92 (WRC)
Monarch	Oct-25-82		350	SA 033485-92 (WRC)
Monarch	Jan-01-84		640	Note 1
Monarch	Jan-02-84		539	Note 1
Monarch	Jan-03-84		360	Note 1
Monarch	Jan-04-84		475	Note 1
Monarch	Jan-05-84		682	Note 1
Monarch	Jan-06-84		711	Note 1
Monarch	Jan-07-84		688	Note 1
Monarch	Jan-08-84		732	Note 1
Monarch	Jan-09-84		643	Note 1
Monarch	Jan-10-84		427	Note 1
Monarch	Jan-11-84		435	Note 1
Monarch	Jan-12-84		457	Note 1
Monarch	Jan-13-84		317	Note 1
Monarch	Jan-14-84		438	Note 1
Monarch	Jan-15-84		339	Note 1
Monarch	Jan-16-84		462	Note 1
Monarch	Jan-17-84		435	Note 1
Monarch	Jan-18-84		413	Note 1
Monarch	Jan-19-84		345	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Monarch	Jan-20-84		359	Note 1
Monarch	Jan-21-84		448	Note 1
Monarch	Jan-22-84		518	Note 1
Monarch	Jan-23-84		557	Note 1
Monarch	Jan-24-84		581	Note 1
Monarch	Jan-25-84		513	Note 1
Monarch	Jan-26-84		501	Note 1
Monarch	Jan-27-84		513	Note 1
Monarch	Jan-28-84		540	Note 1
Monarch	Jan-29-84		412	Note 1
Monarch	Jan-30-84		400	Note 1
Monarch	Jan-31-84		533	Note 1
Monarch	Feb-01-84		510	Note 1
Monarch	Feb-02-84		606	Note 1
Monarch	Feb-03-84		420	Note 1
Monarch	Feb-04-84		531	Note 1
Monarch	Feb-05-84		646	Note 1
Monarch	Feb-06-84		554	Note 1
Monarch	Feb-07-84		656	Note 1
Monarch	Feb-08-84		560	Note 1
Monarch	Feb-09-84		622	Note 1
Monarch	Feb-10-84		736	Note 1
Monarch	Feb-11-84		691	Note 1
Monarch	Feb-12-84		725	Note 1
Monarch	Feb-13-84		680	Note 1
Monarch	Feb-14-84		621	Note 1
Monarch	Feb-15-84		537	Note 1
Monarch	Feb-16-84		469	Note 1
Monarch	Feb-17-84		299	Note 1
Monarch	Feb-18-84		383	Note 1
Monarch	Feb-19-84		356	Note 1
Monarch	Feb-20-84		275	Note 1
Monarch	Feb-21-84		242	Note 1
Monarch	Feb-22-84		240	Note 1
Monarch	Feb-23-84		265	Note 1
Monarch	Feb-24-84		301	Note 1
Monarch	Feb-25-84		413	Note 1
Monarch	Feb-26-84		408	Note 1
Monarch	Feb-27-84		250	Note 1
Monarch	Feb-28-84		571	Note 1
Monarch	Feb-29-84		763	Note 1
Monarch	Mar-01-84		590	Note 1
Monarch	Mar-02-84		709	Note 1
Monarch	Mar-03-84		735	Note 1
Monarch	Mar-04-84		753	Note 1
Monarch	Mar-05-84		719	Note 1
Monarch	Mar-06-84		741	Note 1
Monarch	Mar-07-84		420	Note 1
Monarch	Mar-08-84		480	Note 1
Monarch	Mar-09-84		554	Note 1
Monarch	Mar-10-84		467	Note 1
Monarch	Mar-11-84		460	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Monarch	Mar-12-84		439	Note 1
Monarch	Mar-13-84		396	Note 1
Monarch	Mar-14-84		423	Note 1
Monarch	Mar-15-84		398	Note 1
Monarch	Mar-16-84		580	Note 1
Monarch	Mar-17-84		597	Note 1
Monarch	Mar-18-84		511	Note 1
Monarch	Mar-19-84		499	Note 1
Monarch	Mar-20-84		504	Note 1
Monarch	Mar-21-84		405	Note 1
Monarch	Mar-22-84		392	Note 1
Monarch	Mar-23-84		408	Note 1
Monarch	Mar-24-84		462	Note 1
Monarch	Mar-25-84		425	Note 1
Monarch	Mar-26-84		347	Note 1
Monarch	Mar-27-84		399	Note 1
Monarch	Mar-28-84		372	Note 1
Monarch	Mar-29-84		363	Note 1
Monarch	Mar-30-84		382	Note 1
Monarch	Mar-31-84		395	Note 1
Monarch	Apr-01-84		239	Note 1
Monarch	Apr-02-84		213	Note 1
Monarch	Apr-03-84		333	Note 1
Monarch	Apr-04-84		293	Note 1
Monarch	Apr-05-84		447	Note 1
Monarch	Apr-06-84		733	Note 1
Monarch	Apr-07-84		746	Note 1
Monarch	Apr-08-84		718	Note 1
Monarch	Apr-09-84		683	Note 1
Monarch	Apr-10-84		727	Note 1
Monarch	Apr-11-84		698	Note 1
Monarch	Apr-12-84		531	Note 1
Monarch	Apr-13-84		525	Note 1
Monarch	Apr-14-84		536	Note 1
Monarch	Apr-15-84		555	Note 1
Monarch	Apr-16-84		598	Note 1
Monarch	Apr-17-84		579	Note 1
Monarch	Apr-18-84		694	Note 1
Monarch	Apr-19-84		685	Note 1
Monarch	Apr-20-84		385	Note 1
Monarch	Apr-21-84		445	Note 1
Monarch	Apr-22-84		459	Note 1
Monarch	Apr-23-84		450	Note 1
Monarch	Apr-24-84		389	Note 1
Monarch	Apr-25-84		534	Note 1
Monarch	Apr-26-84		237	Note 1
Monarch	Apr-27-84		213	Note 1
Monarch	Apr-28-84		321	Note 1
Monarch	Apr-29-84		323	Note 1
Monarch	Apr-30-84		332	Note 1
Monarch	Oct-01-84		383	Note 1
Monarch	Oct-02-84		378	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Monarch	Oct-03-84		384	Note 1
Monarch	Oct-04-84		342	Note 1
Monarch	Oct-05-84		381	Note 1
Monarch	Oct-06-84		393	Note 1
Monarch	Oct-07-84		345	Note 1
Monarch	Oct-08-84		378	Note 1
Monarch	Oct-09-84		366	Note 1
Monarch	Oct-10-84		397	Note 1
Monarch	Oct-11-84		383	Note 1
Monarch	Oct-12-84		384	Note 1
Monarch	Oct-13-84		345	Note 1
Monarch	Oct-14-84		372	Note 1
Monarch	Oct-15-84		470	Note 1
Monarch	Oct-16-84		510	Note 1
Monarch	Oct-17-84		516	Note 1
Monarch	Oct-18-84		458	Note 1
Monarch	Oct-19-84		491	Note 1
Monarch	Oct-20-84		507	Note 1
Monarch	Oct-21-84		508	Note 1
Monarch	Oct-22-84		512	Note 1
Monarch	Oct-23-84		482	Note 1
Monarch	Oct-24-84		538	Note 1
Monarch	Oct-25-84		493	Note 1
Monarch	Oct-26-84		549	Note 1
Monarch	Oct-27-84		483	Note 1
Monarch	Oct-28-84		496	Note 1
Monarch	Oct-29-84		476	Note 1
Monarch	Oct-30-84		459	Note 1
Monarch	Oct-31-84		482	Note 1
Monarch	Nov-01-84		741	Note 1
Monarch	Nov-02-84		603	Note 1
Monarch	Nov-03-84		431	Note 1
Monarch	Nov-04-84		636	Note 1
Monarch	Nov-05-84		725	Note 1
Monarch	Nov-06-84		473	Note 1
Monarch	Nov-07-84		458	Note 1
Monarch	Nov-08-84		441	Note 1
Monarch	Nov-09-84		380	Note 1
Monarch	Nov-10-84		761	Note 1
Monarch	Nov-11-84		766	Note 1
Monarch	Nov-12-84		602	Note 1
Monarch	Nov-13-84		616	Note 1
Monarch	Nov-14-84		560	Note 1
Monarch	Nov-15-84		553	Note 1
Monarch	Nov-16-84		541	Note 1
Monarch	Nov-17-84		629	Note 1
Monarch	Nov-18-84		435	Note 1
Monarch	Nov-19-84		445	Note 1
Monarch	Nov-20-84		552	Note 1
Monarch	Nov-21-84		294	Note 1
Monarch	Nov-22-84		19	Note 1
Monarch	Nov-23-84		349	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED A IAL
SETTLEMENT AND NSE
ION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Monarch	Nov-24-84		421	Note 1
Monarch	Nov-25-84		195	Note 1
Monarch	Nov-26-84		277	Note 1
Monarch	Nov-27-84		475	Note 1
Monarch	Nov-28-84		562	Note 1
Monarch	Nov-29-84		535	Note 1
Monarch	Nov-30-84		511	Note 1
Monarch	Dec-01-84		418	Note 1
Monarch	Dec-02-84		524	Note 1
Monarch	Dec-03-84		541	Note 1
Monarch	Dec-04-84		545	Note 1
Monarch	Dec-05-84		552	Note 1
Monarch	Dec-06-84		550	Note 1
Monarch	Dec-07-84		620	Note 1
Monarch	Dec-08-84		553	Note 1
Monarch	Dec-09-84		481	Note 1
Monarch	Dec-10-84		572	Note 1
Monarch	Dec-11-84		667	Note 1
Monarch	Dec-12-84		562	Note 1
Monarch	Dec-13-84		498	Note 1
Monarch	Dec-14-84		657	Note 1
Monarch	Dec-15-84		557	Note 1
Monarch	Dec-16-84		518	Note 1
Monarch	Dec-17-84		460	Note 1
Monarch	Dec-18-84		247	Note 1
Monarch	Dec-19-84		449	Note 1
Monarch	Dec-20-84		332	Note 1
Monarch	Dec-21-84		375	Note 1
Monarch	Dec-22-84		342	Note 1
Monarch	Dec-23-84		248	Note 1
Monarch	Dec-24-84		110	Note 1
Monarch	Dec-25-84		143	Note 1
Monarch	Dec-26-84		106	Note 1
Monarch	Dec-27-84		758	Note 1
Monarch	Dec-28-84		650	Note 1
Monarch	Dec-29-84		439	Note 1
Monarch	Dec-30-84		728	Note 1
Monarch	Dec-31-84		742	Note 1
Monarch	Jan-01-85		719	Note 1
Monarch	Jan-02-85		452	Note 1
Monarch	Jan-03-85		494	Note 1
Monarch	Jan-04-85		429	Note 1
Monarch	Jan-05-85		377	Note 1
Monarch	Jan-06-85		249	Note 1
Monarch	Jan-07-85		382	Note 1
Monarch	Jan-08-85		446	Note 1
Monarch	Jan-09-85		569	Note 1
Monarch	Jan-10-85		503	Note 1
Monarch	Jan-11-85		530	Note 1
Monarch	Jan-12-85		628	Note 1
Monarch	Jan-13-85		530	Note 1
Monarch	Jan-14-85		628	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED & CONFIDENTIAL
SETTLEMENT AND DEFENSE COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Monarch	Jan-15-85		589	Note 1
Monarch	Jan-16-85		731	Note 1
Monarch	Jan-17-85		412	Note 1
Monarch	Jan-18-85		373	Note 1
Monarch	Jan-19-85		444	Note 1
Monarch	Jan-20-85		452	Note 1
Monarch	Jan-21-85		673	Note 1
Monarch	Jan-22-85		734	Note 1
Monarch	Jan-23-85		242	Note 1
Monarch	Jan-24-85		609	Note 1
Monarch	Jan-25-85		469	Note 1
Monarch	Jan-26-85		387	Note 1
Monarch	Jan-27-85		480	Note 1
Monarch	Jan-28-85		704	Note 1
Monarch	Jan-29-85		753	Note 1
Monarch	Jan-30-85		257	Note 1
Monarch	Jan-31-85		180	Note 1
Monarch	Feb-01-85		431	Note 1
Monarch	Feb-02-85		456	Note 1
Monarch	Feb-03-85		416	Note 1
Monarch	Feb-04-85		325	Note 1
Monarch	Feb-05-85		424	Note 1
Monarch	Feb-06-85		295	Note 1
Monarch	Feb-07-85		279	Note 1
Monarch	Feb-08-85		758	Note 1
Monarch	Feb-09-85		816	Note 1
Monarch	Feb-10-85		834	Note 1
Monarch	Feb-11-85		552	Note 1
Monarch	Feb-12-85		480	Note 1
Monarch	Feb-13-85		812	Note 1
Monarch	Feb-14-85		822	Note 1
Monarch	Feb-15-85		801	Note 1
Monarch	Feb-16-85		794	Note 1
Monarch	Feb-17-85		832	Note 1
Monarch	Feb-18-85		794	Note 1
Monarch	Feb-19-85		803	Note 1
Monarch	Feb-20-85		802	Note 1
Monarch	Feb-21-85		641	Note 1
Monarch	Feb-22-85		802	Note 1
Monarch	Feb-23-85		832	Note 1
Monarch	Feb-25-85		799	Note 1
Monarch	Feb-27-85		811	Note 1
Monarch	Feb-28-85		808	Note 1
Monarch	Mar-01-85		572	Note 1
Monarch	Mar-02-85		797	Note 1
Monarch	Mar-03-85		736	Note 1
Monarch	Mar-04-85		821	Note 1
Monarch	Mar-05-85		815	Note 1
Monarch	Mar-06-85		825	Note 1
Monarch	Mar-07-85		799	Note 1
Monarch	Mar-08-85		818	Note 1
Monarch	Mar-09-85		833	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Monarch	Mar-10-85		825	Note 1
Monarch	Mar-11-85		740	Note 1
Monarch	Mar-12-85		684	Note 1
Monarch	Mar-13-85		564	Note 1
Monarch	Mar-14-85		603	Note 1
Monarch	Mar-15-85		689	Note 1
Monarch	Mar-16-85		827	Note 1
Monarch	Mar-17-85		817	Note 1
Monarch	Mar-18-85		819	Note 1
Monarch	Mar-19-85		816	Note 1
Monarch	Mar-20-85		826	Note 1
Monarch	Mar-21-85		830	Note 1
Monarch	Mar-22-85		802	Note 1
Monarch	Mar-23-85		831	Note 1
Monarch	Mar-24-85		822	Note 1
Monarch	Mar-25-85		820	Note 1
Monarch	Mar-26-85		730	Note 1
Monarch	Mar-27-85		641	Note 1
Monarch	Mar-28-85		826	Note 1
Monarch	Mar-29-85		805	Note 1
Monarch	Mar-30-85		821	Note 1
Monarch	Mar-31-85		826	Note 1
Monarch	Apr-01-85		826	Note 1
Monarch	Apr-02-85		829	Note 1
Monarch	Apr-03-85		822	Note 1
Monarch	Apr-04-85		831	Note 1
Monarch	Apr-05-85		645	Note 1
Monarch	Apr-06-85		705	Note 1
Monarch	Apr-07-85		539	Note 1
Monarch	Apr-08-85		741	Note 1
Monarch	Apr-09-85		826	Note 1
Monarch	Apr-10-85		824	Note 1
Monarch	Apr-11-85		829	Note 1
Monarch	Apr-12-85		822	Note 1
Monarch	Apr-13-85		822	Note 1
Monarch	Apr-14-85		820	Note 1
Monarch	Apr-15-85		836	Note 1
Monarch	Apr-16-85		741	Note 1
Monarch	Apr-17-85		657	Note 1
Monarch	Apr-18-85		818	Note 1
Monarch	Apr-19-85		808	Note 1
Monarch	Apr-20-85		825	Note 1
Monarch	Apr-21-85		810	Note 1
Monarch	Apr-22-85		821	Note 1
Monarch	Apr-23-85		829	Note 1
Monarch	Apr-24-85		812	Note 1
Monarch	Apr-25-85		829	Note 1
Monarch	Apr-26-85		834	Note 1
Monarch	Apr-27-85		810	Note 1
Monarch	Apr-28-85		826	Note 1
Monarch	Apr-29-85		823	Note 1
Monarch	Apr-30-85		8,631	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Monarch	May-01-85		381	Note 1
Monarch	May-02-85		150	Note 1
Monarch	May-03-85		378	Note 1
Monarch	May-04-85		326	Note 1
Monarch	May-05-85		362	Note 1
Monarch	May-06-85		368	Note 1
Monarch	May-07-85		376	Note 1
Monarch	May-08-85		372	Note 1
Monarch	May-09-85		380	Note 1
Monarch	May-10-85		380	Note 1
Monarch	May-11-85		379	Note 1
Monarch	May-12-85		309	Note 1
Monarch	May-13-85		348	Note 1
Monarch	May-14-85		363	Note 1
Monarch	May-15-85		370	Note 1
Monarch	May-16-85		379	Note 1
Monarch	May-17-85		382	Note 1
Monarch	May-18-85		380	Note 1
Monarch	May-19-85		371	Note 1
Monarch	May-20-85		315	Note 1
Monarch	May-21-85		338	Note 1
Monarch	May-22-85		353	Note 1
Monarch	May-23-85		378	Note 1
Monarch	May-24-85		371	Note 1
Monarch	May-25-85		378	Note 1
Monarch	May-26-85		372	Note 1
Monarch	May-27-85		387	Note 1
Monarch	May-28-85		296	Note 1
Monarch	May-29-85		380	Note 1
Monarch	May-30-85		378	Note 1
Monarch	May-31-85		366	Note 1
Monarch	Jun-01-85		386	Note 1
Monarch	Jun-02-85		314	Note 1
Monarch	Jun-03-85		305	Note 1
Monarch	Jun-04-85		304	Note 1
Monarch	Jun-05-85		365	Note 1
Monarch	Jun-06-85		317	Note 1
Monarch	Jun-07-85		379	Note 1
Monarch	Jun-08-85		375	Note 1
Monarch	Jun-09-85		377	Note 1
Monarch	Jun-10-85		379	Note 1
Monarch	Jun-11-85		384	Note 1
Monarch	Jun-12-85		341	Note 1
Monarch	Jun-13-85		335	Note 1
Monarch	Jun-14-85		304	Note 1
Monarch	Jun-15-85		386	Note 1
Monarch	Jun-16-85		386	Note 1
Monarch	Jun-17-85		377	Note 1
Monarch	Jun-18-85		386	Note 1
Monarch	Jun-19-85		370	Note 1
Monarch	Jun-20-85		370	Note 1
Monarch	Jun-21-85		370	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Monarch	Jun-22-85		386	Note 1
Monarch	Jun-23-85		322	Note 1
Monarch	Jun-24-85		346	Note 1
Monarch	Jun-25-85		384	Note 1
Monarch	Jun-26-85		378	Note 1
Monarch	Jun-27-85		377	Note 1
Monarch	Jun-28-85		384	Note 1
Monarch	Jun-29-85		384	Note 1
Monarch	Jun-30-85		315	Note 1
Monarch	Jul-01-85		385	Note 1
Monarch	Jul-02-85		375	Note 1
Monarch	Jul-03-85		15	Note 1
Monarch	Jul-05-85		283	Note 1
Monarch	Jul-06-85		309	Note 1
Monarch	Jul-07-85		368	Note 1
Monarch	Jul-08-85		374	Note 1
Monarch	Jul-09-85		326	Note 1
Monarch	Jul-10-85		371	Note 1
Monarch	Jul-11-85		380	Note 1
Monarch	Jul-12-85		386	Note 1
Monarch	Jul-13-85		374	Note 1
Monarch	Jul-14-85		381	Note 1
Monarch	Jul-15-85		351	Note 1
Monarch	Jul-16-85		366	Note 1
Monarch	Jul-17-85		347	Note 1
Monarch	Jul-18-85		354	Note 1
Monarch	Jul-19-85		244	Note 1
Monarch	Jul-20-85		329	Note 1
Monarch	Jul-21-85		253	Note 1
Monarch	Jul-22-85		337	Note 1
Monarch	Jul-23-85		257	Note 1
Monarch	Jul-24-85		372	Note 1
Monarch	Jul-25-85		343	Note 1
Monarch	Jul-26-85		329	Note 1
Monarch	Jul-27-85		378	Note 1
Monarch	Jul-28-85		378	Note 1
Monarch	Jul-29-85		382	Note 1
Monarch	Jul-30-85		307	Note 1
Monarch	Jul-31-85		346	Note 1
Monarch	Aug-01-85		384	Note 1
Monarch	Aug-02-85		380	Note 1
Monarch	Aug-03-85		385	Note 1
Monarch	Aug-04-85		277	Note 1
Monarch	Aug-05-85		376	Note 1
Monarch	Aug-06-85		311	Note 1
Monarch	Aug-07-85		380	Note 1
Monarch	Aug-08-85		387	Note 1
Monarch	Aug-09-85		387	Note 1
Monarch	Aug-10-85		385	Note 1
Monarch	Aug-11-85		386	Note 1
Monarch	Aug-12-85		230	Note 1
Monarch	Aug-13-85		387	Note 1

CONFIDENTIAL BUSINESS INFORMATION

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Mill	Date	BOD Loads (lbs/day)		SOURCE
		Influent	Effluent	
Monarch	Aug-14-85		386	Note 1
Monarch	Aug-15-85		283	Note 1
Monarch	Aug-16-85		273	Note 1
Monarch	Aug-17-85		389	Note 1
Monarch	Aug-18-85		369	Note 1
Monarch	Aug-19-85		340	Note 1
Monarch	Aug-20-85		387	Note 1
Monarch	Aug-21-85		366	Note 1
Monarch	Aug-22-85		365	Note 1
Monarch	Aug-23-85		386	Note 1
Monarch	Aug-24-85		365	Note 1
Monarch	Aug-25-85		386	Note 1
Monarch	Aug-26-85		387	Note 1
Monarch	Aug-27-85		384	Note 1
Monarch	Aug-28-85		387	Note 1
Monarch	Aug-29-85		387	Note 1
Monarch	Aug-30-85		387	Note 1
Monarch	Aug-31-85		364	Note 1
Note 1 = SAC34834 to SA035050, SA035107 to SA035474, SA035584, SA035586, SA035615				
Blanks indicate no monitoring data.				
BOD = Biolgical Oxygen Demand.				
Loads (lb/day) converted from PPM or mg/L using: Concentration (ppm or mg/L) x Flow (MGD) x 8.33.				
Shaded cell with bold text indicates November 2001 revision.				

CONFIDENTIAL BUSINESS INFORMATION

APPENDIX 14A-E

Rex Mill Clarifier:
Historical Wastewater Flow, Influent and Effluent
Suspended Solids and BOD

PRIVILEGED AND CONFIDENTIAL
SETTLEMENT AND JOINT DEFENSE
COMMUNICATION

Date	WW Flow	Influent (lbs/day)		Effluent (lbs/day)		SOURCE
	(MGD)	BOD	SS	BOD	SS	
Jul-20-55	1.11	7,706	40,256	2,037	7,295	064084 - 064087 (WRC)
Jul-21-55	1.25	4,776	13,706	2,232	7,185	064084 - 064087 (WRC)
Jul-22-55	1 21	5,256	12,938	2,426	6,813	064084 - 064087 (WRC)
Jul-23-55	1.10			2,256	7,488	064084 - 064087 (WRC)
Jul-24-55	0.51	3,601	9,700	631	1,133	064084 - 064087 (WRC)
Jul-25-55	1.31	5,224	16,804	2,122	8,053	064084 - 064087 (WRC)
Jul-26-55	1.20	4,465	16,053	2,057	7,625	064084 - 064087 (WRC)
Sep-6-55	1 11	5,709	19,942	2,036	6,082	064084 - 064087 (WRC)
Sep-7-55	1.14	3,691	16,646	1,953	5,085	064084 - 064087 (WRC)
May-21-57	1.00	3,315	15,416	1,120	3,054	064097 - 064099 (WRC)
May-23-57	1.23	2,100	19,980	1,795	7,899	064097 - 064099 (WRC)
Jun-23-59	1.06	4,138	21,484	2,062	6,134	064094 - 064096 (WRC)
Jun-24-59	1.06	2,789	22,048	2,180	4,041	064094 - 064096 (WRC)
Jan-22-64	**1.13**			**1,787**	**5,204**	**KA05400865**
Jan-27-64	**1.54**			**4,360**	**14,080**	**KA05400865**
Jan-28-64	**1.52**			**3,260**	**22,190**	**KA05400865**
Jun-27-61	1.58			3,040	17,160	064091 - 064092 (WRC)

Notes

Blanks indicate no monitoring data

SS = Suspended solids; BOD = Biolgical Oxygen Demand.

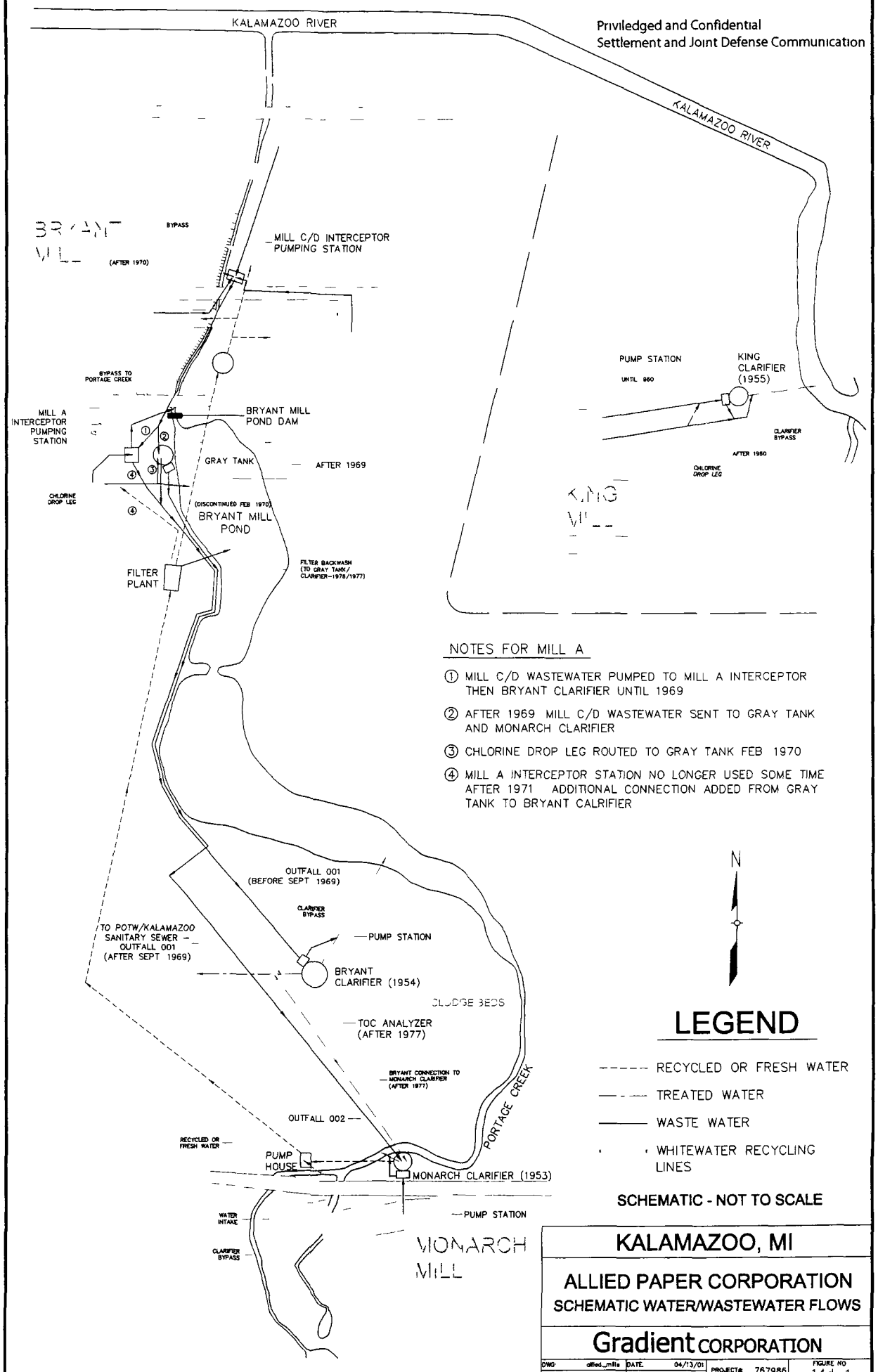
Loads (lb/day) converted from PPM or mg/L using: Concentration (ppm or mg/L) x Flow (MGD) x 8.33

Shaded cell with bold text indicates November 2001 revision

CONFIDENTIAL BUSINESS INFORMATION

FIGURE 14D-1

Priviledged and Confidential
Settlement and Joint Defense Communication



KALAMAZOO, MI

ALLIED PAPER CORPORATION

SCHEMATIC WATER/WASTEWATER FLOWS

Gradient CORPORATION

DWG:	allied_mills	DATE:	04/13/01	PROJECT#:	767986	FIGURE NO
DRAWN	JJC	SCALE	N.T.S.			14d-1

CONFIDENTIAL BUSINESS INFORMATION

FIGURE 14D-2

Figure 14d-2. Allied Bryant and Monarch Mills Water and Wastewater Flow Schematic

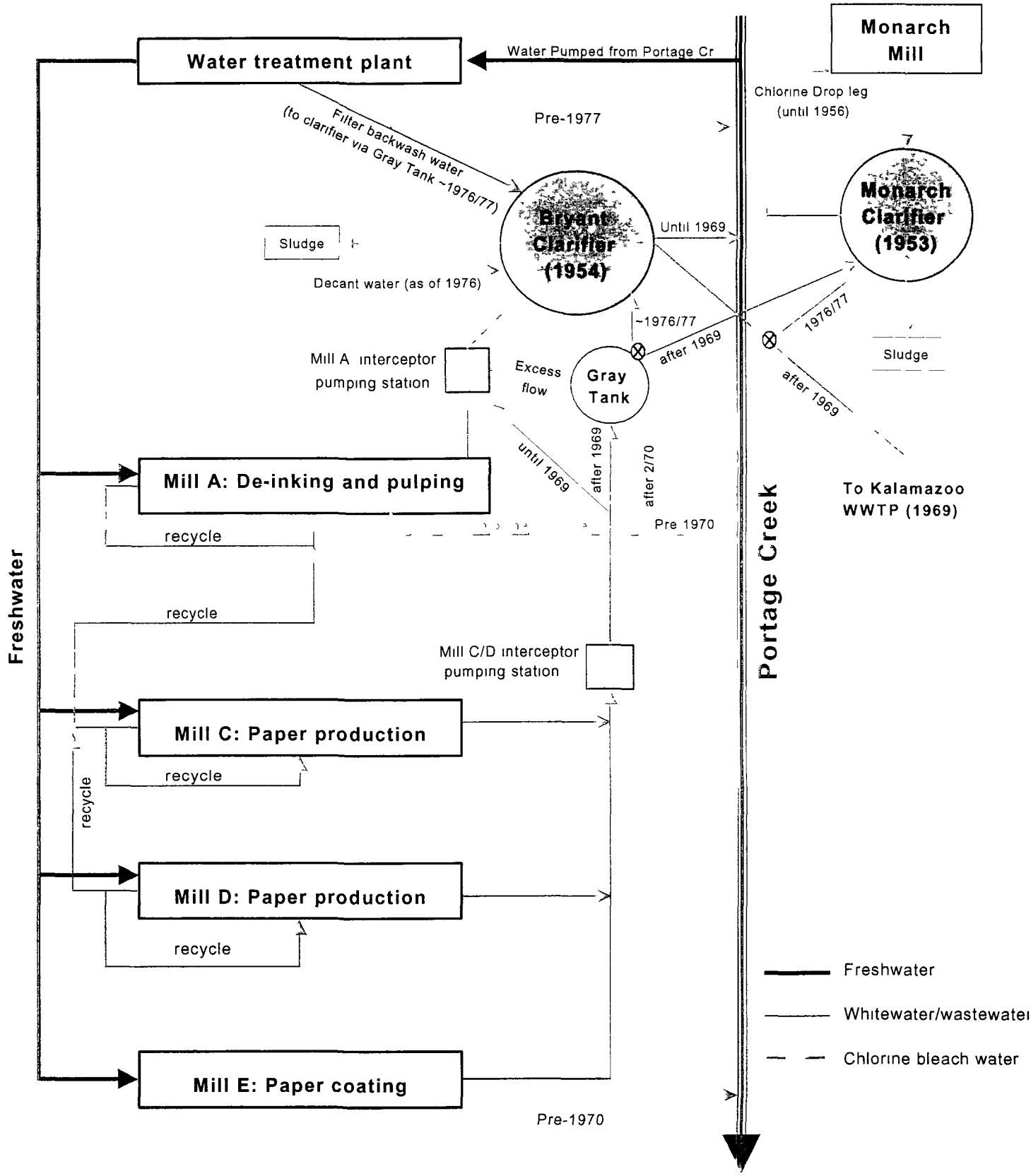


FIGURE 14D-3

Figure 14d-3. Allied King Mill Wastewater Flow Schematic

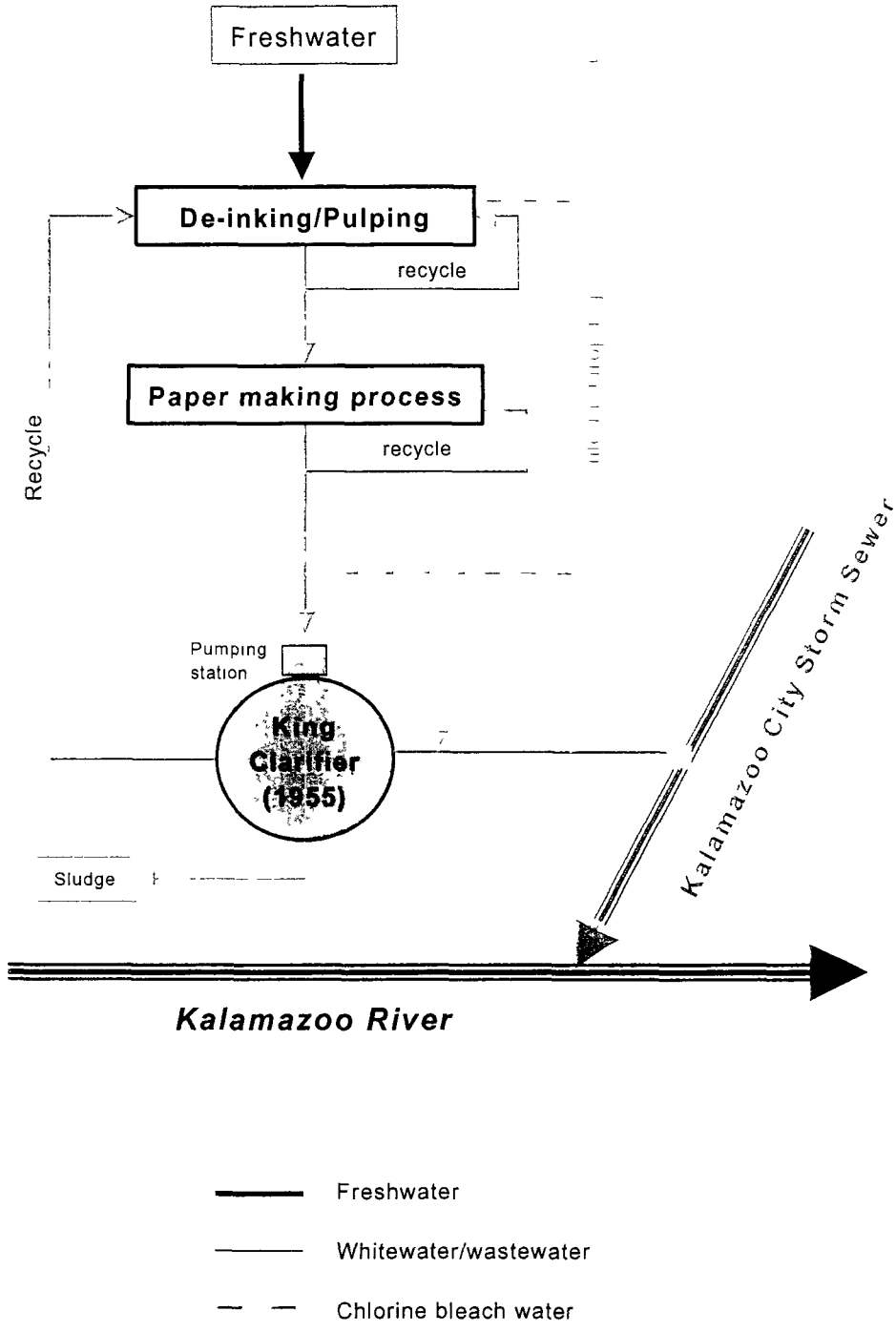


TABLE 14E-1

Table 14e-1
Measured PCB Concentrations in Allied Historical Wastewater Streams

Mill	Date	PCB (ug/L)	SOURCE
Bryant	May-05-75	<0.01	SA025246 - SA025248
Bryant	Aug-16-76	<0.1	SA025249 - SA025254
Bryant	Jul-18-77	<0.1	MDNR003940 - MDNR003944
Bryant	Jun-24-80	1.56	SA022279 - SA022280
Monarch	Jul-12-72	<0.1	KA04800334
Monarch	Aug-31-72	56	KA04800335
Monarch	May-05-75	<0.1	000194
Monarch	Aug-16-76	<0.1	MDNR Industrial Wastewater Survey, 10/16-18/76, no bates number; SA025249 - SA025254
Monarch	Jul-18-77	<0.1	MDNR003940 - MDNR003944
Monarch	Sep-06-85	0.069	0005160

CONFIDENTIAL BUSINESS INFORMATION

APPENDIX 25A – 1

APPENDIX 25A-1
MONARCH PRODUCTION TOTALS
(WINDER AND FINISHED PRODUCT TOTALS)
(SA 53424-54193; SA 55388-56075; SA 65112-65772; SA 67111-67481; SA 67483-67670)

		TOTALS FROM WINDER		TOTAL FINISHED PRODUCT	
YR.	MO.	TONS/DAY	TONS/MO	TONS/DAY	TONS/MO.
1975	Sep.	42.7	1111.0	No report for these months	
	Oct.	40.3	806.1		
	Nov.	41.6	914.2		
	Dec.	41.9	1004.7		
1976	Jan.	38.7	928.8		
	Feb.	38.1	914.9		
	Mar.	40.9	1266.8		
	Apr.	37.9	986.2		
	May	34.4	756.5		
	Jun.	37.0	1109.2		
	Jul.	34.6	794.8		
	Aug.	35.4	921.3		
	Sep.	36.0	936.1		
	Oct.	33.7	775.5		
	Nov.	35.4	707.8		
	Dec.	34.9	871.8		
1977	Jan.	35.9	861.2		
	Feb.	37.9	910.8		
	Mar.	37.2	1005.6		
	Apr.	36.0	755.3		
	May	30.7	675.3		
	Jun.	37.3	933.3		
	Jul.	33.2	598.5		
	Aug.	32.4	811.0		
	Sep.	37.4	1010.2		
	Oct.	37.8	756.6		
	Nov.	33.9	609.7		
	Dec.	33.4	802.0		
1978	Jan.	33.7	774.8		
	Feb.	33.7	808.0		
	Mar.	34.4	1066.6		
	Apr.	37.4	896.9		
	May	35.9	790.5		
	Jun.	34.9	1047.6		

CONFIDENTIAL BUSINESS INFORMATION

		TOTALS FROM WINDER		TOTAL FINISHED PRODUCT	
YR	MO	TONS/DAY	TONS/MO	TONS/DAY	TONS/MO
	Jul.	33.9	745.7		
	Aug.	35.1	913.6		
	Sep.	42.0	1174.9		
	Oct.	40.3	966.4		
	Nov	40.6	974.9		
	Dec.	37.9	1174.1		
1979	Jan.	37.1	1037.8		
	Feb.	35.0	980.1		
	Mar.	40.3	1371.0		
	Apr.	36.2	1014.0		
	May	36.3	1016.7		
	Jun.	36.0	1224.7		
	Jul.	39.3	1100.7		
	Aug.	38.4	1076.4		
	Sep.	38.7	1352.9		
	Oct	43.2	1209.1		
	Nov.	41.9	1172.3		
	Dec.	36.8	1176.1		
1980	Jan.	38.1	1065.6	37.2	1040.3
	Feb.	35.0	350.1	33.5	335.3
	Mar.	38.5	1040.8	36.7	990.1
	Apr.	43.1	947.6	No reports for these months	
	May	20.4	305.3		
	Jun.	33.9	1050.6	31.3	971.1
	Jul	38.7	851.3	37.0	814.7
	Aug	40.6	811.8	39.8	795.5
	Sep	35.3	777.2	34.5	759.1

CONFIDENTIAL BUSINESS INFORMATION

APPENDIX 25A – 2

APPENDIX 25A-2
BRYANT PRODUCTION TOTALS
(WINDER AND FINISHED PRODUCT TOTALS)
[SOURCES: SA 53424-54193; SA 55388-56075; SA 65112-65772; SA 66333-66454; SA 67111-67481; SA 79090-79299; SA 79942-90151)

		TOTALS FROM WINDER		TOTAL FINISHED PRODUCT	
YR	MO	TONS/DAY	TONS/MO	TONS/DAY	TONS/MO
1977	Mar.	222.6	5565.0	No reports for these months	
	Apr.	196.6	4325.9	[redacted]	
	May	219.9	4838.0	[redacted]	
	Jun.	219.6	5930.0	[redacted]	
	Jul.	199.7	3794.9	[redacted]	
	Aug.	222.7	5122.8	[redacted]	
	Sep.	220.0	5279.7	[redacted]	
	Oct.	224.9	4048.8	[redacted]	
	Nov.	216.3	3893.7	[redacted]	
	Dec.	233.1	5595.1	[redacted]	
1978	Jan.	190.5	3809.5	[redacted]	
	Feb.	229.8	5055.5	[redacted]	
	Mar.	227.1	7040.5	[redacted]	
	Apr.	192.6	4623.5	[redacted]	
	May	201.8	4438.8	[redacted]	
	Jun.	200.2	6006.6	[redacted]	
	Jul.	201.2	4628.3	[redacted]	
	Aug.	195.3	4686.4	[redacted]	
	Sep.	207.0	6003.5	[redacted]	
	Oct.	211.5	5077.1	[redacted]	
	Nov.	211.5	5075.9	[redacted]	
	Dec.	218.5	6335.8	[redacted]	
1979	Jan.	231.9	5566.5	[redacted]	
	Feb.	238.5	5723.2	[redacted]	
	Mar.	226.0	6779.9	[redacted]	
	Apr.	227.4	5458.4	[redacted]	
	May	219.0	5914.0	[redacted]	
	Jun.	231.9	7883.3	[redacted]	
	Jul.	213.1	5967.0	[redacted]	
	Aug.	223.9	6270.6	[redacted]	
	Sep.	230.5	8068.9	[redacted]	
	Oct.	224.2	6277.5	[redacted]	
	Nov.	232.4	6506.8	[redacted]	

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		TOTALS FROM WINDER		TOTAL FINISHED PRODUCT	
YR	MO	TONS/DAY	TONS/MO	TONS/DAY	TONS/MO
	Dec.	237.2	7591.7		
1980	Jan.	242.9	6802.1	239.3	6701.5
	Feb.	236.8	6631.8	231.8	6491.4
	Mar.	248.5	8699.0	242.8	8499.1
	Apr.	250.9	7024.1	No reports for these months.	
	May	239.3	717.8		
	Jun.	233.0	8155.7	230.1	8054.1
	Jul.	215.8	5178.4	211.9	5085.3
	Aug.	212.9	5959.9	208.6	5840.8
	Sep.	219.5	7025.4	216.4	6923.6
	Oct.	190.8	5342.9	186.8	5231.5
	Nov.	194.4	5444.1	189.9	5316.1
	Dec.	204.7	6753.5	200.9	6629.7
1981	Jan.	198.5	5557.6	194.7	5452.6
	Feb.	190.2	5326.0	187.9	5262.2
	Mar.	185.0	6473.7	180.9	6330.6
	Apr.	189.8	5314.1	186.5	5221.3
	May	187.8	5258.9	184.8	5174.7
	Jun.	187.8	6947.8	184.2	6816.2
	Jul.	188.0	4324.1	No reports for these months.	
	Aug.	224.1	6274.2		
	Sep.	242.1	8474.3		
	Oct.	210.8	5902.6		
	Nov.	196.9	5514.3		
	Dec.	177.9	5869.9		
1982	Jan.	209.9	5877.0		
	Feb.	229.8	6434.7		
	Mar.	230.9	8079.9		
	Apr.	223.9	5598.7		
	May	227.8	5923.6		
	Jun.	195.0	7408.3		
	Jul.	227.0	6810.9	222.6	6677.0
	Aug.	211.2	5913.5	206.9	5793.0
	Sep.	225.4	7890.3	221.6	7756.5
	Oct.	250.6	7015.6	247.4	6927.7
	Nov.	214.7	6010.8	210.2	5886.9
	Dec.	222.6	6456.1	217.3	6302.4
1983	Jan.	231.1	6469.9	228.6	6399.5
	Feb.	204.6	5727.9	202.2	5662.0
	Mar.	218.7	7216.9	213.6	7049.6
	Apr.	209.3	5859.5	205.5	5753.7
	May	225.0	6299.3	220.2	6165.6

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		TOTALS FROM WINDER		TOTAL FINISHED PRODUCT	
YR.	MO.	TONS/DAY	TONS/MO	TONS/DAY	TONS/MO
	Jun.	205.5	6576.2	201.9	6461.5
	Jul.	229.5	6654.9	226.3	6561.6
	Aug.	233.3	6531.6	230.1	6443.3
	Sep.	235.6	8246.1	231.9	8117.1
	Oct.	258.3	7233.5	256.7	7187.0
	Nov.	260.5	7292.9	255.2	7145.5
	Dec.	259.1	8550.6	255.8	8440.4
1984	Jan.	237.9	6661.7	234.8	6575.1
	Feb.	242.7	6795.0	239.7	6712.4
	Mar.	228.2	7985.3	223.8	7832.0
	Apr.	220.0	6159.0	No reports for these months	
	May	206.4	5778.0	202.1	5658.4
	Jun.	219.4	7240.7	215.2	7102.7
	Jul.	215.6	5822.1	212.1	5728.0
	Aug.	208.3	5833.3	204.5	5724.7
	Sep.	No information on total days in operation available	7478.9	No information on total days in operation available	7383.6
	Oct.		6134.8		6077.5
	Nov.		4897.0		4790.5
	Dec.		7697.3		7588.3
1985	Jan.		6566.9		6486.0
	Feb.	240.9	6745.7	238.1	6665.8
	Mar.		8721.9		8636.8
	Apr.		7066.2		6991.5
	May		6504.2		6444.5
	Jun.		8225.1		8165.5
	Jul.		5675.6		5585.6
	Aug.		6494.3		6379.6
	Sep.		6731.1		6659.5
	Oct.		6171.0		6077.3
	Nov.		7352.3		7279.1
	Dec.		8980.4		8902.3

APPENDIX 25C-1

APPENDIX 25C-1
PCB CONTENT OF PAPER PRODUCED

DATE	CORK OR YELLOW TIPPING (PCB in ppm)	WHITE TIPPING (PCB in ppm)	FOIL MOUNTING (PCB in ppm)
March, 1976	3.5 (SA 31952)	9.3 (SA 31952)	
April, 1976	3.5 (SA 43766)	9.3 (SA 43766)	
May, 1976	.05 (SA 42696) .03 (SA 42696)	.075 (SA 42696) .09 (SA 42696)	
July, 1976			.20 (SA 42696)
August, 1978	<.10 for Aroclor 1242 <.20 for Aroclor 1254 <.15 for Aroclor 1260 (SA 23128) Nondetectable for Aroclor 1242 Nondetectable for Aroclor 1254 Nondetectable for Aroclor 1260 (SA 42620-621)	<.10 for Aroclor 1242 <.20 for Aroclor 1254 <.15 for Aroclor 1260 (SA 23128) Nondetectable for Aroclor 1242 Nondetectable for Aroclor 1254 Nondetectable for Aroclor 1260 (SA 42620-621)	
March, 1984	<0.5 (KA 5800584)		

DATE	PLUG WRAP (PCB in ppm)	RELY TAMPON (PCB in ppm)	GUM WRAP (PCB in ppm)
November, 1971			.78 (SA 44783)
February, 1972			.97 (SA 44708)
August, 1978	<.10 for Aroclor 1242 <.20 for Aroclor 1254 <.15 for Aroclor 1260 (SA 23128) Nondetectable for Aroclor 1242	<.10 for Aroclor 1242 <.20 for Aroclor 1254 <.15 for Aroclor 1260 (SA 23128) Nondetectable for Aroclor 1242	

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	Nondetectable for Aroclor 1254 Nondetectable for Aroclor 1260 (SA 42620-621)	Nondetectable for Aroclor 1254 Nondetectable for Aroclor 1260 (SA 42620-621)	

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APPENDIX 28D-1

III. INVENTORY OF PAPER WASTE RESIDUALS

Table 1 is a one-year inventory of residuals production at the Allied Paper facility. The period covered is from January through December of 1985, and includes the daily average for each month and the monthly total.

Table 1

1985 PAPER WASTE RESIDUALS PRODUCTION/DISPOSAL

	Daily Average	Monthly Total
January	43,500 lbs/day	1,350,000 lbs.
February	43,000	1,199,000
March	36,500	1,136,000
April	38,500	961,000
May	35,000	837,000
June	32,500	982,000
July	38,000	1,069,000
August	34,500	1,077,000
September	32,000	970,000
October	45,000	1,403,000
November	36,000	1,091,000
December	46,500	1,444,000
ANNUAL	38,417 lbs/day	13,519,000 lbs. = 7952.35 $yd.^3$

As listed, Allied produced approximately 13.5 million pounds of sludge in 1985, which equates to approximately 8,000 cubic yards. Based on the system of operations, the inventory of residuals for production, storage, and disposal is one and the same.

TABLE 28D-1

Table 28d-1
Allied Mills Documented Bypass Loading Summary

Date	Source	Flow	BOD		TSS		Bates No.
		(MGD)	(mg/L)	(lbs/day)	(mg/l)	(lbs/day)	
June 27 & 28 1961	Whitewater - Bryant Mill	0 288	170	408	760	1 823	(SA010966 – SA010970)
	Deinking Waste - Bryant Mill	0 367	780	2,384	2,870	8 773	(SA010966 – SA010970)
June 3 - 6 1968	Unknown Wastewater - Bryant Mill	0 092[a]	840	644	2,180	1,671	(SA029236, SA0011346 – SA0011354)
June - July 1970	Wastewater - King Mill	3 01[b]	120	3,009	1,120	28 080	(SA011309 - SA011310, SA029311 MDNR0004430)

Notes
[a] Bypass flow rate calculated by dividing the total bypass volume by the bypass duration
[b] Total bypass flow rate assumed to be equal to total King Mill flow since the clarifier was out of operation (average of 6 1970 and 7/1970 flow data from Table 14a-2)

CONFIDENTIAL BUSINESS INFORMATION

APPENDIX 28D-2

APPENDIX 28D-2
BYPASSES

DATE	TYPE OF MATERIAL BYPASSED	DESCRIPTION	SOURCE
Jul. 20, Jul. 25, Aug. 24, 1955	Wastewater	Bypass sewer from pump house discharged to Portage Creek.	MWRC Report of Waste Surveys (SA 39006) (SA 039018 – SA 039023)
Jan. 26, 1956	Unknown	Bypassing at St. Regis noted.	Transcript of Conference between MWRC and Kalamazoo Paper Mills (KA 5400130)[b]
Apr. 10, 1956	Wastewater	Final pumping station at 100-ft. clarifier was not handling its original rated capacity, thus allowing overflow directly to Portage Creek. Steps were taken to correct this.	St. Regis Letter to MWRC (SA 10988)
Sept., Oct., Nov., 1956	Wastewater	Observance of waste bypassing King clarifier.	SA 029196
Nov. 14, 1956	Wastewater	Bypassing of settling tanks was observed.	Allied Report (SA 29126)
Aug., 1957	Deinked waste	Mill A effluent observed bypassing settling tank, amounting to a 1.305 MGD average over a six-day period.	Allied Inter-Office Correspondence (KA 05001183)[b]
Jan. 20, 1958	Deinked waste	Mill A effluent bypassing settling tank.	Allied Inter-Office Correspondence (SA 027163)
Jan. 23, 1957 to Jan. 30, 1958	Wastewater	The King settling tank was down 13-20 percent of the operating days due to mechanical and operational trouble.	Allied Inter-Office Correspondence (SA 027156-027158)
Feb. 7, 1958	Unknown; Sludge	Correspondence notes that during the week of January 27th , the tank operated properly only two of the six days; sludge built up sufficiently enough to halter the tanks	Allied Inter-Office Correspondence (SA 27155)

CONFIDENTIAL BUSINESS INFORMATION

DATE	TYPE OF MATERIAL BYPASSED	DESCRIPTION	SOURCE
		ability to run for a similar number of days.	
May 1, 1958	Wastewater	Correspondence notes that residual suspended solids in the treated wastes is very high because 50% more volume has been sent through the settling tank than it is designed to handle. The letter recommends volume reduction by diverting flows which are relatively low in suspended solids and BOD into the stream (e.g., the filtrate of the flow from the chlorination oliver in Mill A).	Allied Inter-Office Correspondence (SA 33524)
Nov., 1958	Wastewater	Bypassing observed at Bryant and King Mills.	Waste Tank Treatment Report (SA 35113-35114)
Dec., 1958	Wastewater	Bypassing observed at Bryant and King Mills.	Waste Tank Treatment Report (SA 35111-35112)
Dec. 31, 1958	Mill waste and Deinked waste	Correspondence notes generally that "[b]ypassing of mill waste...has occurred from time to time" at King and that at Bryant "[t]he main problem in operation is the periodic bypassing of the highly loaded deinking waste directly to Portage Creek."	Allied Inter-Office Correspondence (SA 29192-29193)
Mar., 1959	Wastewater	Bar grates were plugged; bypassing of settling tanks observed.	Waste Tank Treatment Report (SA 35435) (SA 035162)
May 25, 1959	Wastewater	"[a]t Bryant there is some by-passing of the waste to the creek."	Allied Inter-Office Memorandum (KA 4600378 – KA 4600379)[b] (SA 028993 – SA029000)

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DATE	TYPE OF MATERIAL BYPASSED	DESCRIPTION	SOURCE
Nov., 1960	Wastewater	Tanks were down; bypassing observed.	Waste Tank Treatment Report (SA 35344)
April 6, 1961	Deinked waste	Bypass of Bryant pump station wet well observed, caused by the bar screen being too plugged with rags and debris. Estimated quantity was several hundred to over 1,000 gpm. Problem was to be fixed.	MWRC Memo (KA 5500181)[b] (SA 029152)
June 27 – June 28, 1961	White water, deinked waste, bleached waste.	White water bypass due to mechanical troubles with pumps. Deinked waste bypass due to plugging of bar grate. Bleached waste discharged directly into Portage Creek. King Division bypassed an unknown material at the back water gate on the bypass sewer line. Bryant White Water: Flow = 0.288 MGD; BOD = 170 ppm; TSS = 760 mg/L; Bryant Deinking Waste: Flow = 0.367 MGD; BOD = 780 ppm; TSS = 2,870 mg/L	1961 MWRC Wastewater Survey (SA 10966 - SA 10970)
Nov. 15, 1961	Wastewater	Waste treatment plants were not in operation.	MWRC Memo (KA 5500228)[b] (SA 010929)
Oct., 1962	Wastewater	Waste bypassing through the butterfly swing gate to River at King Mill. The wet well was not operating at adequate capacity.	NCASI 000192 – NCASI 000193
Oct., 1962	Wastewater	Occasional bypasses occurred due to shut down of the traveling bar grates.	NCASI 000192 – NCASI 000193
Nov. 6, 1962	Wastewater	Bypassing was occurring at King and	Allied Internal Memorandum (KA 4800413 –

CONFIDENTIAL BUSINESS INFORMATION

DATE	TYPE OF MATERIAL BYPASSED	DESCRIPTION	SOURCE
		Bryant.	KA 4800414)[b]
May, 1963	Unknown	"Occasional [sic] bypass occurs at the King Division – Allied Paper Corp. when the flow exceeds the pumping capacity."	Jones, Henry and William Survey for Kalamazoo Joint Treatment Study (KA 5400805)[b]
Feb. 13, Feb. 19, 1964	Wastewater	Bypassing observed at pumping stations, caused by a pump breakdown when wet-strength paper got into sewer system. Problem was fixed.	Allied Letter to MWRC (KA 5500233, KA 5500234)[b]
April 27, 1964		Correspondence notes that on the previous week there was a breakdown in the Monarch clarifier for twenty-four hours, and it did not operate until Thursday.	April 27, 1964 Allied Letter to MWRC (Purdy Exhibit No. 44)
April, 1964	Wastewater	Sizeable leakage bypassing flap gate at King Mill. Frequently observed bypassing. On one occasion, gate was stuck in open position. Problem was to be fixed.	April 29, 1964 Allied Letter to MWRC (SA 011418)
Dec. 3, 1964	Wastewater	Approximately 50% of waste bypassed from 8 am to 1 pm due to failure of pumps. Problem was fixed.	Allied Letter to MWRC (KA 5500259)[b] (SA 011415)
May 18, 1965	Wastewater	Bypassing observed from large sewer at Alcott Street to Bryant Mill Pond.	MWRC Memo (KA 4800108)[b] (SA 011413)
May 21 – May 22, 1965	Wastewater	Partial bypassing of waste treatment plant due to mechanical failure of pumps. Problem was fixed.	Allied Letter to MWRC (KA 4800109)[b]
June 9, 1965	Wastewater	The Bryan influent sampler at Mill A is now installed and ready to go. The waters from Mill C and D, coming into a pump station near Mill D, are not being pumped to Mill A	Allied Internal Memorandum (SA 028977)

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DATE	TYPE OF MATERIAL BYPASSED	DESCRIPTION	SOURCE
		pumping well. An investigation was made by Allied.	
June 11, 1965	Unknown	Bypass at Bryant Mill due to a build up of sludge causing clarifier malfunction. Problem was fixed.	Allied Letter to MWRC (SA 11410)
Aug. 2, 1966	Wastewater	Bypass into river for three hours caused by blown gasket on line from Bryant to clarifier. Repairs were to be made.	MWRC Memo (KA 5500266)[b]
Feb. 6, 1967	Wastewater	Bull gear on clarifier thickening mechanism broke and it was necessary to drain the clarifier to replace the gear. Estimated that it would take two days to replace gear and get unit back in operation.	MWRC Memo (KA 04800121)
Mar. 27 – Apr. 21, 1967	Wastewater	Bypass to creek observed.	Waste Tank Treatment Report (SA 35613-35616)
Nov., 29 – Dec. 1, 1967	Wastewater	Bypassing into creek below dam.	Waste Tank Treatment Report (SA 35586)
Dec. 4 – Dec. 8, 1967	Wastewater	Bypassing below dam.	Waste Tank Treatment Report (SA 35585)
Dec. 12, 1967	Wastewater	Bryant Mill bypass observed at Alcott Street Bridge, (estimated flow 150 gpm). Bypass caused by bad risers and valves in the pumps. Repairs were made to fix the problem.	Correspondence Between Allied and MWRC (SA 11382 and SA 11379) (MDNR 3665)
Dec. 11- Dec. 13, 1967	Wastewater	Bypassing below dam.	Waste Tank Treatment Report (SA 35584)
Dec. 15, 1967	Wastewater	"It has been our experience that the	MWRC Memo (MDNR 3667)[b]

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DATE	TYPE OF MATERIAL BYPASSED	DESCRIPTION	SOURCE
		various pumping stations frequently bypass and permit untreated wastes to flow directly to Portage Creek."	
Dec. 20, 1967	Wastewater (brown turbid appearance)	Bypassing observed at Bryant Mill (estimated 250 gpm), caused by a burnt-out waste pump. Repairs were to be completed later that day.	MWRC Memo (KA 4900188[b], MDNR 2469) (MDNR 3672)
Dec. 18 – Dec. 22, 1967	Wastewater	Overflowing into creek.	Waste Tank Treatment Report (SA 35583)
Jan. 23, Jan. 24, 1968	Unknown	Bypass observed (estimated 300 gpm), caused by too many color orders. Problem was fixed.	MWRC Memo, Allied Letter to MWRC (MDNR 4471, SA 11378)
Mar. 4, 1968	Chlorinated water	Bypass from deinking mill observed.	Mogg Diary Entry[a] (KA 5300090)[b]
April 4, 1968	Whitewater	Streams from Mill C, Mill D, and the Power Plant to Portage Creek, were observed.	Allied Internal Memorandum
April 24, 1968	Unknown	Bypasses at Allied have been frequently observed by MWRC staff.	Transcript of Conference between Allied and MWRC (SA 11369)
May 3, 1968	Wastewater	"Staff reported repeated incidents of partial waste bypassing to Portage Creek without processing."	MWRC letter to Allied (KA 4900189)[b]
May 21, 1968	Sludge	Sludge from sludge holding ponds observed spilling into Portage Creek.	MWRC Memo (MDNR 2488)
June 3 – June 6, 1968	Unknown	Bypass observed (366,600 gallons estimated flow over the four days). BOD = 840 ppm; TSS = 2,180 mg/L	MWRC Wastewater Survey (SA 29236) (SA 011346 – SA 011354)
June 13, 1968	Unknown	Letter notes, "We have also been directed	Allied letter to MWRC (KA 5500291-

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DATE	TYPE OF MATERIAL BYPASSED	DESCRIPTION	SOURCE
		by the Commission to stop by-passing the Bryant clarifier."	5500292)[6]
June 17, 1968	White Water	Letter references proposed bypassing by Allied in order to test the quality of de-inked wastes.	MWRC letter to Allied (SA 11342) (MDNR 3711)
July 22, 1968	Unknown	Bryant bypass observed.	MWRC Chemical Analysis Report (MDNR 2494)
July – Aug., 1968	Wastewater	Bypass into Portage observed. MWRC knew this bypassing was necessary for Allied to clean its waste pipes and permitted it to continue as long as it was kept to a minimum.	MWRC Letter to Concerned Citizen (SA 11332) (MDNR 3718 – MDNR 3719)
June – July, 1970	Wastewater	Bypass at King to Kalamazoo River caused by out-of-service clarifier. Clarifier went out of service due to faulty drive gears in clarifier scraper mechanism. BOD = 120 ppm; TSS = 1,120 mg/L	MWRC Letter to Allied, MWRC Staff Report (SA 11309 – SA 11310, (SA 29311, MDNR 4430)
June 1 – July 10, 1970	Wastewater	King down for repairs and bypassing clarifier due to gear trouble; no samples taken.	Waste Tank Treatment Report (SA 35079 – SA 35084)
Mar. 8 – 12, 1971	Wastewater	Clarifier effluent line to city plugged up and totalizer ran continuously; effluent samples for Tuesday and Wednesday are estimates only.	Waste Tank Treatment Report (SA 34876)
May 17, 1971	Brown-colored water	Overflows at Mills A and D into Portage Creek responsible for purported fish kills.	Allied Internal Correspondence (SA 29368)
June 14 – 18, 1971	Wastewater	Clarifier ran over every day this week.	Waster Tank Treatment Report (SA 34862)

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DATE	TYPE OF MATERIAL BYPASSED	DESCRIPTION	SOURCE
Oct. 27, 1971	White Water	"We have numerous overflows, mostly during our weekend shutdowns."	Allied Internal Memorandum (SA 34813)
June 3, 1974	Wastewater	Overflow of Wastewater into Portage Creek caused by power plant rupture. Problem fixed within 2 hours. Bypass turned Portage Creek a milky white color.	Correspondence Between Allied and MWRC (MDNR 4834, KA 5500041[b])
Nov. 8, 1975	White-colored water	Turbidity caused by bypassing of Monarch clarifier during weekend equipment cleanup. Bypass only lasted a short time.	MWRC Letter to Allied (MDNR 4819)
Dec. 9, 1975	Wastewater	Bypass caused by ruptured sump pump discharge pipe at Alcott Street. Volume discharged was greater than 100 gallons and lasted for 45 minutes. Problem fixed later that evening.	Dec. 16, 1975 Allied Letter to MDNR[b]
Mar. 14, 1978	Wastewater	Bypass to Portage Creek caused by temporary power outtage.	Allied Letter to MDNR (KA 5500084)[b]
Apr. 19, 1978	Wastewater	Bypass from Bryant clarifier caused by leak in flange near Gray Tank. Repairs were made.	Apr. 19, 1978 Allied Letter to MDNR[b]
May 10, 1978	Yellow-colored water	Upsets from Monarch clarifier caused by air being pumped into clarifier during the production of Gold Cork Tipping paper. Problem corrected.	Allied Inter-Office Correspondence (SA 28983)
June 22, 1979	White water	Bypass to Portage caused by small hole in gravity line (approximately 300 gallons discharged). Repairs were made.	Allied Letter to MNDR (KA 5500091)[b]
Mar. 1, 1980	Wastewater	Overflowing of gray tank caused by malfunctioning computer. Problem was	Allied Internal Correspondence (SA 51903)

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DATE	TYPE OF MATERIAL BYPASSED	DESCRIPTION	SOURCE
		fixed.	
July 20, 1981	White water	Bypass due to clarifier repairs. Clarifier was down for 3 to 4 hours. Samples taken at Alcott St. and Reed St. indicate SS levels of 18.3 and 21.1 mg./l., respectively.	Handwritten notes (065999)
July 30, 1981	Wastewater	10-minute bypass while Mill D pump was being repaired. MDNR had been informed of the need for this bypass prior to its occurrence.	Allied Letter to MDNR (SA 30819)
Apr. 14, 1982	Wastewater	46-minute bypass necessary for electrical repair at Mill D sump pumping station (estimated 23,300 gal.)	Allied Letter to MDNR (KA 5500097)[b]
Apr. 15, 1982	White-colored water	Temporary surge in flow of clarifier effluent to Portage caused by replacement of pump at Monarch clarifier. Two grab samples were taken. Results indicate BOD levels of 18 and 7 mg./l.; SS levels of 13.9 and 6.4 mg./l.; and VSS levels of 4.3 and 3.2 mg./l.	Allied Letter to MDNR (KA 5500097; 065977-978)[b]
Mar. 21, 1983	White-colored water	Outfall to Portage Creek observed as being pure white.	MDNR Memo (SA 6468)

[a] Cecil Mogg diary entries' also note bypasses that occurred at Brown, Kalamazoo Paper Co. and Georgia Pacific. Some of these were not mentioned in the Questionnaire answers of respective mediation participants.
[b] Document was not previously produced to the document depository, but will be sent there.

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TABLE 28E-1

Table 28e-1: Documents/Correspondence Relating to Allied's Waste Treatment System

Bates Number	Date	Description/Comment
SA049541	1946-1970	Suspended Solids data (Bryant, King, Monarch), (one page)
NCASI 000252-000268	22-Sep-46	Allied Paper Co. Total Mill Waste Survey
NCASI 000424-000430	15-Jun-50	Allied Paper Co. King Division From R W Purdy, et al.
SA039024	3-Nov-53	Allied Paper Co. Monarch Division, Report of Survey. Survey made by R W. Purdy
SA039018-039019	1955	St Regis Paper Co. Report of Waste Survey Survey made by R.W. Purdy
SA029194-029197	14-Nov-56	Settling tank performance data (Bryant, King, Monarch). From W.L. Kendrick to The Executive Committee
SA039032	27-May-57	Report of Survey, Allied Paper, Bryant Mill
NCASI000942 - 000943	13-Nov-57	Letter to M. Adams (Michigan Water Resources Commission) re: Reducing Mill Waste and Water Useage
SA010981 - SA010983	6-Aug-58	Letter to M. Adams (Michigan, Water Resources Commission) Re: Reduce Oxygen Demand in Mill Effluent
SA010979	15-Sep-58	Letter to L. Oeming (Michigan, Water Resources Commission) Re: Reply to Letter of September 9th - Reduction of BOD Demand through Various Filtering Media.
SA029063 - SA029069	9-Apr-59	Progress Report No. 2 - Evaluation of Nalco 1610 and 1623 as Coagulants
SA029050 -SA029056	24-Apr-59	Progress Report No. 1: Effect of Rice Barton Operation (North Side) on Caustic Useage in Hydropulper
SA029027 - SA029040	30-Apr-59	Progress Report - BOD and Suspended Solids Removed by Flotation of Concentrated Deinking Waste
KA04600378	25-May-59	Waste Treatment Program data (Bryant, King, Monarch). To R.M. Levy from U.G. Stoeffler
SA033420	24-Sep-59	Allied Paper Corporation Research and Development Projects Regarding BOD Loading Reductions to Kalamazoo River
SA029117 - SA029119	7-Apr-60	Progress Report No. 4 - Reclaiming Sludge with Low Ash Content.
SA029014 - SA029026	20-Oct-60	Progress Report No. 6 - A Study of BOD Removal from King Mill Primary Treated Effluent
SA029152	6-Apr-61	Letter to R. Purdy (Michigan, Water Resources Commission) Re: By-passing of a portion of waste from the Bryant pump station.
SA010966-010970	2-Aug-61	Letter (From L.F. Oeming (WRC) to W. Harrison (Allied)) and data (Report of Survey, Allied Paper, Monarch, Bryant & King Mills).
NCASI 000194	1-Oct-62	King effluent data table. Sent to U.G. Stoeffler from P. H. Germann
SA028965 - SA028969	23-Nov-62	Progress Report No. 7: Survey of King Mill Sewer Losses
NCASI 0000170-0000173	8-Jan-63	King effluent data table.
SA028987 - SA028992	24-Jan-63	Progress Report No. 8 - Bryant Sewer Loadings and Determination of BOD and Solids Removal by Screening
Gilman Exhibit No. 168	16-May-63	Report on Waste Disposal at Allied Paper Company, Kalamazoo, Michigan
NCASI000128-000131	6-Dec-63	National Council for Stream Improvement Survey of Settleable Solids Removal. Monarch Mill.
SA 033416-033419	10-Dec-63	National Council for Stream Improvement Survey of Settleable Solids Removal. Bryant Mill.
SA028948 - SA028957	19-Feb-64	Progress Report No. 1 - A Study of Deinking Pulp Mill Wastes
SA011419	27-Apr-64	Letter to R. Purdy (Michigan, Water Resources Commission) Re: Breakdown of Monarch clarifier
SA011416 - SA011417	25-May-64	Letter to R. Courchaine (Michigan Water Resources Commission) Regarding Proposed Changes to Waste Disposal Systems

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Table 28e-1: Documents/Correspondence Relating to Allied's Waste Treatment System

Bates Number:	Date:	Description/Comment:
SA011415	4-Dec-64	Letter to R. Purdy (Michigan, Water Resources Commission) Re. Breakdown of Bryant pump.
SA011412	4-Jun-65	Letter to R. Purdy (Michigan, Water Resources Commission) Regarding Partial Bypassing of Waste Treatment Plant
SA011410	16-Jun-65	Letter to R. Purdy (Michigan, Water Resources Commission) Re: Trouble with the Drive on the Bryant Clarifier.
SA011406 - SA011407	24-May-66	Letter to L. Oeming (Michigan Water Resources Commission) Re: Decrease BOD Loading to the Kalamazoo River.
SA011403	13-Oct-66	Letter to R. Purdy (Michigan Water Resources Commission) Re: Compliance with BOD Stipulation.
SA029145	23-Nov-66	Letter to R. Courchaine (Michigan, Water Resources Commission) Re: October 1966 BOD Data from Bryant Mill.
MDNR003652-003656	13-May-67	MDNR Waste Paper Survey, Allied Mills
SA032010-032030	13-Jun-67	Report summarizing 1967 and 1968 data
MDNR003659	15-Aug-67	Letter (from C. Harvey, District Engineer, to E. Gilman, Allied) re waste survey reports during May 1967.
SA011378; MDNR003673	26-Jan-68	Letter to R. Courchaine (Michigan, Water Resources Commission) Re: Bypassing Effluent at Bryant.
SA029095	18-Apr-68	Letter to D. Swets (Kalamazoo Public Works Director) Re: Averages for the First 13 Weeks of 1968, Bryant Clarifier Effluent.

APPENDIX 28G

BRYANT CLARIFIER EFFLUENT TO THE CITY OF KALAMAZOO WWTP

Source: Year	*SA 038418* Annual Volume (million gals)	*SA 030099* Annual Volume (million gals)	*SA 030099* Daily Volume (gallons)	*SA 030088* Daily Volume (gallons)	*SA 038424* Daily Volume (gallons)	*KA04800168* Daily Volume (gallons)	*SA 030941* Daily Volume (gallons)	*SA 30396* Daily Volume (gallons)	*SA 038062* Daily Volume (gallons)	*SA 030612* Daily Volume (gallons)	*SA 029365* Daily Volume (gallons)
1969						1,402,770					
1970	430						1,430,000			1,564,000	
1971	350									1,304,000	
1972	290									944,000	971,000
1973	345									889,000	
1974	280										
1975	250										
1976	345										
1977	625							1,753,000			
1978	660										
1979	785										
1980	560										
1981	675										
1982	490										
1983	625	628.6									
1984	425		850,000								
1985	350			900,000*							
1986					813,000						
unknown									1,559,000		

* This was the mill's goal. In 1985 they reduced the goal to 760,000 gpd due to increasing sewer rates.

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TABLES 28G-1 TO 28G-3

Table 28g-1
Bryant Mill - Chlorine Drop Leg Direct Discharge

Date	Flow	BOD		TSS		DS		Bates No.
	(MGD)	(mg/L)	(lbs/day)	(mg/L)	(lbs/day)	(mg/L)	(lbs/day)	
1959		262	1,091	200 (1.67 lb/Mgal)	833	2,003 (16.68 lb/Mgal)	8,342	SA028993 – SA029000
6/27/1961	0.3	160	400	160	400			SA010966 – SA010970
6/4/1968	0.5421	74	334	228	1,029			SA011346 - SA011354
6/5/1968	0.5153	87	373	300	1,288			SA011346 - SA011354
6/6/1968	0.4586	120	458	305	1,165			SA011346 - SA011354
7/11/1968				54 (0.45 lb/Mgal)	225			SA029087 – SA029088
1969	~0.5							KA04500135
1/23/1969		200	833	3,340	13,910			SA034938
1/24/1969		275	1,145	1,800	7,496			SA034938
2/5/1969		145	604	180	750	1,300	5,414	SA035528
2/6/1969		115	479	180	750	700	2,915	SA035528
2/7/1969		265	1,104	140	583	1,300	5,414	SA035528
2/12/1969		145	604	180	750	1,300	5,414	SA035526
2/13/1969		115	479	180	750	700	2,915	SA035526
2/14/1969		265	1,104	140	583	1,300	5,414	SA035526
10/7/1969				130 (1.08 lb/Mgal)	541			SA035491; SA029369
10/8/1969				210 (1.75 lb/Mgal)	875			SA035491; SA029369
10/9/1969				220 (1.83 lb/Mgal)	916			SA035491; SA029369
10/10/1969				150 (1.25 lb/Mgal)	625			SA035491; SA029369
10/14/1969				100 (0.83 lb/Mgal)	416			SA035489
10/15/1969				160 (1.33 lb/Mgal)	666			SA035489
10/16/1969				140 (1.17 lb/Mgal)	583			SA035489
10/17/1969				233 (1.94 lb/Mgal)	970			SA035489
Averages: (lbs/day)			**693**		**1,641**		**5,118**	

Table 28g-2:
King Mill – Chlorine Drop Leg Direct Discharge

Date	Flow	BOD		TSS		DS		Bates No.
	(MGD)	(ppm)	lbs/day	(mg/L)	lbs/day	(mg/L)	lbs/day	
1959		173	720	561 (4.67 lb/Mgal)	2,336	2,003 (16.68 lb/Mgal)	8,342	SA028993 – SA029000

Notes:

Loading rates for days with no reported flow were estimated assuming a daily flow rate of 0.5 MGD

Concentrations reported in concentration units of lb/Mgal were converted to mg/L.

CONFIDENTIAL BUSINESS INFORMAT

Table 28g-3
Monarch Mill - Direct Discharges

Date	Flow (MGD)	BOD (mg/L)	BOD (lbs/day)	TSS (mg/L)	TSS (lbs/day)	Comments	Bates No.
28-Jul-55	6.001	58	2,803	116	5,305	Bleach Waste, white water overflows, and other miscellaneous wastes	Report of Waste Survey 063803 - 063808
29-Jul-55	6	35	1,651	120	5,504	Bleach Waste, white water overflows, and other miscellaneous wastes	Report of Waste Survey 063803 - 063808
30-Jul-55	6 228	48	2,389	144	6,960	Bleach Waste, white water overflows, and other miscellaneous wastes	Report of Waste Survey 063803 - 063808
31-Jul-55	3 658	33	946	116	3,234	Bleach Waste, white water overflows, and other miscellaneous wastes	Report of Waste Survey 063803 - 063808
1-Aug-55	5 959	52	2,485	240	11,431	Bleach Waste, white water overflows, and other miscellaneous wastes	Report of Waste Survey 063803 - 063808
2-Aug-55	6 198	63	3,153	160	7,754	Bleach Waste, white water overflows, and other miscellaneous wastes	Report of Waste Survey 063803 - 063808
3-Aug-55	5.481	31	1,326	116	4,845	Bleach Waste, white water overflows, and other miscellaneous wastes	Report of Waste Survey 063803 - 063808
10-Jan-56	4.543	8	227	32	1,212	White water overflows, and other miscellaneous wastes	Report of Waste Survey 063797 - 063802
11-Jan-56	4.3018					White water overflows, and other miscellaneous wastes	Report of Waste Survey 063797 - 063802
12-Jan-56	4.177	23	732	33	1,150	White water overflows, and other miscellaneous wastes	Report of Waste Survey 063797 - 063802
13-Jan-56	4.02	5	101	20	670	White water overflows, and other miscellaneous wastes	Report of Waste Survey 063797 - 063802
14-Jan-56	2.8605	3.5	36	19	453	White water overflows, and other miscellaneous wastes	Report of Waste Survey 063797 - 063802
15-Jan-56		37		210		White water overflows, and other miscellaneous wastes	Report of Waste Survey 063797 - 063802
16-Jan-56	2.1884	4.2	638	14	256	White water overflows, and other miscellaneous wastes	Report of Waste Survey 063797 - 063802

CONFIDENTIAL BUSINESS INFORMATION

TABLE 28J

APPENDIX 28J
PORTAGE CREEK
Summary of Wastewater Citations[1]

Privileged and Confidential Settlement and Joint Defense Communication

BATES NO.	DATE	TYPE OF DOCUMENT	AUTHOR	ADDRESSEE	DESCRIPTION OF CITATION
MDNR 003539-003541	06/22/61	Notice of Determination and Hearing	State of Michigan Water Resources Commission	Allied Paper Corporation	1. Discharge of inadequately treated process wastes into Kalamazoo River. 2. Said inadequately treated process wastes contain organic oxygen consuming substances which are injurious to fish and create an offensive odor.
MDNR 003618	03/02/64	Correspondence	State of Michigan Water Resources Commission	Allied Paper Corporation	Contains excerpt of minutes of Commission finding that: treatment facilities for removal of settleable solids from the wastes at Bryant Division were found to be out of operation on 2/13/64 and 2/19/64. Resolution of the Commission requires company officials to appear at 3/26/64 meeting to report.
MDNR 003665-003666	12/13/67	Correspondence	State of Michigan Department of Conservation	Allied Paper Corporation	Notes observations of: 1. By-pass of wastes at Bryant Mill, and 2. Monarch Mill sludge topping the dikes of the storage lagoons. Requests report regarding corrective actions to be taken.
KA04800323-04800324	07/03/72	Report	Unknown	Unknown	Pollution report indicates fish kill in Portage Creek from paper mill by-products, sludge and waste from Allied Paper Company, Bryant Mill Pond. Stream dark gray in color.
MDNR 003848-003849	07/23/75	Notice of Noncompliance	Michigan Department of Natural Resources	Allied Paper, Inc.	Noncompliance due to: 1. failure to meet pH limitations; 2. Foam from discharge extended 2,000 feet down Portage Creek. 3. Visible floating or settleable solids.

CONFIDENTIAL BUSINESS INFORMATION

APPENDIX 28J
PORTAGE CREEK
Summary of Wastewater Citations[1]

Privileged and Confidential Settlement and Joint Defense Communication

BATES NO.	DATE	TYPE OF DOCUMENT	AUTHOR	ADDRESSEE	DESCRIPTION OF CITATION
MDNR 003882-003883	12/23/75	Report	State of Michigan Water Resources Commission	Unknown	Pollution Investigation Report indicating a discharge pipe broke at Mill D resulting in an overflow of untreated waste water into Portage Creek for 45 minutes. The problem was corrected. No observed effect on fish.
MDNR 003954	10/24/77	Correspondence	State of Michigan Water Resources Commission	Allied Paper Corporation	Discusses industrial wastewater survey (not attached) conducted at Allied Paper which indicates that NPDES permit limitations for discharge are being exceeded, and that two unpermitted discharges took place.
MDNR 003963-003964	11/03/77	Notice of Noncompliance	Michigan Department of Natural Resources	Allied Paper, Inc.	Noncompliance due to: 1. Facility exceeded BOD5 and TSS limitations 2. Two unpermitted discharges: sand filter backwash from Bryant Mill is still discharged directly to Portage Creek; underdrainage from the sludge disposal area also discharges to Portage Creek.
MDNR 004795	12/21/77	Notice of Noncompliance	Michigan Department of Natural Resources	Allied Paper, Inc.	Noncompliance due to: facility exceeded its authorized discharge limits of BOD5.
MDNR 004009-004010	06/05/78	Correspondence	State of Michigan Water Resources Commission	Allied Paper Corporation	States that the industrial rating for Allied will remain as "I" because of numerous incidents of noncompliance with effluent limitations, and failure to submit and/or properly complete certain report forms.

CONFIDENTIAL BUSINESS INFORMATIC

APPENDIX 28J
PORTAGE CREEK
Summary of Wastewater Citations[1]

Privileged and Confidential Settlement and Joint Defense Communication

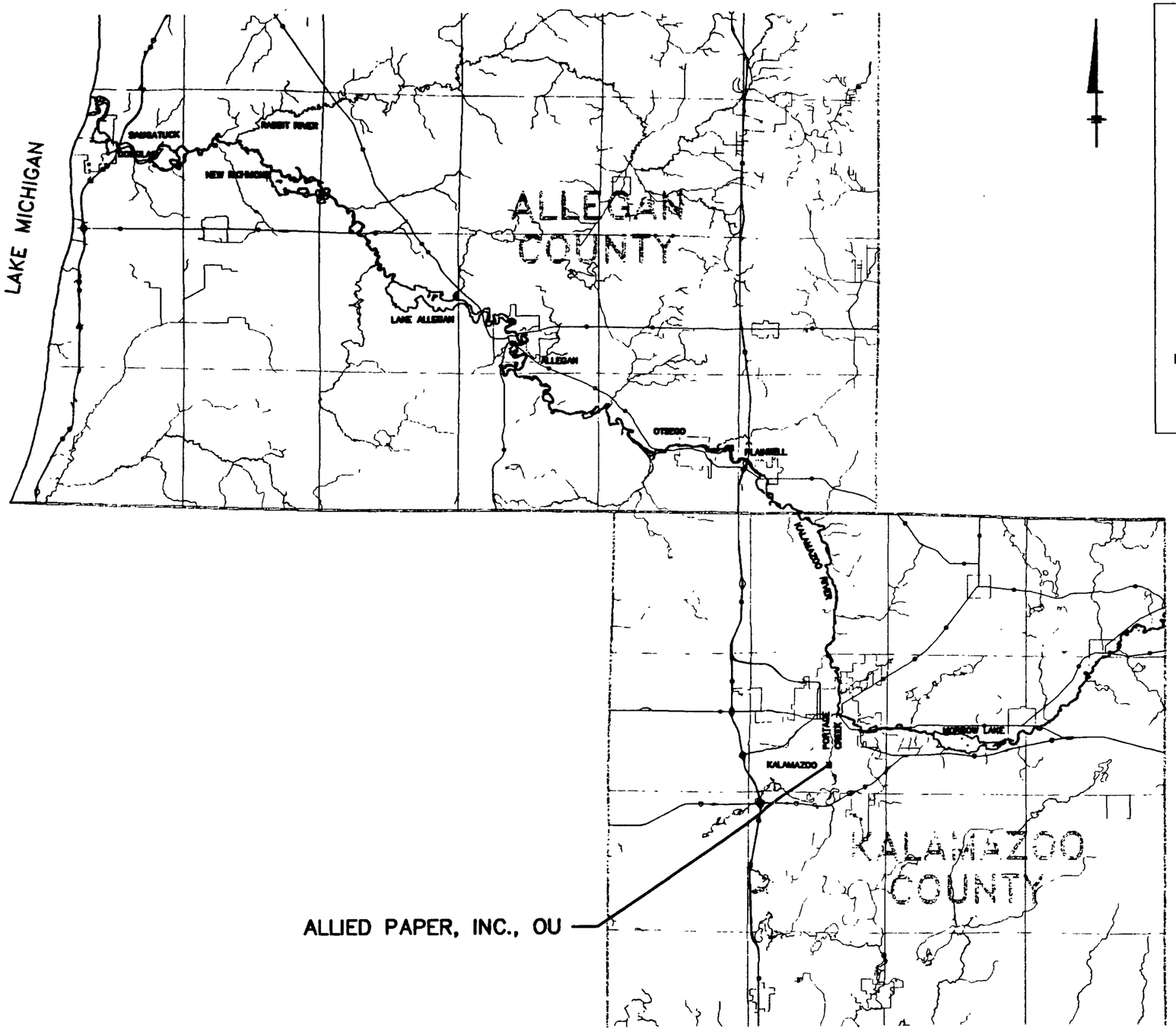
BATES NO.	DATE	TYPE OF DOCUMENT	AUTHOR	ADDRESSEE	DESCRIPTION OF CITATION
MDNR 004798-004799	07/12/79	Notice of Noncompliance	Michigan Department of Natural Resources	Allied Paper, Inc.	Noncompliance due to exceedance of discharge limits for oil-grease-visual.
MDNR 004800-004801	12/17/80	Notice of Noncompliance	Michigan Department of Natural Resources	Allied Paper, Inc.	Noncompliance due to exceedance of BOD5 daily maximum loading permit limitation.
MDNR 004802-004803	12/15/81	Notice of Noncompliance	Michigan Department of Natural Resources	Allied Paper, Inc.	Noncompliance due to exceedance of BOD5 and TSS limitations. *Note that Allied's NPDES permit allowed daily BOD and TSS maximums of 770 lbs./day between October 15 and May 14. The highest BOD-5 value listed on this NOV is 671 lbs./day, and the highest TSS value is 632 lbs./day. Thus, although Allied did receive this NOV, Allied was not actually in violation of its permit*
MDNR 004574	01/23/87	NPDES Compliance Inspection Report	USEPA		RE: Allied Paper Co. Documents two unpermitted discharges: broken concrete pipe; discharge was large volume and white in color. Portion of document regarding second discharge is missing.
MDNR 004581	01/28/87	NPDES Compliance Inspection Report	USEPA		RE: Allied Paper Co. Indicates broken concrete pipe not discharging (plugged). Unpermitted discharge via ditch to Portage Creek was plugged also.

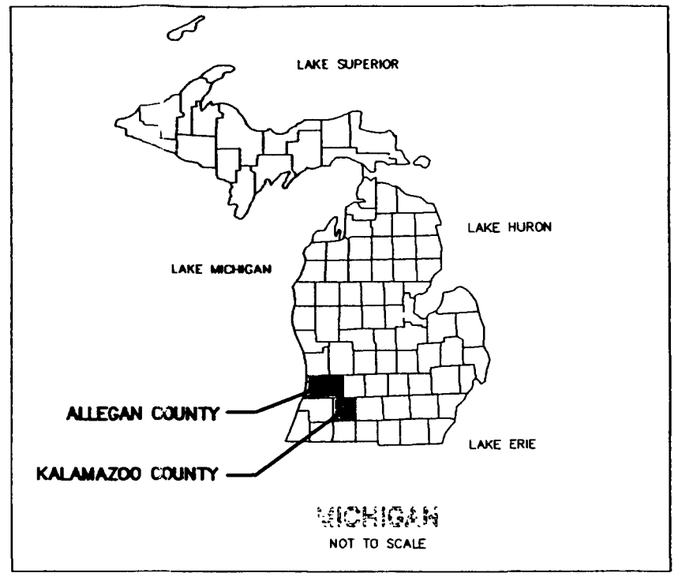
CONFIDENTIAL BUSINESS INFORMATION

BATES NO.	DATE	TYPE OF DOCUMENT	AUTHOR	ADDRESSEE	DESCRIPTION OF CITATION
MDNR 004572-004576	02/03/87	Correspondence	Michigan Department of Natural Resources	Allied Paper, Inc.	Discusses two unpermitted discharges into Portage Creek: 1) from a 30-36" broken concrete pipe. This has been plugged with concrete. 2) next to water filter plant. Has been plugged with a blow-up plug, and will be permanently eliminated when the weather improves in the spring. Attachments: EPA 1/23/87 NDPES compliance inspection report regarding the same discharges; what appears to be part of a report, dated 1/6/87, for the same discharges.

CONFIDENTIAL BUSINESS INFORMATION

APPENDIX 29-B





Source: BBL, 1994
Technical Memorandum 7
March 1994

NOTE:

ALLEGAN AND KALAMAZOO COUNTY MAPPING PROVIDED BY MICHIGAN RESOURCE INFORMATION SYSTEM.

0 5 MILES 10 MILES

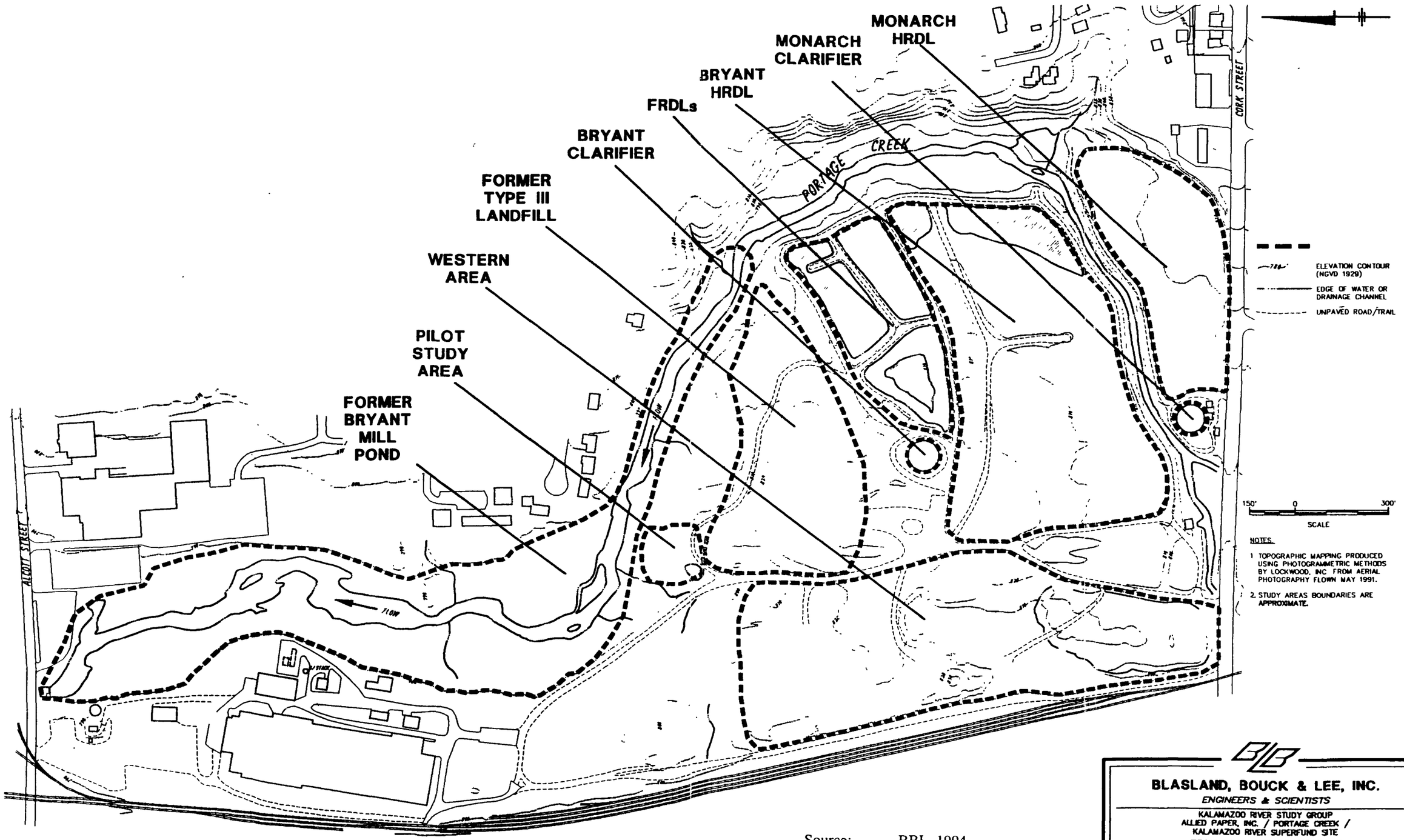
SCALE

BLASLAND, BOUCK & LEE, INC.
ENGINEERS & SCIENTISTS

KALAMAZOO RIVER STUDY GROUP
ALLIED PAPER, INC. / PORTAGE CREEK /
KALAMAZOO RIVER SUPERFUND SITE
TECHNICAL MEMORANDUM 7
ALLIED PAPER, INC., OU

LOCATION PLAN

FIGURE **1**



NOTES:

1. TOPOGRAPHIC MAPPING PRODUCED USING PHOTOGRAMMETRIC METHODS BY LOCKWOOD, INC. FROM AERIAL PHOTOGRAPHY FLOWN MAY 1991.
2. STUDY AREAS BOUNDARIES ARE APPROXIMATE.

Source: BBL, 1994
Technical Memorandum 7
March 1994

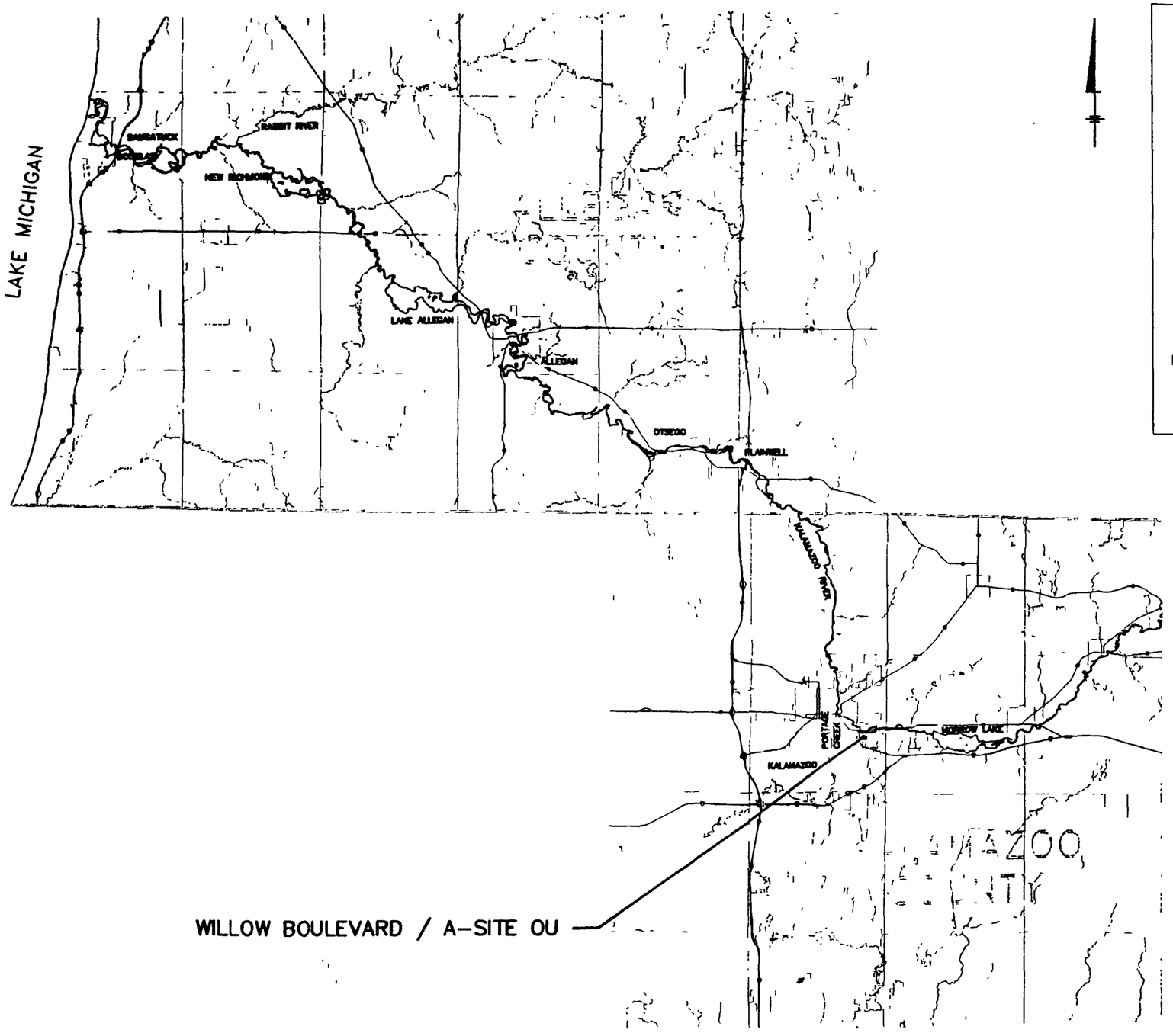
L ON=*,OFF=REF,A*,GW* ON=A-STUDYAREAS
2/13/94 54-RLP,NCS,PGL
64551.37R\RESULTS1\64551G01.DWG

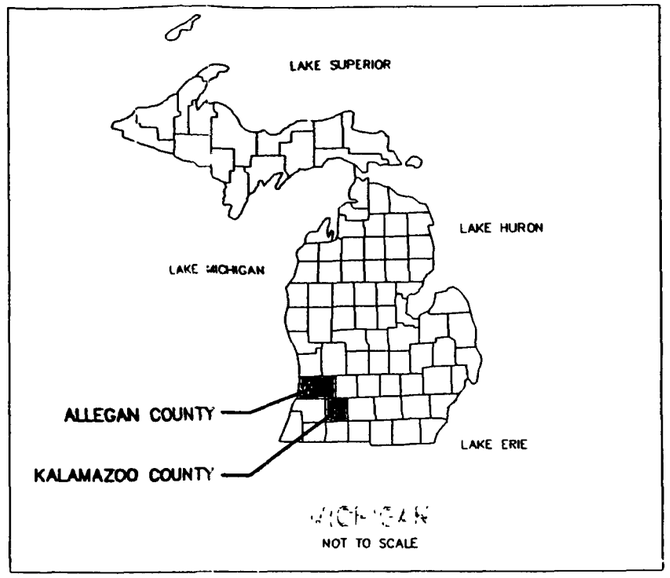
BLASLAND, BOUCK & LEE, INC.
ENGINEERS & SCIENTISTS

KALAMAZOO RIVER STUDY GROUP
ALLIED PAPER, INC. / PORTAGE CREEK / KALAMAZOO RIVER SUPERFUND SITE
TECHNICAL MEMORANDUM 7
ALLIED PAPER, INC., OU

ALLIED PAPER, INC., OU
STUDY AREAS

FIGURE **2**





Source: BBL, 1995
Technical Memorandum 9
February 1995

NOTE

ALLEGAN AND KALAMAZOO COUNTY MAPPING PROVIDED BY MICHIGAN RESOURCE INFORMATION SYSTEM

0 5 MILES 10 MILES

SCALE

BLASLAND, BOUCK & LEE, INC.
ENGINEERS & SCIENTISTS

KALAMAZOO RIVER STUDY GROUP
ALLIED PAPER, INC. / PORTAGE CREEK / KALAMAZOO RIVER SUPERFUND SITE

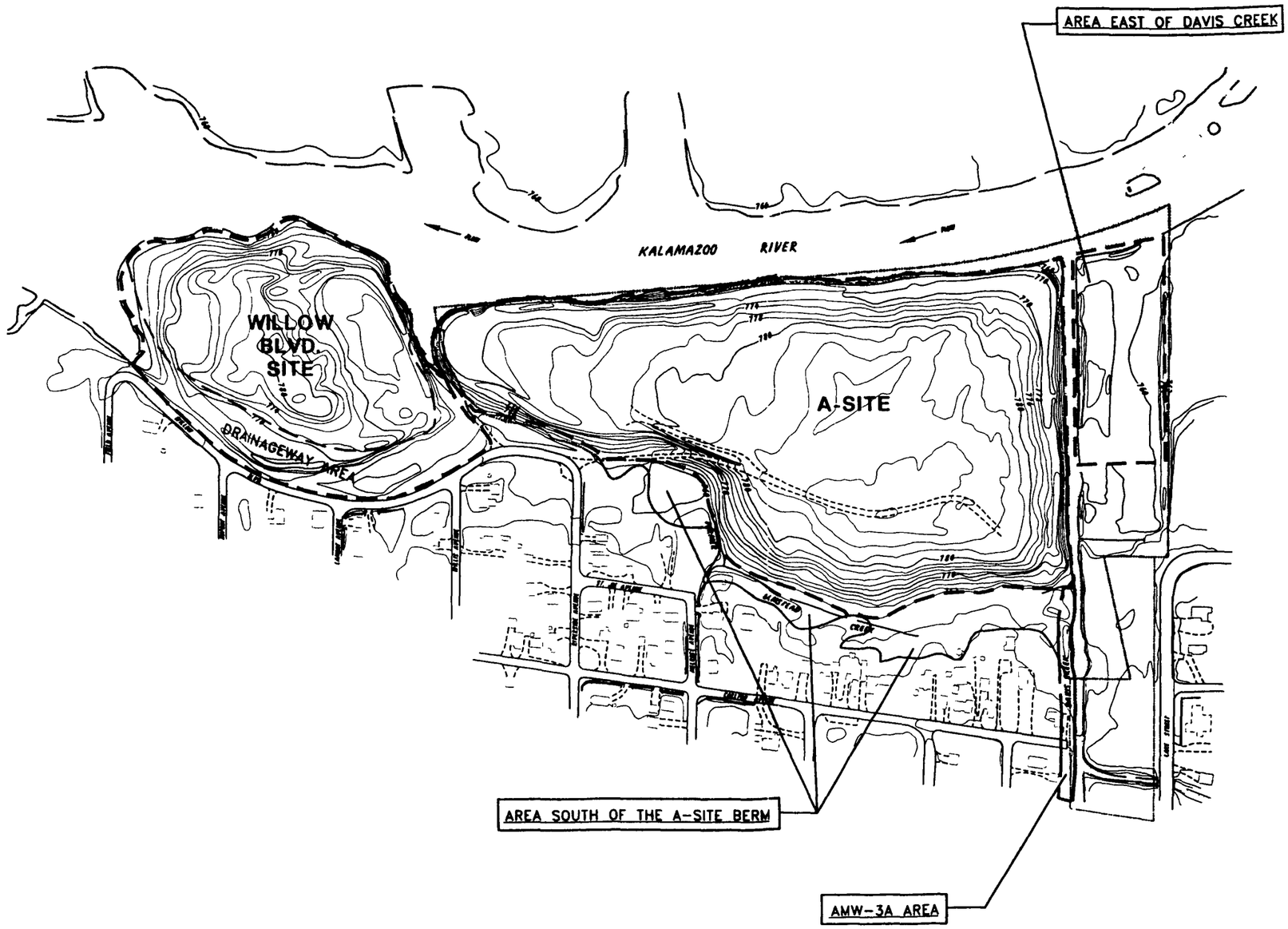
TECHNICAL MEMORANDUM 9
WILLOW BOULEVARD / A-SITE OU

LOCATION PLAN

FIGURE **1**

KB60205456

3/94 BA-RLP MES



LEGEND

- 780 — ELEVATION CONTOUR (NGVD 1929)
- EDGE OF WATER OR DRAINAGE CHANNEL
- UNPAVED ROAD/TRAIL
- APPROXIMATE A-SITE BOUNDARY
- GEORGIA-PACIFIC PROPERTY BOUNDARY OUTSIDE OF A-SITE

NOTES:

1. UNLESS OTHERWISE INDICATED ALL SAMPLE LOCATIONS SURVEYED BY WADE-TRIM INC. OCTOBER 1993 THROUGH AUGUST 1996. SAMPLES ARN-1 THROUGH ARN-5 AND WRN-1 THROUGH WRN-5 WERE SURVEYED BY BBL JULY 1993.
2. TOPOGRAPHIC MAPPING PRODUCED USING PHOTOGRAMMETRIC METHODS BY LOCKWOOD, INC. FROM AERIAL PHOTOGRAPHY FLOWN APRIL 1991. KALAMAZOO RIVER SOUTH BANK, EAST OF DAVIS CREEK REVISED PER CURRENT CONDITIONS. ADDITIONAL TOPOGRAPHIC CHANGES AFTER APRIL 1991 ARE NOT SHOWN.
3. ALL LOCATIONS ARE APPROXIMATE.
4. RESIDUALS VOLUME ESTIMATES ARE APPROXIMATE

150' 0 300'
SCALE

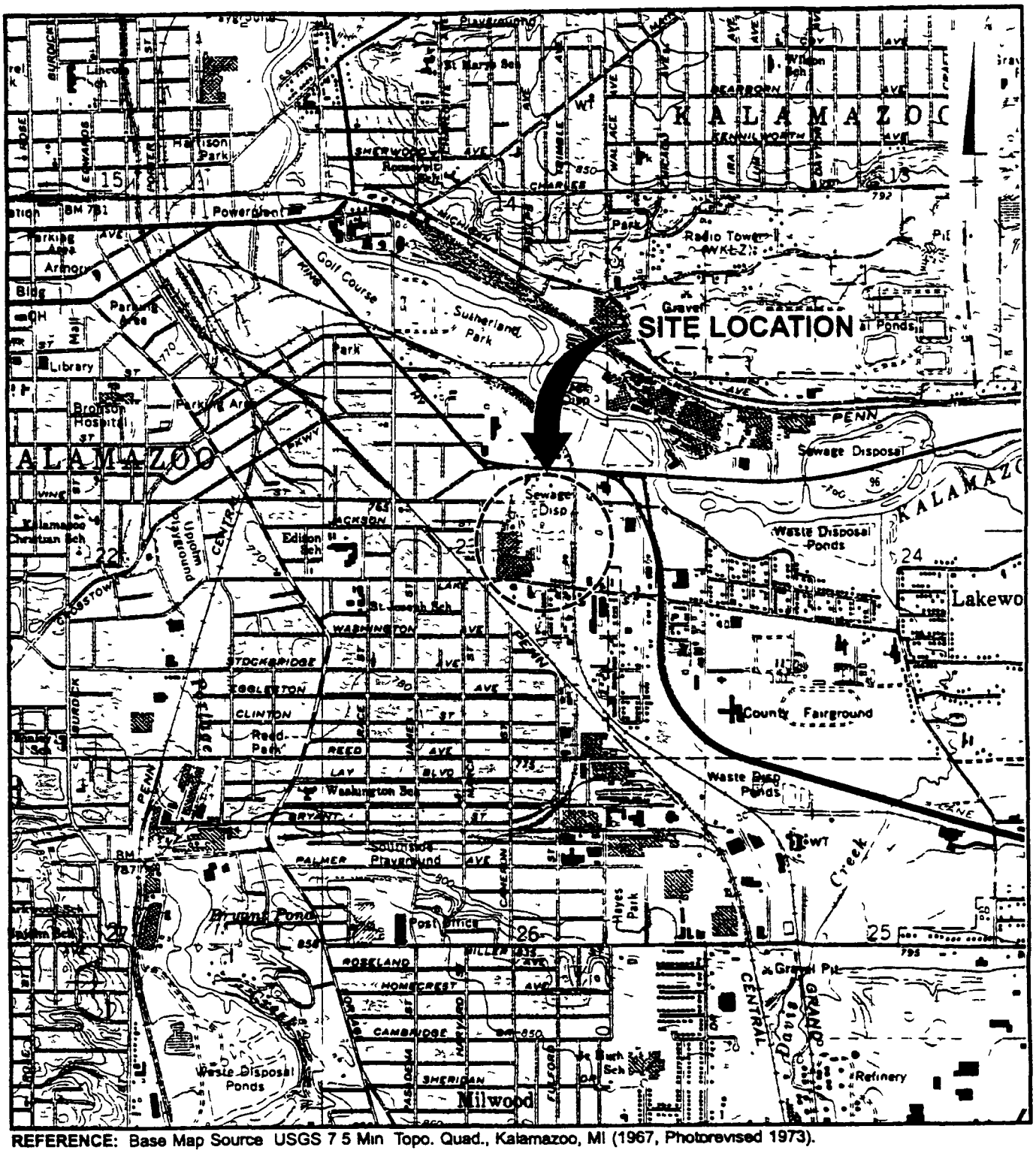
KALAMAZOO RIVER STUDY GROUP
ALLIED PAPER, INC./PORTAGE CREEK/KALAMAZOO RIVER SUPERFUND SITE
REMEDIAL INVESTIGATION REPORT/FOCUSED FEASIBILITY STUDY
WILLOW BOULEVARD/A-SITE OU

WILLOW BOULEVARD/A-SITE AND ANCILLARY AREAS

BBL BLASLAND, BOUCK & LEE, INC. *engineers & scientists*

FIGURE 2

X 64581X03
P FIG-2-3
L ON=*,OFF=*REF*,WBL*,*N-*,ON=WBL-SPL
8/21/98 54-RLP DCC AK NES
64581640/64581G06.DWG



REFERENCE: Base Map Source USGS 7 5 Min Topo. Quad., Kalamazoo, MI (1967, Photorevised 1973).

2000' 0 2000'

APPROXIMATE SCALE 1" = 2000'

AREA LOCATION

ALLIED PAPER, INC./PORTAGE CREEK/KALAMAZOO RIVER SUPERFUND SITE

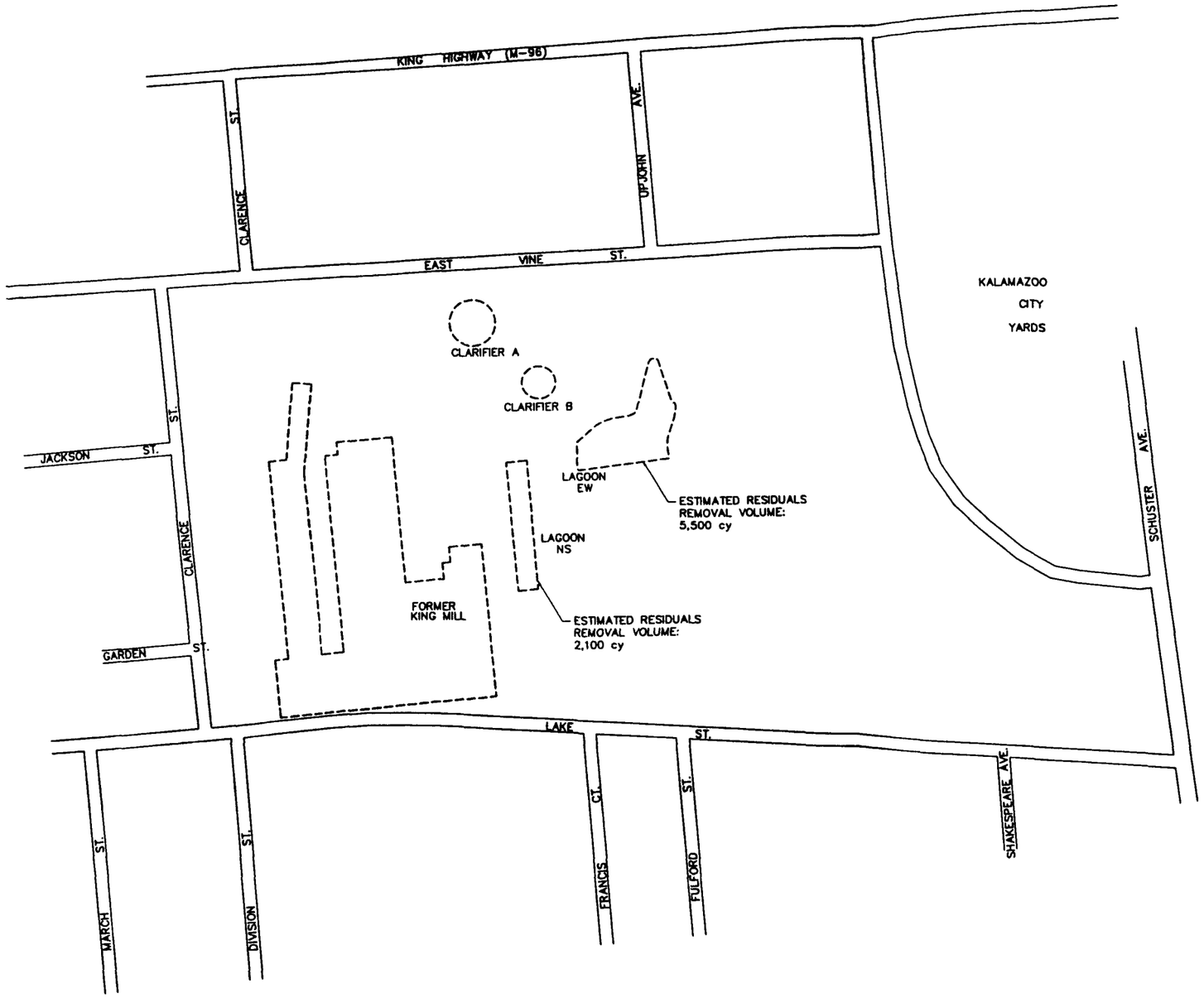
RESPONSE ACTIVITIES SUMMARY
FORMER ALLIED PAPER, INC. KING MILL LAGOONS

SITE LOCATION MAP

BBL BLASLAND, BOUCK & LEE, INC
engineers & scientists

FIGURE 1

02/00 SYR-54-DJH LBR
64584040/64584N02 CDR



LEGEND

---- APPROXIMATE LOCATION OF FORMER STRUCTURES

NOTES:

1. MAP DEVELOPED BASED UPON 1973 USGS 7.5 MINUTE SERIES TOPOGRAPHIC MAP AND HIGH ALTITUDE AERIAL PHOTOGRAPHS TAKEN IN 1955 AND 1974. LOCATIONS OF FORMER STRUCTURES AND LAGOONS ARE APPROXIMATE ONLY.
2. THE LIMITS OF LAGOONS EW AND NS AND ASSOCIATED RESIDUALS REMOVAL VOLUMES ARE BASED ON AN AUGUST 5, 1997 LETTER FROM DR. MARK BROWN OF BLASLAND, BOUCK, & LEE, INC. TO MR. SCOTT CORNELIUS OF THE MICHIGAN DEPARTMENT OF ENVIRONMENTAL CONSERVATION.

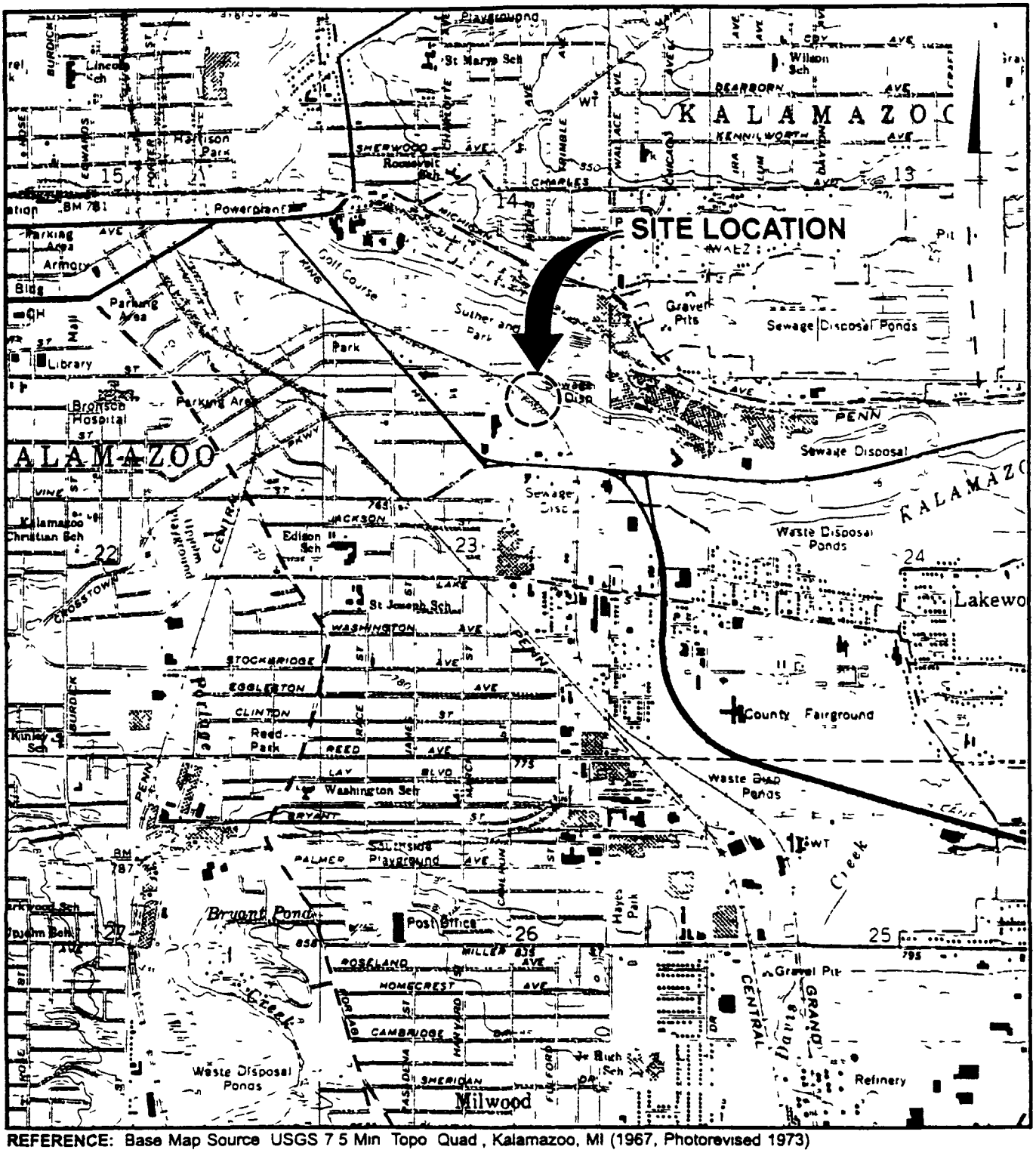
DRAFT

KALAMAZOO RIVER STUDY GROUP
ALLIED PAPER, INC./PORTAGE CREEK/KALAMAZOO RIVER SUPERFUND SITE
FORMER KING MILL PROPERTY

SITE PLAN AND RESIDUALS REMOVAL VOLUME ESTIMATES

BBL BLASLAND, BOUCK & LEE, INC. engineers & scientists

FIGURE 2



REFERENCE: Base Map Source USGS 7 5 Min Topo Quad , Kalamazoo, MI (1967, Photorevised 1973)

2000' 0 2000'

APPROXIMATE SCALE 1" = 2000'

AREA LOCATION

ALLIED PAPER INC./PORTAGE CREEK/KALAMAZOO RIVER SUPERFUND SITE

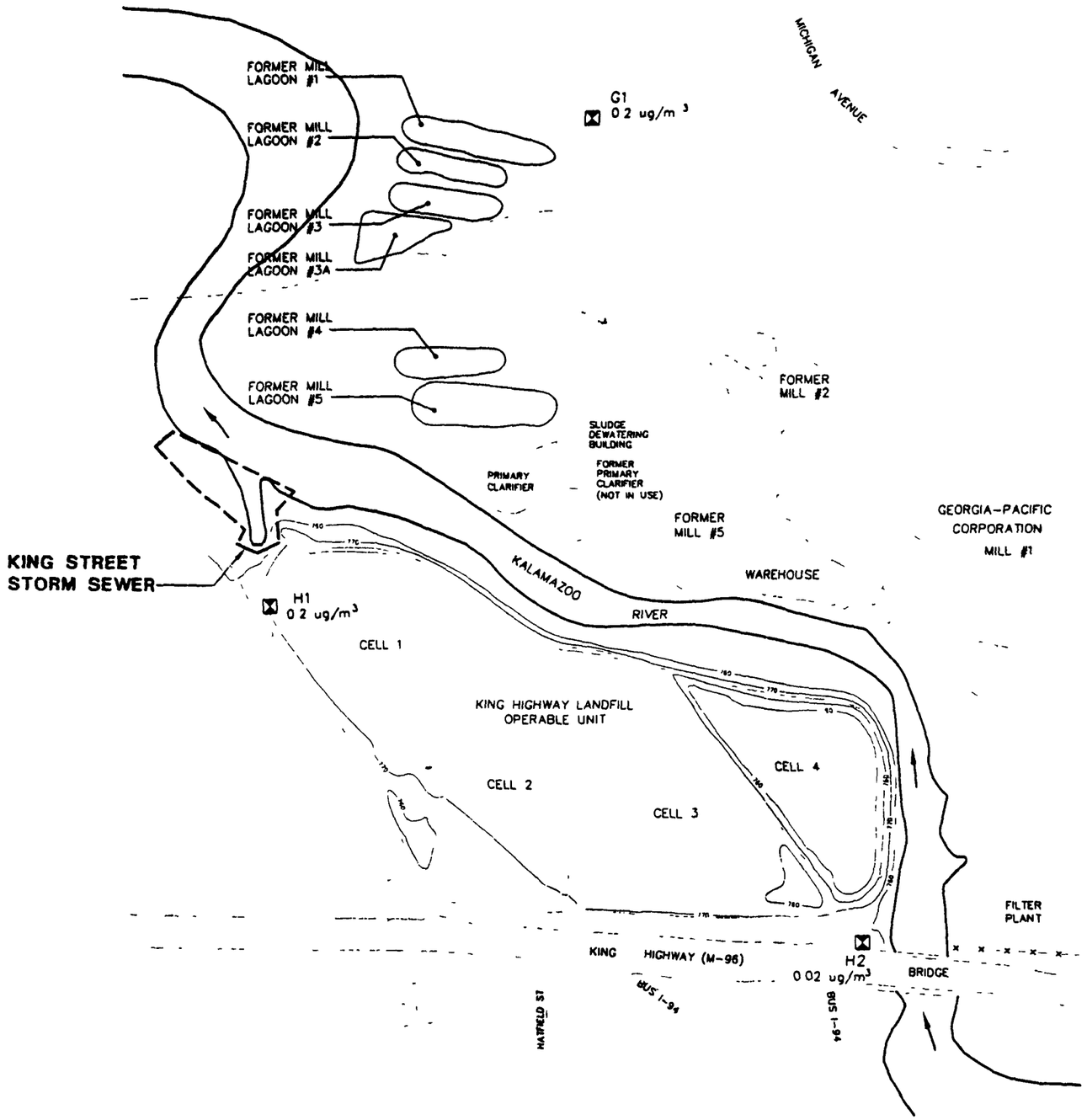
REMOVAL ACTION SUMMARY
KING STREET STORM SEWER

SITE LOCATION MAP

BBL BLASLAND, BOUCK & LEE, INC
engineers & scientists

FIGURE 1

02/00 SYR-54-DJH LBR
64584040/64584N01 CDR



LEGEND

- RAILROAD TRACKS
- LOCATION OF CURRENT STRUCTURES
- FENCE
- RIVER FLOW DIRECTION
- APPROXIMATE LOCATION OF REMEDIAL ACTIVITIES
- APPROXIMATE LOCATION OF AIR MONITORING STATION
- 0 02 ug/m3 PCB ACTION LEVELS

NOTES:

1. BASE MAP INFORMATION IS APPROXIMATE AND IS BASED ON MAPPING PROVIDED BY MICHIGAN DEPARTMENT OF NATURAL RESOURCES, MAPPING DIGITIZED FROM AERIAL PHOTOGRAPHS, AND VARIOUS MEASUREMENTS AND SURVEYS PERFORMED BY BLASLAND, BOUCK, & LEE, INC
2. WATER MONITORING LOCATIONS CHANGED DAILY BASED ON LOCATION OF REMEDIAL ACTIVITIES.

300' 0 300'

APPROXIMATE SCALE: 1" = 300'

ALLIED PAPER, INC /PORTAGE CREEK/ KALAMAZOO RIVER SUPERFUND SITE

REMOVAL ACTION SUMMARY
KING STREET STORM SEWER

PROJECT LOCATION AND ENVIRONMENTAL MONITORING LOCATIONS

BBL BLASLAND, BOUCK & LEE, INC. *engineers & scientists*

FIGURE 2

L ON=*, OFF=ACCESS* "REF"
P STD-PCP/BL
2/11/00 SYR-54-KLN KLN NES
64584040/64584G02 DWG

APPENDIX 29-E

MONARCH HRDL

Polygon	Sample Point	Installation Date	Installed By	Polygon Area (ft2)	Depth Residuals Start (ft)	Depth Residuals End (ft)	Residuals Thickness (ft)	Residuals Volume (ft3)	Residuals Volume (yd3)
1	MLSS-1	1993	BBL	49,205	796 4	789	7 4	364,115	13,486
2	MLSS-2	1993	BBL	60,741	808 7	787 5	21 2	1,287,705	47,693
3	MLSS-3	1993	BBL	46,314	809 1	789 5	19 6	907,760	33,621
4	MLSS-4	1993	BBL	46,138	808 5	789	19 5	899,699	33,322
5	MLSS-5	1993	BBL	23,850	805 6	782 5	23 1	550,937	20,405
7	MW-125	1993	BBL	8,683	799 7	789	10 7	92,910	3,441
8	MW-126	1993	BBL	15,664	800	788	12	187,968	6,962
Polygon Method Total				250,595					158,929

CONFIDENTIAL BUSINESS INFORMAT

WESTERN AREA

Polygon	Sample Point	Installation Date	Installed By	Polygon Area (ft2)	Depth Residuals Start (ft)	Depth Residuals End (ft)	Residuals Thickness (ft)	Residuals Volume (ft3)	Residuals Volume (yd3)
1	WA-8	1993	BBL	*31,562*	2	11.5	9.5	299,839	11,105
2	MW-8/8A	1985/1993	WW/BBL	*27,710*	1.5	12.5	11	304,809	11,289
3	WA-6	1993	BBL	*25,838*	1.5	14	12.5	322,977	11,962
4	MW-7/7B	1985/1993	WW/BBL	*38,836*	----	-----	----		
5	WA-4	1993	BBL	*46,731*	6	10	4	186,924	6,923
6	WA-3	1993	BBL	*46,708*	1.5	16	14.5	677,272	25,084
7	WA-2	1993	BBL	*45,604*	1.75	15.5	13.75	627,056	23,224
8	MW-6	1985	WW	*31,987*	----	----	----		
9	MW-20	1988	WW	*29,500*	----	----	----		
10	WA-1	1993	BBL	*62,855*	3	12.5	9.5	597,124	22,116
11	MW-21	1989	CTI	*171,962*	----	----	----		
12	WA-5	1993	BBL	*100,520*	3.5	23.5	20	2,010,400	74,459
13	MW120A/B	1993	BBL	*10,619*	3	22	19	201,758	7,473
14	WA-7	1993	BBL	*81,247*	3.8	21.5	17.7	1,438,079	53,262
Polygon Method Total				751,680				6,666,238	246,898

CONFIDENTIAL BUSINESS INFORMATION

BRYANT FRDL

Polygon	Sample Point	Installation Date	Installed By	Polygon Area (ft2)	Depth Residuals Start (ft)	Depth Residuals End (ft)	Residuals Thickness (ft)	Residuals Volume (ft3)	Residuals Volume (yd3)
1	DHLB-1	1993	BBL	66,803.707	810.4	794.5	15.9	1,062,179	39,340
2	DHLB-2	1993	BBL	42,209.244	797.5	790.5	7	295,465	10,943
3	DHLB-3	1993	BBL	39,904.162	801.8	794	7.8	311,252	11,528
4	DHLB-4	1993	BBL	---	---	---	---	---	---
5	DHLB-5	1993	BBL	----	----	----	----	----	----
6	DHLB-6	1993	BBL	29,802.514	798	786.5	11.5	342,729	12,694
Polygon Method Total									74,505

CONFIDENTIAL BUSINESS INFORMATION

BRYANT HRDL

Polygon	Sample Point	Installation Date	Installed By	Polygon Area (ft2)	Depth Residuals Start (ft)	Depth Residuals End (ft)	Residuals Thickness (ft)	Residuals Volume (ft3)	Residuals Volume (yd3)
1	SB507	1989	LTI	144,072	806.5	801	5.5	792,396	29,348
2	SB503	1989	LTI	204,952	812	802.5	9.5	1,947,040	72,113
3	SB502	1989	LTI	58,084	806.3	795	11.3	656,352	24,309
4	SB501	1989	LTI	54,781	803.5	794.5	9	493,027	18,260
5	BHDL 123	1993	BBL	29,824	800.4	791	9.4	280,349	10,383
6	SB505	1989	LTI	40,684	803	792.5	10.5	427,178	15,821
7	SB506	1989	LTI	39,505	803.5	793.5	10	395,051	14,632
8	BHDL 22	1993	BBL	25,307	804	792	12	303,683	11,248
9	MW121	1993	BBL	55,058	801.3	792.5	8.8	484,510	17,945
Polygon Method Total									214,059

CONFIDENTIAL BUSINESS INFORMATION

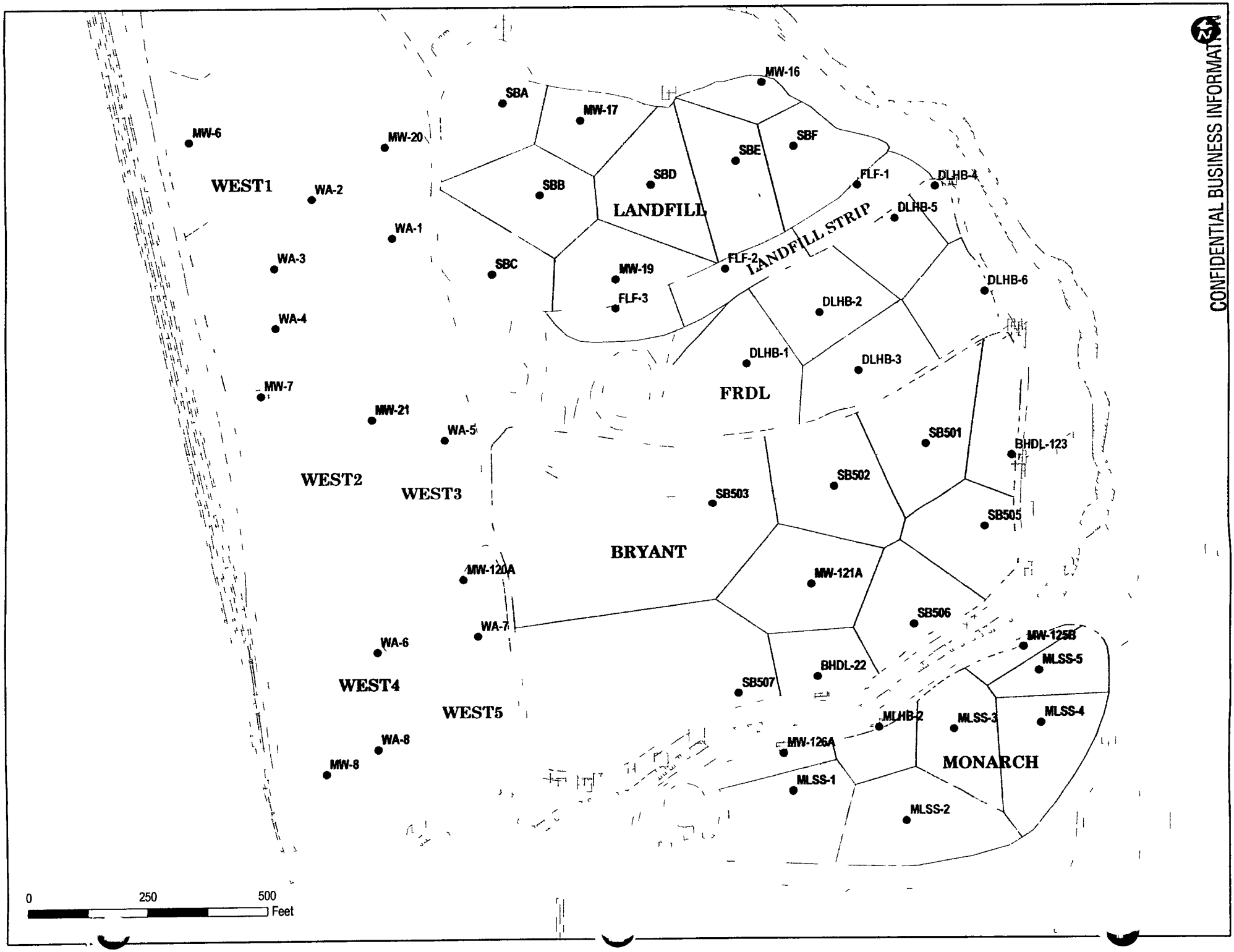
FORMER TYPE III LANDFILL

Polygon	Sample Point	Installation Date	Installed By	Polygon Area (ft2)	Depth Residuals Start (ft)	Depth Residuals End (ft)	Residuals Thickness (ft)	Residuals Volume (ft3)	Residuals Volume (yd3)
1	SBA	1988	WW	46175	---	---	----		
2	SBB	1988	WW	46014	0	12	12	552,172	20,451
2	SBB	1988	WW	46014	27 5	32 5	4 5	207,064	7,669
3	SBC3	1988	WW	39260	2	19 5	17 5	687,058	25,447
5	MW-19D	1988	WW	39740	1	8 5	7 5	298,050	11,039
5	MW-19D	1988	WW	39740	13	22	9	357,659	13,247
8	SBF	1988	WW	41177	8	16 2	8 2	337,651	12,506
9	MW-16	1988	WW	15308	2	17 5	15 5	237,274	8,788
10	SBE	1988	WW	46755	1 5	13	11 5	537,678	19,914
11	SBD	1988	WW	49282	0	8 5	8 5	418,896	15,515
12	MW-17	1988	WW	29932	12	19	7	209,523	7,760
Polygon Method Total									142,334

STRIP BETWEEN THE LANDFILL AND THE FRDLs

Polygon	Sample Point	Installation Date	Installed By	Polygon Areas (ft2)	Depth Residuals Start (ft)	Depth Residuals End (ft)	Residuals Thickness (ft)	Residuals Volume (ft3)	Residuals Volume (yd3)
7	FLF-1	1993	BBL	25,691	794	788	6	154,144	5,709
6	FLF-2	1993	BBL	23,747	801 5	791 5	10	237,471	8,795
4	FLF-3	1993	BBL	20,390	812 5	806 5	6	122,337	4,531
Polygon Method Total									19,035

CONFIDENTIAL BUSINESS INFORMATION


CONFIDENTIAL BUSINESS INFORMATION
MW-16
SBA
MW-17
MW-6
MW-20
SBE
SBF
WEST1
WA-2
SBB
SBD
FLF-1
DLHB-4
LANDFILL
DLHB-5
LANDFILL STRIP
WA-1
WA-3
SBC
MW-19
FLF-2
DLHB-6
FLF-3
DLHB-2
WA-4
DLHB-1
DLHB-3
MW-7
FRDL
MW-21
WA-5
SB501
BHDL-123
WEST2
WEST3
SB502
SB503
SB505
BRYANT
MW-120A
MW-121A
SB506
WA-7
MW-125B
WA-6
MLSS-5
BHDL-22
WEST4
SB507
WEST5
MLHB-2
MLSS-3
MLSS-4
WA-8
MW-126A
MW-8
MONARCH
MLSS-1
MLSS-2
0
250
500
Feet

MEMORANDUM

BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

To: Doug Cowin

Date: 1/3/01

From: David Lay

cc: Bill McCune, Keith White, & File (645.51)

Re: Back-Calculation of Residual Volumes at the Allied OU Study Areas

As requested, I have completed a review of the applicable Allied OU files and did not locate the original notes/calculations documenting the residual volume estimates incorporated within Technical Memorandum #7 and the Allied OU RI Report. It is assumed that the reported volumes were estimated by multiplying the size of each study area by the thickness of residuals encountered. To confirm that these estimates are reasonable and consistent with the site data, the size of the study area (square yards) and volume of residual (cubic yards) were used to back-calculate the average residual thickness (yards) for each study area. The back-calculated thicknesses were then compared to the average residual thickness provided on the geologic boring logs for monitoring wells and/or soil borings located within each study area. The attached table summarizes the calculations. The boring logs used to determine the average residual thickness in each study area are as follows:

- Bryant HRDL = BHDL-22, BHDL-123, and MW-121A/B.
- Bryant FRDLs = DLHB-1, DLHB-2, DLHB-3, DLHB-4, DLHB-5, and DLHB-6.
- Former Type III Landfill = FLF-1, FLF-2, FLF-3, SB-C3, MW-5R, MW-17A/B, SB-A, SB-B, SB-D, SB-E, and SB-F.
- Monarch HRDL = MLSS-1, MLSS-2, MLSS-3, MLSS-4, and MLSS-5.
- Western Disposal Area = MW-7B, MW-8A, MW-120A/B, WA-1, WA-2. WA-3, WA-4, WA-5, WA-6, WA-7, and WA-8.

It should be noted that the area of Bryant FRDL #5 was originally included within the Bryant HRDL during residual volume calculations for Technical Memorandum #7, whereas Bryant FRDL #5 is identified as being associated with the Bryant FRDLs study area in the Allied OU RI Report.

The re-calculated volumes confirm that the original estimated volumes are reasonable as the difference between the calculated and observed residual thicknesses were small.

DWL/dwl

6723 Towpath Road, P.O. Box 66 • Syracuse, NY 13214-0066 • Telephone (315) 446-9120 • Fax (315) 446-8053

TABLE 1

ALLIED PAPER, INC.\PORTAGE CREEK\KALAMAZOO RIVER SUPERFUND SITE

VOLUME OF RESIDUAL CALCULATIONS

Study Area	Estimated Volume of Residual (Cubic Yards)[1]	Size of Area[2] (Square Yards)	Back-Calculated Thickness of Residual (Yards)	Average Thickness of Residual from Boring Logs (Yards)	Difference Between Residual Thicknesses (Yards) (Calculated - Observed)
Bryant HRDL	390,000	82,170	4.7	4.3	0.4
Bryant FRDLs	54,000	24,310	2.2	2.3	-0.1
Western Disposal Area	380,000	87,120	4.4	3.8	0.6
Former Type III Landfill	140,000	62,920	2.2	2.3	-0.1
Monarch HRDL	170,000	29,040	5.9	6.0	-0.1

Notes:

[1] - Estimated volume of residual from the Allied OU RI Report.

[2] - For comparison purposes, the area of Bryant FRDL #5 (19,250 square yards) was subtracted from Bryant FRDLs, and added to Bryant HRDL for the calculations above. This was done because the area of Bryant FRDL #5 was originally included within the Bryant HRDL during residual volume calculations for Technical Memorandum #7, and currently Bryant FRDL #5 is associated with the Bryant FRDLs study area in the Allied OU RI Report.

APPENDIX 29-G

Site Area	BBL PCB Mass Estimate (kg)	Thiessen Polygon PCB Mass Estimate (kg)
Monarch HRDL	1,304	1,228
Bryant HRDL	12,804	6,423
Bryant FRDL	98	139
Former Type III Landfill, including the Landfill Perimeter Strip	2,858	2,769
Western Area	24,774	6,611
Bryant Mill Pond (a)		3,864
A-Site (c)	4,700	5,779(b)
Area East of Davis Creek (d)		7
Area South of A-Site Berm (c)		14

(a) The PCB mass in the Bryant Mill Pond was placed in the Bryant HRDL/FRDLs during the Bryant Mill Pond Sediment Removal Action.

(b) Georgia-Pacific (BBL) calculation of PCB mass using Thiessen polygon method (Mediation Questionnaire Response, January 2001).

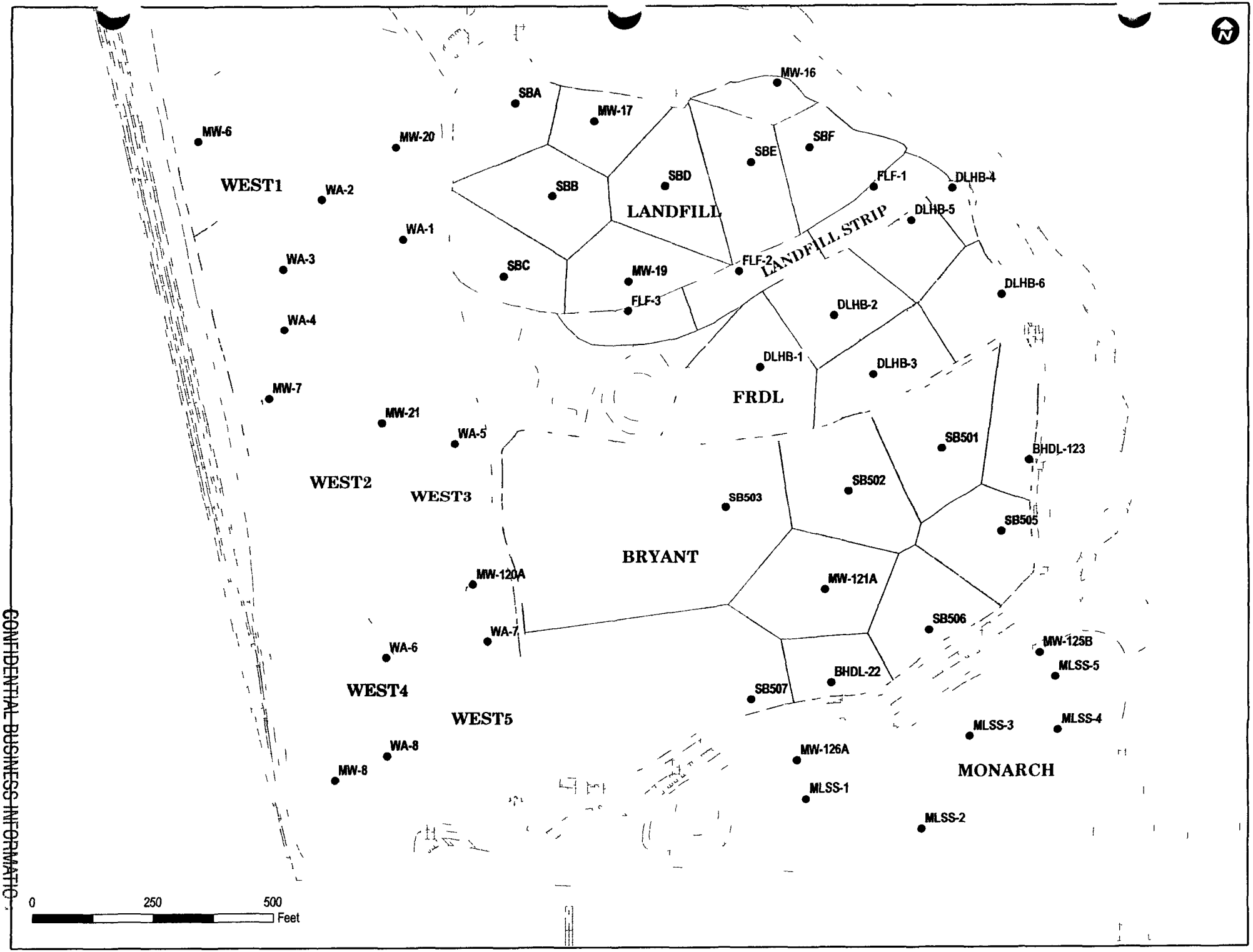
(c) The PCB mass estimate provided by Allied for the A-Site are the same as those provided by Georgia Pacific. These volumes include the entire volume of residuals at the A-Site, covering periods of use by Allied and Georgia Pacific.

(d) Allied believes it is responsible for approximately 50% of the A-Site and 100% of the Area East of Davis Creek and the Area South of the A-Site Berm.

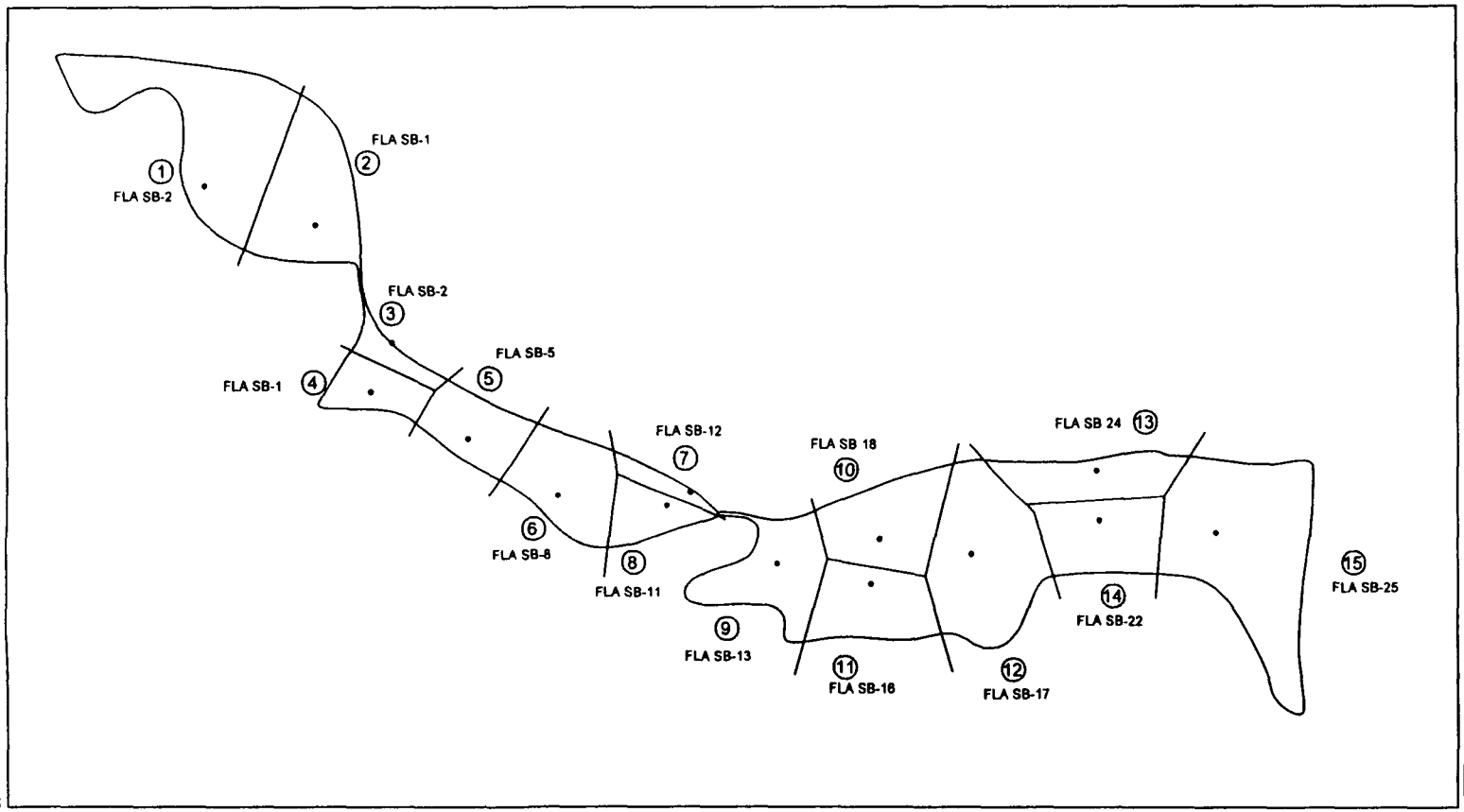
COMPARISON OF PCB MASS ESTIMATES

	BBL						LTI									
	Area (ft2)	Volume (yd3)	Residual Thickness (ft)	Bulk Density (lb/ft3)	PCB Concentration (mg/kg)	PCB Mass (kg)	Area (ft2)	Volume (yd3)	PCB Concentration Range (mg/kg)	Bulk Density #1 (lb/ft3)	PCB Mass (kg)	Bulk Density #2 Range (lb/ft3)	PCB Mass (kg)	Sensitivity Analysis Min PCB Mass (kg)	Sensitivity Analysis Max PCB Mass (kg)	Root Mean Square Error
BRYANT HRDL	739,530	390,000	13	20 2	134	12,804	652,267	214,059	0 01-475 06	22 2	6,423	12-36	5,342	3,788	11,437	1,966
BRYANT FRDL	218,790	54,000	7	24 9	5	98	178,720	74,505	0 29-33 05	24 9	139	19-23	125	13	235	71
MONARCH HRDL	261,360	170,000	18	20 0	31	1,304	250,595	158,929	6 21-57 66	20	1,228	9-16	794	933	1,228	92
LANDFILL	566 280	120 000	7	25 4	67	2,858	463,049	161,369	0 25-2000	22 2	2,769	23-58	4,957	495	5 006	2 163
WESTERN AREA	784,080	380 000	11	25 4	218	24,774	751,680	246,386	0 275-748 67	22 2	6,611	17-39	9,019	5,101	18,158	3,393
TOTAL		1 114 000				41,838		855,248			17,170		20,237	10,330	36 064	

CONFIDENTIAL BUSINESS INFORMATION



CONFIDENTIAL BUSINESS INFORMATION



100 0 100

Approximate Scale In Feet

Note FLA SB-7 - Residuals with PCB's not used because out of area in question

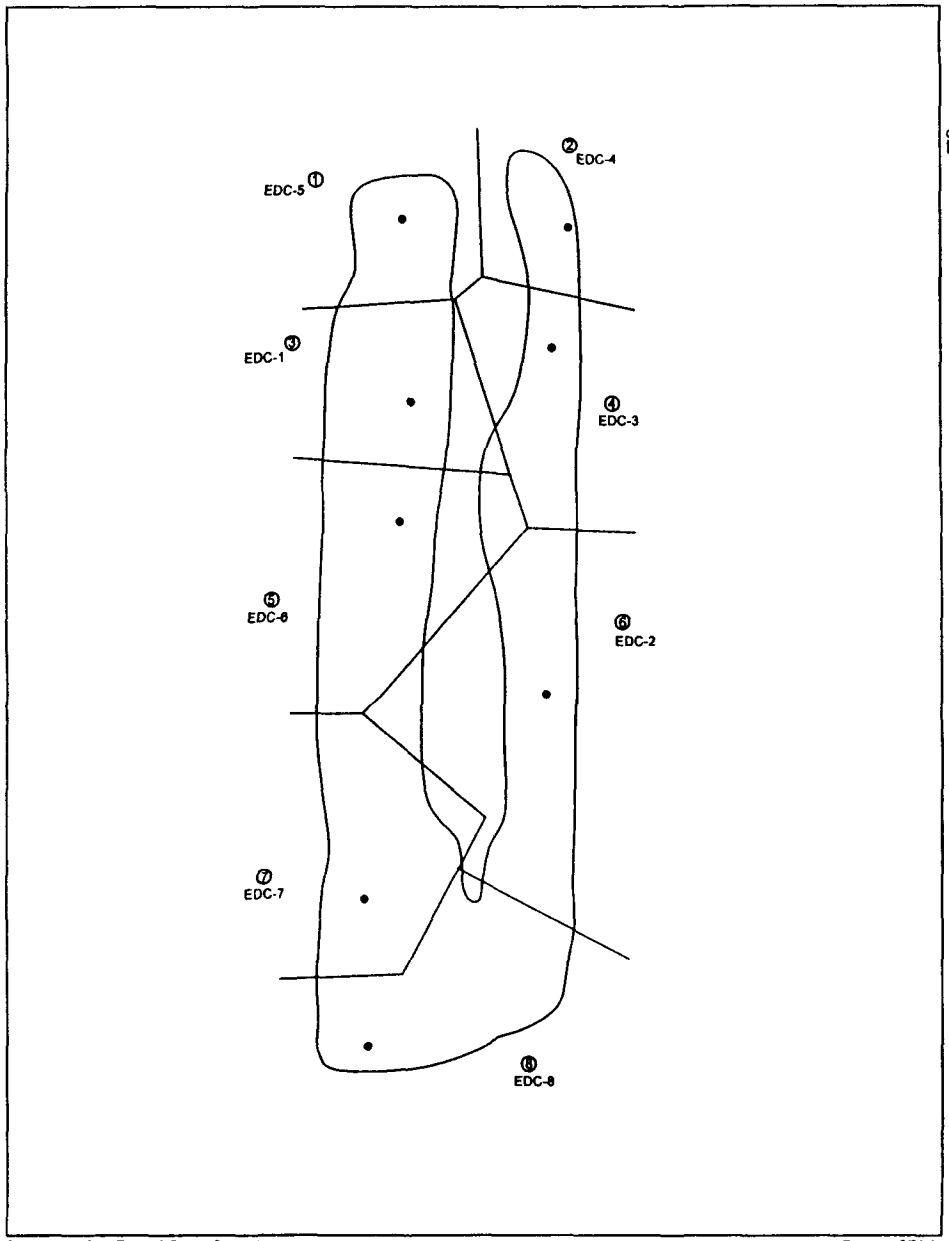
AREA SOUTH OF A-SITE BERM

LTI Environmental Engineering
A Division of Limno-Tech, Inc.
501 Avis Dr Ann Arbor MI 48108

Filename J:\JD7\Drawings\A Site_south_of_berm.dgn

Revised 8/22/01

CONFIDENTIAL BUSINESS INFORMATION



0 75 150 225 300

APPROXIMATE SCALE IN FEET

AREA EAST OF DAVIS CREEK

LTI Environmental Engineering
A Division of Limno-Tech, Inc
501 Avis Dr, Ann Arbor, MI 48108

Filename A-Site_East_of_Davis_Creek.dgn

Revison 8/22/01

CONFIDENTIAL BUSINESS INFORMATION

South of A-Site Berm

Polygon	Sample Point	Installation Date	Installed By	Polygon Area (ft2)	Depth Residuals Start (ft)	Depth Residuals End (ft)	Residuals Thickness (ft)	Residuals Volume (ft3)	Residuals Volume (cm3)	Residuals Volume (yd3)	Bulk Density #1 (lb/ft3)	Soil Mass (lb)	Soil Mass (kg)	Bulk Density #2 (lb/ft3)	Soil Mass (lb)	Soil Mass (kg)	Average PCB Conc (mg/kg)	#1 PCB Mass (kg)	#2 PCB Mass (kg)
1	WA/FLA-SB	1999	BBL	16,800	--	--	0	0		0 00	29 2								
2	WA/FLA-SB	1999	BBL	10,400	--	--	0	0		0	29 2	0	0						
3	FLA-SB-2	1999	BBL	2,000	--	--	0	0		0	29 2	0	0						
4	FLA-SB-1	1999	BBL	3,200	--	--	0	0		0	29 2	0	0						
5	FLA-SB-5	1999	BBL	5,600	--	--	0	0		0	29 2	0	0						
6	FLA-SB-8	1999	BBL	7,200	--	--	0	0		0	29 2	0	0						
7	FLA-SB-12	1999	BBL	1,600	0	4 8	4 8	7,680	2 17E+08	284	29 2	224,256	101,935	25	188,985	85,723	37	4	3
8	FLA-SB-11	1999	BBL	3,200	--	--	0	0		0	29 2	0	0						
9	FLA-SB-13	1999	BBL	6,800	--	--	0	0		0	29 2	0	0						
10	FLA-SB-18	1999	BBL	8,000	0	3 1	3 1	24,800	7 02E+08	919	29 2	724,160	329,164	25	610,264	276,814	25	8	7
11	FLA-SB-16	1999	BBL	7,600	--	--	0	0		0	29 2	0	0						
12	FLA-SB-19	1999	BBL	14,000	--	--	0	0		0	29 2	0	0						
13	FLA-SB-24	1999	BBL	6,000	0	2	2	12,000	3 4E+08	444	29 2	350,400	159,273	43	516,177	234,136	14	2	3
14	FLA-SB-22	1999	BBL	7,200	--	--	0	0		0	29 2	0	0						
15	FLA-SB-25	1999	BBL	20,400	--	--	0	0		0	29 2	0	0						
Polygon Method Total				103,200						1,647								14	13

CONFIDENTIAL BUSINESS INFORMATION

BRYANT HRDL

BULK DENSITY #1

Polygon	Sample Point	Installation Date	Installed By	Polygon Area (ft2)	Depth Residuals Start (ft)	Depth Residuals End (ft)	Residuals Thickness (ft)	Residuals Volume (ft3)	Residuals Volume (yd3)	Bulk Density (lb/ft3)	Soil Mass (lb)	Soil Mass (kg)	BBL Avg PCB Conc (mg/kg)	Average PCB Conc (mg/kg)	PCB Mass (kg)
1	SB507	1989	LTI	144,072	806 5	801	5 5	792,396	29,348	22 2	17,591,197	7,995,999	134 00	76 00	608
2	SB503	1989	LTI	204,952	812	802 5	9 5	1,947,040	72,113	22 2	43,224,284	19,647,402	134 00	*0 01*	0 19
3	SB502	1989	LTI	58,084	806 3	795	11 3	656,352	24,309	22 2	14,571,020	6,623,191	134 00	475 06	3,146
4	SB501	1989	LTI	54,781	803 5	794 5	9	493,027	18,260	22 2	10,945,195	4,975,088	134 00	70 19	349
5	BHDL 123	1993	BBL	29,824	800 4	791	9 4	280,349	10,383	22 2	6,223,758	2,828,981	134 00	110 19	312
6	SB505	1989	LTI	40,684	803	792 5	10 5	427,178	15,821	22 2	9,483,359	4,310,618	134 00	41 50	179
7	SB506	1989	LTI	39,505	803 5	793 5	10	395,051	14,632	22 2	8,770,132	3,986,423	134 00	63 36	253
8	BHDL 22	1993	BBL	25,307	804	792	12	303,683	11,248	22 2	6,741,769	3,064,440	134 00	166 42	510
9	MW121	1993	BBL	55,058	801 3	792 5	8 8	484,510	17,945	22 2	10,756,127	4,889,148	134 00	218 09	1,066
Polygon Method Total				652,267					214,059						6,423
BBL Total				739,530		BBL avg thick	12 9		390,000						12,804

BULK DENSITY #2

Polygon	Sample Point	Installation Date	Installed By	Polygon Area (ft2)	Depth Residuals Start (ft)	Depth Residuals End (ft)	Residuals Thickness (ft)		Residuals Volume (ft3)	Residuals Volume (yd3)	Bulk Density (lb/ft3)	Soil Mass (lb)	Soil Mass (kg)	Average PCB Conc (mg/kg)	PCB Mass (kg)
1	SB507	1989	LTI	144,072	806 5	801	5 5	2 24E+10	792,396	29,348	13	10,465,781	4,747,247	76 00	361
2	SB503	1989	LTI	204,952	812	802 5	9 5	5 51E+10	1,947,040	72,113	19	36,583,319	16,594,085	*0 01*	0 16
3	SB502	1989	LTI	58,084	806 3	795	11 3	1 86E+10	656,352	24,309	19	12,332,333	5,593,910	475 06	2,657
4	SB501	1989	LTI	54,781	803 5	794 5	9	1 4E+10	493,027	18,260	19	9,263,578	4,201,932	70 19	295
5	BHDL 123	1993	BBL	29,824	800 4	791	9 4	7 94E+09	280,349	10,383	15	4,243,551	1,924,862	110 19	212
6	SB505	1989	LTI	40,684	803	792 5	10 5	1 21E+10	427,178	15,821	36	15,179,884	6,885,550	41 50	286
7	SB506	1989	LTI	39,505	803 5	793 5	10	1 12E+10	395,051	14,632	12	4,808,727	2,181,224	63 36	138
8	BHDL 22	1993	BBL	25,307	804	792	12	8 6E+09	303,683	11,248	21	6,523 797	2,959,175	166 42	492
9	MW121	1993	BBL	55,058	801 3	792 5	8 8	1 37E+10	484,510	17,945	19	9,103,559	4,129,347	218 09	901
Polygon Method Total				652,267						214,059					**5,342**

CONFIDENTIAL BUSINESS INFORMATION

FORMER TYPE III LANDFILL

BULK DENSITY #1

Polygon	Sample Point	Installation Date	Installed By	Polygon Area (ft2)	Depth Residuals Start (ft)	Depth Residuals End (ft)	Residuals Thickness (ft)	Residuals Volume (ft3)	Residuals Volume (yd3)	Bulk Density (lb/ft3)	Soil Mass (lb)	Soil Mass (kg)	Average PCB Conc (mg/kg)	PCB Mass (kg)
1	SBA	1988	WW	---	---	---	----	---	---					
2	SBB	1988	WW	46,014	0	12	12	552,172	20,451	22 2	12,258,209	5,571,913	0 25	1 3930
2	SBB	1988	WW	46,014	27 5	32 5	4 5	207,064	7,669	22 2	4,596,829	2,089,468	0 25	0 5224
3	SBC3	1988	WW	39,260	2	19 5	17 5	687,058	25,447	22 2	15,252,696	6,933,044	0 25	3 6745
5	MW-19D	1988	WW	39,740	1	8 5	7 5	298,050	11,039	22 2	6,616,701	3,007,591	0 53	0 2978
5	MW-19D	1988	WW	39,740	13	22	9	357,659	13,247	22 2	7,940,041	3,609,109	0 099	0 3573
8	SBF	1988	WW	41,177	8	16 2	8 2	337 651	12,506	22 2	7,495,858	3,407,208	0 25	0 8518
9	MW-16	1988	WW	15,308	2	17 5	15 5	237,274	8,788	22 2	5,267,488	2,394,313	0 25	0 5986
10	SBE	1988	WW	46,755	1 5	13	11 5	537,678	19,914	22 2	11,936,459	5 425,663	0 25	1 3564
11	SBD	1988	WW	49,282	0	8 5	8 5	418,896	15,515	22 2	9,299,490	4 227,041	0 25	1 0568
12	MW-17	1988	WW	29,932	12	19	7	209,523	7,760	22 2	4,651,419	2,114,282	0 25	0 5286
Polygon Method Total				393,222				3,843,027	142,334					**10.64**

BULK DENSITY #2

Polygon	Sample Point	Installation Date	Installed By	Polygon Area (ft2)	Depth Residuals Start (ft)	Depth Residuals End (ft)	Residuals Thickness (ft)	Residuals Volume (cm3)	Residuals Volume (ft3)	Residuals Volume (yd3)	Bulk Density (lb/ft3)	Soil Mass (lb)	Soil Mass (kg)	Average PCB Conc (mg/kg)	PCB Mass (kg)
1	SBA	1988	WW	---	---	---	----		---	---					
2	SBB	1988	WW	46,014	0	12	12	1 56E+10	552,172	20,451	46	25,258,329	11,457,103	0 25	2 86
2	SBB	1988	WW	46,014	27 5	32 5	4 5	5 86E+09	207,064	7,669	58	12,027,009	5,455,416	0 25	1 36
3	SBC3	1988	WW	39,260	2	19 5	17 5	1 95E+10	687,058	25,447	23	16,039,953	7,275,675	0 25	1 82
5	MW-19D	1988	WW	39,740	1	8 5	7 5	8 44E+09	298,050	11,039	46	13,813,179	6,265,617	0 53	3 32
5	MW-19D	1988	WW	39,740	13	22	9	1 01E+10	357,659	13,247	46	16,575,815	7,518,741	0 099	0 74
8	SBF	1988	WW	41,177	8	16 2	8 2	9 56E+09	337,651	12,506	52	17,611,696	7,988,613	0 25	2 00
9	MW-16	1988	WW	15,308	2	17 5	15 5	6 72E+09	237,274	8,788	46	10,996,532	4,987,994	0 25	1 25
10	SBE	1988	WW	46,755	1 5	13	11 5	1 52E+10	537,678	19,914	54	28,768,165	13,049,154	0 25	3 26
11	SBD	1988	WW	49,282	0	8 5	8 5	1 19E+10	418,896	15,515	53	22,129,564	10,037,905	0 25	2 51
12	MW-17	1988	WW	29,932	15	18	7	5 93E+09	209,523	7,760	46	9,710,413	4,404,614	0 25	1 10
Polygon Method Total				393,222					3,843,027	142,334					**20**

CONFIDENTIAL BUSINESS INFORMATION

AREA EAST OF DAVIS CREEK

Polygon	Sample Point	Installation Date	Installed By	Polygon Area (ft2)	Depth Residuals Start (ft)	Depth Residuals End (ft)	Residuals Thickness (ft)	Residuals Volume (ft3)	Residuals Volume (cm3)	Residuals Volume (yd3)	Bulk Density #1 (lb/ft3)	Soil Mass (lb)	Soil Mass (kg)	Bulk Density #2 (lb/ft3)	Soil Mass (lb)	Soil Mass (kg)	Average PCB Conc (mg/kg)	#1 PCB Mass (kg)	#2 PCB Mass (kg)
1	EDC-5	1993	BBL	11,475	0	0 5	0 5	5,738	1 62E+08	213	29 2	167,535	76,152	25	145,072	65,804	11	1	1
2	EDC-4	1993	BBL	8,721	0	0 5	0 5	4,361	1 23E+08	162	29 2	127,327	57,876	31	135,459	61,444	4 8	0	0
3	EDC-1	1993	BBL	18,630	0	0 5	0 5	9,315	2 64E+08	345	29 2	271,998	123,635	43	400,683	181,748	36	4	7
4	EDC-3	1993	BBL	13,770	--	--	0	0		0	29 2	0	0					0	
5	EDC-6	1993	BBL	27,540	0	0 5	0 5	13,770	3 9E+08	510	29 2	402,084	182,765	34	471,197	213,733	12	2	3
6	EDC-2	1993	BBL	32,130	--	--	0	0		0	29 2	0	0					0	
7	EDC-7	1993	BBL	21,573	0	0 5	0 5	10,787	3 05E+08	400	29 2	314,966	143,166	34	369,104	167,425	1 0115	0	0
8	EDC-8	1993	BBL	21,114	0	0 5	0 5	10,557	2 99E+08	391	29 2	308,264	140,120	33	352,737	160,001	0 078	0	0
Polygon Method Total				143,478						2,020								7	10

CONFIDENTIAL BUSINESS INFORMATION

BBL
ASLANIAN, BOUCEK & LEE, INC.
engineers & scientists

DRAFT

SUBJECT	PROJ. NO	BY	DATE	SHEET
KHL - AVERAGE DRY DENSITY OF RESIDUALS CALCULATIONS	645.24.500	JCH	6/99	1/4

CALCS. BY _____ DATE _____ CHECKED BY _____ DATE _____

Cell 4

$w_{AVG} = 185.76\ \%$

void ratio = 4.58

avg total unit weight = 74.43

$\gamma_T = (1+w)\gamma_d$

$\gamma_D = \frac{\gamma_T}{1+w} = \frac{74.43}{1+1.86} = 26.0\ pcf\ (lb/ft^3)$

Cells 1, 2, 3

$w_{AVG}(\%) = 171.75$

$G_s = 2.072$

$\gamma_s = G_s \gamma_w$

$= 2.072(62.4) = 129.3 = \frac{W_s}{V_s}$

$V_s = 2.86 \times 10^{-3}$

$V_w = 0.01\ ft^3$

Assume $W_T = 1$

$W_w + W_s = 1$

$1.718 W_s + W_s = 1$

$2.718 W_s = 1$

$W_s = .37$

$W_w = .63$

$\gamma_w = \frac{W_w}{V_w} = \frac{.63}{62.4} = .01$

$\gamma_{dry} = \frac{W_s}{V_T} = \frac{.37}{2.86 \times 10^{-3} + .01} = 28.8\ lb/ft^3$

$\text{avg } \gamma_{dry} = \frac{26.0 + 28.8}{2} = \boxed{27.4\ lb/ft^3} = KHL$

BL
SOUCK & LEE INC.
rs & scientists

DRAFT

CT	PROJ. NO.	BY	DATE	SHEET
arch HRDL	645.24.500	JC4	6/98	2/4

CS BY _____; DATE _____ CHECKED BY _____ DATE _____

MLSS-2

Assume $W_T = 1$

G_s (avg) $= 1.7$

$w_{avg} = 291.7\%$

$S = 1$

$W_w + W_s = 1$

$2.917 W_s + W_s = 1$

$\gamma_s = G_s \gamma_w$

$\gamma_s = 1.7(62.4) = 106.1 = \frac{W_s}{V_s}$

$3.917 W_s = 1$

$W_s = 0.26$

$W_w = 0.74$

$\gamma_w = \frac{W_w}{V_w} =$

$V_s = 2.45 \times 10^{-3}\ ft^3$

$V_w = 0.01\ ft^3$

$V_w = \frac{W_w}{\gamma_w} = \frac{.74}{62.4} = .01\ ft^3$

$\gamma_{dry} = \frac{W_s}{V_T} = \frac{0.26}{2.45 \times 10^{-3} + 0.01} = \underline{20.9\ pcf}$

MLSS-3

$w_{avg} = 344\%$

$S = 1$

$\gamma_s = G_s \gamma_w$

$\gamma_s = 1.75(62.4) = 109.2 = \frac{W_s}{V_s}$

$W_w + W_s = 1$

$3.44 W_s + W_s = 1$

$4.44 W_s = 1$

$W_s = .23$

$W_w = .77$

$V_s = 2.11 \times 10^{-3}\ ft^3$

$V_w = 0.01\ ft^3$

$\gamma_{dry} = \frac{0.23}{2.11 \times 10^{-3} + .01} = 19.0\ pcf$

avg $\gamma_{dry} = \frac{20.9 + 19.0}{2} = \underline{20.0\ pcf}$

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Engineers & Scientists

DRAFT

SUBJECT	PROJ NO	BY	DATE	SHEET
FRDLs	645.24.500	JCV	6/98	3/4

CALCS BY _____ DATE _____ CHECKED BY _____ DATE _____

DLHB-1

Assume $W_T = 1$

$w(\%) = 232$

$w_w + w_s = 1$

$3.32 w_s = 1$

$G_s = 2.33$

$2.32 w_s + w_s = 1$

$w_s = .30$

$\gamma_s = G_s \gamma_w$

$w_w = .70$

$\gamma_s = 2.33(62.4) = 145.4 = \frac{w_s}{V_s}$

$V_w = \frac{w_w}{\gamma_w} = \frac{.70}{62.4}$

$V_s = 2.062 \times 10^{-3}\ ft^3$

$= .01\ ft^3$

$V_w = .01\ ft^3$

$\gamma_{dry} = \frac{w_s}{V_T} = \frac{0.30}{2.062 \times 10^{-3} + .01} = 24.9\ lb/ft^3$

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BASLAND BOLICK & LEE, INC.
engineers & scientists

DRAFT

SUBJECT	PROJ NO.	BY	DATE	SHEET
A-Site	645.24.500	JCV	6/98	4/4

CALCS. BY _____, DATE _____ CHECKED BY _____, DATE _____

$\omega_{AVG}(\%) = 156$

$G_s = 1.864$

$\gamma_s = G_s \gamma_w$

$= 1.864(624) = 1163 = \frac{W_s}{V_s}$

$V_s = 3.35 \times 10^{-3}$

$2.56 W_s + W_s = 1$

$2.56 W_s = 1$

$W_s = .39$

$W_w = .61$

$\gamma_w = \frac{W_w}{V_w} = \frac{63}{62.4} = .01$

$V_w = 0.01 ft^3$

$\gamma_{dry} = \frac{W_s}{V_t} = \frac{.39}{3.35 \times 10^{-3} + .01} = 29.2 \ lb/ft^3$

Memorandum

PRIVILEGED & CONFIDENTIAL

TO: Jon DeWitt

DATE: September 5, 1996

PROJECT: JD7

FROM: Tad Slawecki

COPIES: GWP

SUBJECT: Bryant Mill Pond PCB Impacted Sediment Volume Estimates

The Bryant Mill Pond PCB impacted sediment estimation program developed by LTI was used to estimate the volume PCB impacted sediments in the former mill pond. This memo presents the estimates and describes their calculation.

Estimated volumes

The program calculated that **88,049 cubic yards** of former pond sediments contained PCBs, or overlaid sediments containing PCBs. The total volume of sediments is calculated by the program as **163,220 cubic yards**. The total mass of PCBs in the sediments is calculated by the program to be **8,502 pounds**. Calculations for these estimates and the data are explained at the end of this memo.

Methods

The computer program used digitized information about the extent of the pond, the current stream course, and locations, depths, and analytical results of sediment cores to calculate sediment volumes with high precision. Figure 1 shows the location of the sediment core samples in the Bryant Mill Pond area.

Theissen polygons were used to assign each part of the sediment area to the nearest core

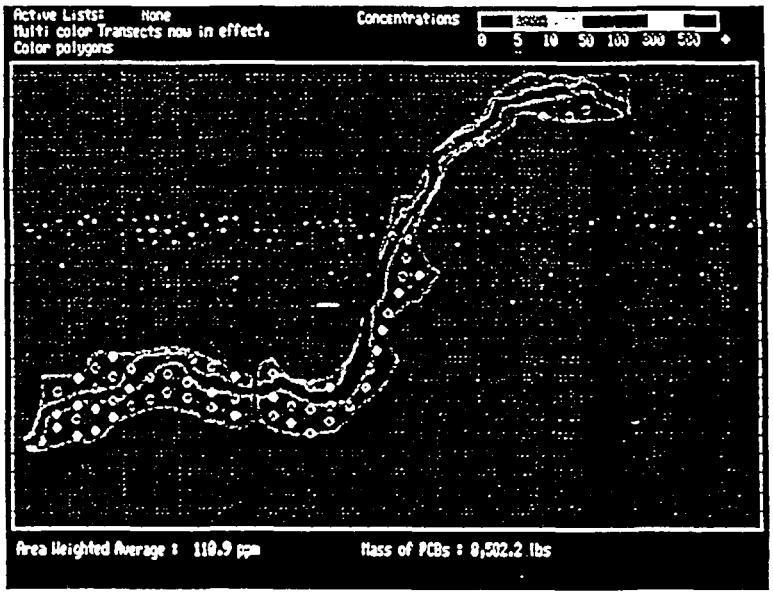

Figure 1. Location of sediment core samples.

sample location This is a conservative approach which makes the extremely simple assumption that the concentration of PCBs at an arbitrary point in the system is the same as the concentration at the sampling location closest to the point Figure 2 shows the Theissen polygons and sample numbering used

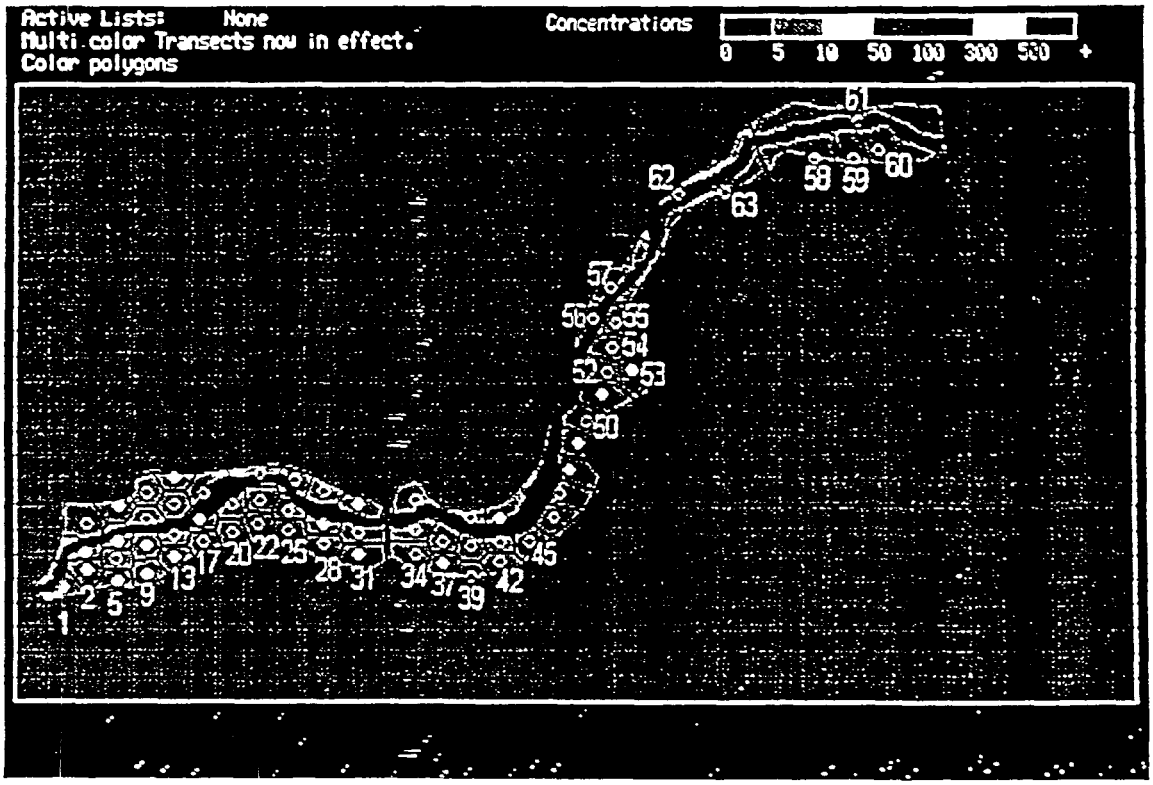

Figure 2. Sample location numbering and Thiessen polygons

The volume of impacted sediment was calculated by summing up the volume for each Thiessen polygon As shown in Figure 3, the depth of of the impacted sediments was determined by finding the deepest point in the associated sediment core with a detectable PCB concentration and multiplying that depth by the area of the Thiessen polygon

Total volume [illegible] cubic yards

Average depth of excavation 2 89 feet

Boring	Depth (ft)	Area (sq ft)	Volume (cu yd)	Boring	Depth (ft)	Area (sq ft)	Volume (cu yd)	Boring	Depth (ft)	Area (sq ft)	Volume (cu yd)
1	6 0	17044 0	3195 4	22	5 0	2235 0	2265	43	4 0	9210 0	1135 0
	6 0	12781 5	2626 2	23	3 0	1373 5	1 49 4	44	0	7221 3	1431 7
3	5 0	13999 2	1960 6	24	2 0	3672 1	8 0	45	0	13361 1	1185 0
4	5 0	19933 6	3677 7	25	4 0	3953 4	786 4	46	0	17410 4	485 8
5	2 0	9437 9	699 1	26	4 0	886 9	5 6	4	0	25759 8	1371 7
6	4 0	9150 6	1355 6	27	0	11 15 6	58 5	48	4 0	22720	2782 9
	3 0	11128 4	851 5	28	4 0	4 4 6	4 0	49	0	14572 0	368 9
8	5 0	10757 7	1992 2	29	3 0	3349 3	688 4	50	0	14384 5	500 9
9	0	11039 3	817 7	30	0	599	733 9	5	0	18570 8	687 8
10	3 0	10496 8	1166 3	31	3 0	16885 9	35 3	5	0	13067 4	968 0
1	5 0	11449 2	1812 2	32	4 0	6499	2945	53	0	17999 5	333 3
2	4 0	11130 0	1648 9	33	0	13734 9	4 5 5	54	0	16563 2	554 1
13	3 0	9553 2	1061 5	34	4 0	5282	225 2	55	0	10961 0	399 1
14	3 0	9977 3	687 1	35	4 0	8685 4	2367 4	56	0 0	14744 2	0 0
5	4 0	1184 6	1641 4	36	1 0	7714 6	537 6	57	0	35438 5	1979 7
16	5 0	8857 0	1640 2	37	3 0	106 4 6	1 86	58	0	23770 6	2641 2
7	3 0	9478 3	1053 1	38	4 0	2285 6	779 5	59	2 0	5092 9	1118 0
8	3 0	10498 8	527 4	39	0	6872 7	509	60	0	31997 9	1184 9
19	5 0	16107 2	2670 2	40	4 0	288 8	584	6	0	60784 6	4582 6
20	0 0	11116 0	0 0	41	4 0	1 775 3	4 4 3	62	0	26478 9	978 6
2	3 0	3468 6	1098 4	42	0	1831 0	468 6	63	0	21977 9	1624 3

Figure 3 Calculated impacted volumes

Finally, a color-coded depiction of the depth of the impacted sediments was also produced.

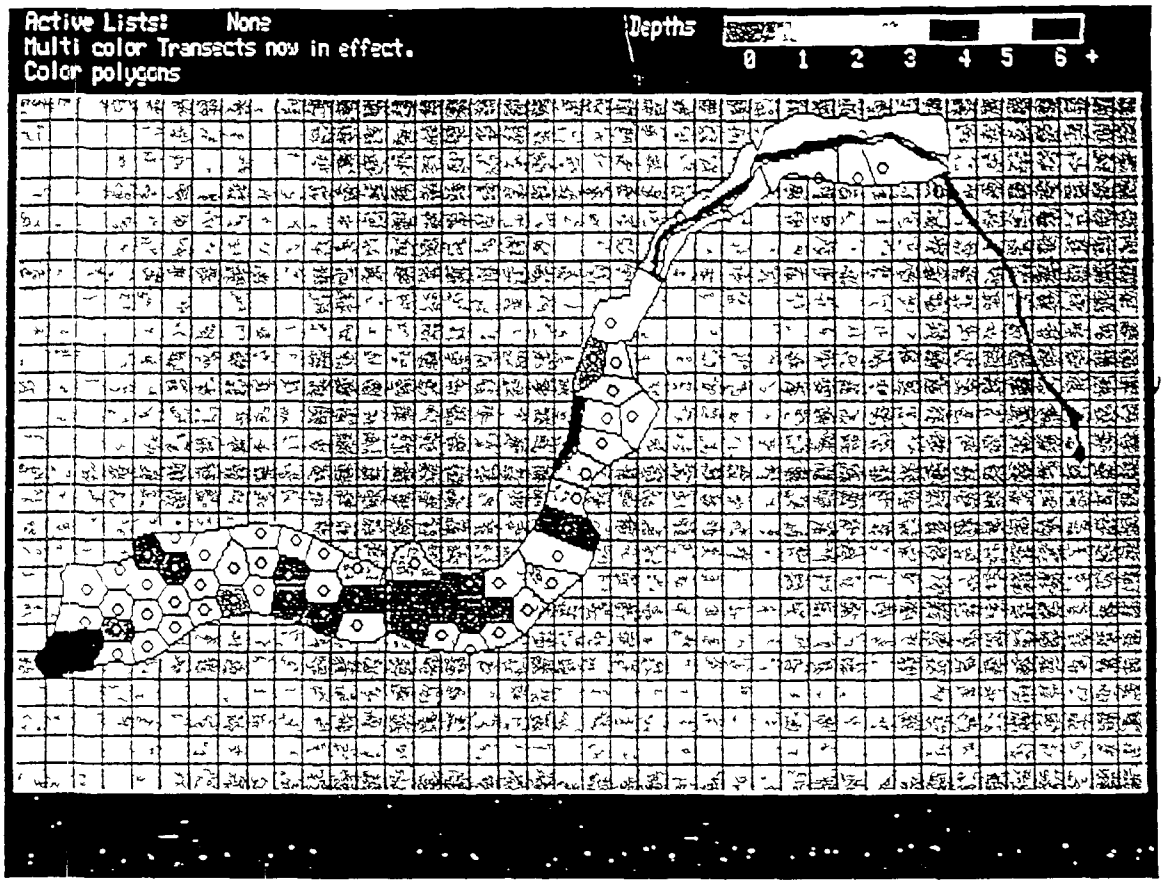

Figure 4 Depth of impacted sediments for each Thuessen polygon

TABLE 2

ALLIED PAPER, INC.\PORTAGE CREEK\KALAMAZOO RIVER SUPERFUND SITE

ALLIED PAPER, INC. OPERABLE UNIT
REVISED PCB MASS ESTIMATE CALCULATIONS USING RI VOLUME ESTIMATES

Study Area	Estimated Volume of Residual (Cubic Yards)[1]	Average Dry Density of Residuals (Pounds per Cubic Feet)	Mean PCB Concentration[2] (Milligrams per Kilograms)	Estimated PCB Mass (Kilograms)
Bryant HRDL	390,000	20 2	134 0	12,926
Bryant FRDLs	54,000	24 9	5 2	85
Western Disposal Area	380,000	25 4	218 0	25,765
Former Type III Landfill	140,000	25.4	66.6	2,900
Former Bryant Mill Pond[3]	146,000	22 5	47.0	1,891
Monarch HRDL	170,000	20 0	31.3	1,303
			Total PCB Mass = 44,870	
			Rounded = 44,800	

Notes

[1] - Estimated volume of residual from the Allied OU RI Report.

[2] - A geometric mean is utilized for the Former Type III Landfill PCB concentration

[3] - This volume of residuals is the volume of PCB-containing sediments placed within the Bryant HRDL/FRDLs from the former Bryant Mill Pond

Addendum on calculations

The total volume of sediments in cubic feet is calculated as follows:

$$V = \sum_{i=1}^{cores} depth_i \times (A_i - As_i)$$

where $depth_i$ is the depth in feet of sediment at core i, A_i is the area in square feet of the Theissen polygon associated with core i, and As_i is the area in square feet of stream passing through the Theissen polygon.

The total mass of PCBs in the sediments is calculated as follows:

$$M = \sum_{i=1}^{cores} \sum_{j=1}^{depth_i} \frac{\rho_{ij} C_{ij} \left[h_j (A_i - As_i) \right]}{35.315 \times 453.6}$$

where C_{ij} is the concentration in mg/kg for the sample taken j feet down at core I, ρ_{ij} is the dry bulk density of that sample in kg/L, and h_j is the height in feet of the jth slice. The conversion factors are 35.315 ft^3/m^3 and 453.6 gm/lb.

The volume of impacted sediment is calculated as follows:

$$V = \sum_{i=1}^{cores} exc_i \times (A_i - As_i)$$

where exc_i is the excavation depth in feet at core i. This is defined as the depth of the deepest sample at core i with a detectable concentration of PCB

MEMORANDUM

BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

To: Doug Cowin

Date: 1/5/01

From: David Lay

cc: Bill McCune, Keith White, & File (645.51)

Re: Calculation of PCB Mass Estimates at the Allied OU Study Areas

As requested, I have completed a review calculation of PCB mass estimates for the study areas of the Allied OU presented within the Proposed Settlement Agreement (BBL, 1998). Table 1 presents the calculation of the PCB mass estimates for the Allied OU study areas. The PCB mass estimates were calculated using the following formula:

PCB Mass (kilograms) = V_R * $\propto_R$ * Mean PCB Concentration where:

- V_R = Volume of residuals presented within Technical Memorandum #7 (cubic yards converted to cubic feet).
- $\propto_R$ = Average dry density of residuals obtained from geotechnical data obtained during the RI (pounds per cubic foot converted to kilograms per pound).
- Mean PCB Concentration from analytical data presented within Technical Memorandum #7 and the RI Report.

The mean PCB concentration for each study area were determined from soil samples collected from the following borings:

- Bryant HRDL = BHDL-22, BHDL-123, and MW-121B.
- Bryant FRDLs = DLHB-1, DLHB-2, DLHB-3, and DLHB-6.
- Former Type III Landfill = FLF-1, FLF-2, and FLF-3.
- Monarch HRDL = MLSS-1, MLSS-2, MLSS-3, MLSS-4, MLSS-5, MW-125B, MW-126A, and MW-126B.
- Western Disposal Area = MW-8A, MW-120B, WA-1, WA-2. WA-3, WA-4, WA-5. WA-6, WA-7, and WA-8.

It should be noted that the PCB mass estimate calculated for the Former Bryant Mill Pond was not present within the Proposed Settlement Agreement (BBL, 1998). The PCB mass estimate for the Former Bryant Mill Pond that was calculated in 1998 is 1,075 kilograms using the following values:

- V_R = 83,000 cubic yards;
- $\propto_R$ = 22.5 pounds per cubic foot; and
- Mean PCB concentration = 47 milligrams per kilograms.

DWL/dwl

6723 Towpath Road, P.O. Box 66 • Syracuse, NY 13214-0066 • Telephone (315) 446-9120 • Fax (315) 446-8053

TABLE 1

ALLIED PAPER, INC.\PORTAGE CREEK\KALAMAZOO RIVER SUPERFUND SITE

ALLIED PAPER, INC., OPERABLE UNIT PCB MASS ESTIMATE CALCULATIONS FROM THE PROPOSED SETTLEMENT AGREEMENT

Study Area	Estimated Volume of Residual (Cubic Yards)[1]	Average Dry Density of Residuals (Pounds per Cubic Feet)	Mean PCB Concentration[2] (Milligrams per Kilograms)	Estimated PCB Mass (Kilograms)
Bryant HRDL	390,000	20 2	134 0	12,804
Bryant FRDLs	62,000	24 9	5.2	98
Western Disposal Area	380,000	25.4	218.0	25,774
Former Type III Landfill	138,000	25 4	66 6	2,858
Monarch HRDL	170,000	20 0	31.3	1,304
			Total PCB Mass= 42,838 Rounded = 42,800	

Notes

[1] - Estimated volume of residual from the Allied OU RI Report

[2] - A geometric mean is utilized for the Former Type III Landfill PCB concentration

APPENDIX 29-H

APPENDIX 35B – 1

CONFIDENTIAL BUSINESS INFORMATION

APPENDIX 35B1 - LIST OF TRANSFORMERS, STATUS AND PCB TEST RESULTS

[redacted] = transformers on site as of 1988

Serial No.	KVA	LAST KNOWN STATUS (w/ source)	WHERE LEAKS WERE FOUND IN 1981 *	PCB TEST RESULTS ** (ppm)					
				May, 1981	July, 1981	1982	1983	1984	1987
923087	500	disposed of 1981 (SA 37466)		9	<10				
923088	500	disposed of 1981 (SA 37466)		<1	<10				
934566	500	disposed of 1981 (SA 37466)		11	<10				
[redacted]	[redacted]	in storage as of 1988 (SA37745)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	in operation as of 1988 (SA37745)	[redacted]	[redacted]	<10	[redacted]	[redacted]	<10	<5
[redacted]	[redacted]	in operation as of 1988 (SA37745)	[redacted]	[redacted]	12	[redacted]	[redacted]	26	17
[redacted]	[redacted]	in operation as of 1988 (SA37745)	[redacted]	[redacted]	<10	[redacted]	[redacted]	<10	<5
[redacted]	[redacted]	in storage as of 1988 (SA37745)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	in storage as of 1988 (SA37745)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	in storage as of 1988 (SA37745)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	in operation as of 1988 (SA37745)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2621586	[redacted]	in storage as of 1988 (SA37745)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2845675	150	disposed of by 1984 (SA 37773)			<10				
2845676	150	disposed of by 1984 (SA 37773)			<10				
2845678	150	disposed of by 1984 (SA 37773)			<10				
[redacted]	[redacted]	in operation as of 1988 (SA37745)	[redacted]	[redacted]	<10	[redacted]	[redacted]	<10	<5
[redacted]	[redacted]	in operation as of 1988 (SA37745)	[redacted]	[redacted]	<10	[redacted]	[redacted]	<10	<5
[redacted]	[redacted]	in operation as of 1988 (SA37745)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	in operation as of 1988 (SA37745)	[redacted]	[redacted]	<10	[redacted]	[redacted]	<10	<5
3010456	200	disposed of 1983 (SA 37849, SA 37853)			32		25		
3010458	200	disposed of 1983 (SA 37849, SA 37853)			<10		<10		
3010461	200	disposed of 1983 (SA 37849, SA 37853)			97		16		
3110153	333	disposed of 1983 (SA 37849, SA 37853)			<10		<10		
3110154	333	disposed of 1983 (SA 37849, SA 37853)			<10		<10		
3343093	37 1/2	disposed of 1983 (SA 37849, SA 37853)			14		13		
3556024	37 1/2	disposed of 1988 (SA 37744)							5
3557459	37 1/2	disposed of 1988 (SA 37744)							<5
3766865	200	disposed of 1981 (SA 37466)			13 6				
3766866	200	disposed of 1981 (SA 37466)			<10				
3766867	200	disposed of 1981 (SA 37466)			<10				
3772572	3000	disposed of by 1984 (SA 37773)			42				
3772574	1500	disposed of 1988 (SA 37744)		<1	40			32	
3772576	1000	in operation as of 1988 (SA37745)			<10			<10	10
4395257	200	disposed of 1981 (SA 37466)			<10				
4395268	200	disposed of 1981 (SA 37466)			<10				
4395273	200	disposed of 1981 (SA 37466)		12	13				

CONFIDENTIAL BUSINESS INFORMATION

Serial No	KVA	LAST KNOWN STATUS (w/ source)	WHERE LEAKS WERE FOUND IN 1981 *	PCB TEST RESULTS ** (ppm)					
				May, 1981	July, 1981	1982	1983	1984	1987
[redacted]	[redacted]	in operation as of 1988 (SA37745)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	in operation as of 1988 (SA37745)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	in operation as of 1988 (SA37745)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
4767186	1500	disposed of 1983 (SA 37859)			<10				
4767187	1500	disposed of 1983 (SA 37859)		<1	<10				
5499217	75	disposed of 1983 (SA 37854)							
5893814	25	disposed of 1983 (37849 37853)			<10		<10		
5896683	25	disposed of 1983 (37849 37853)			<10		<10		
6539075	750	disposed of 1983 (SA 37854)							
[redacted]	[redacted]	in storage as of 1988 (SA37745)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	in storage as of 1988 (SA37745)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	in storage as of 1988 (SA37745)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
?(old eng Rm)	37 1/2	disposed of 1983 (SA 37849)							
?(old eng Rm)	37 1/2	disposed of 1983 (SA 37849)							
?(old eng Rm)	50	disposed of 1983 (SA 37849)							
[redacted]	[redacted]	in operation as of 1988 (SA37745)	[redacted]	[redacted]	<10	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	in operation as of 1988 (SA37745)	[redacted]	[redacted]	<10	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	in storage as of 1988 (SA37745)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	in storage as of 1988 (SA37745)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	in storage as of 1988 (SA37745)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
2A 2695	200	disposed of 1988 (SA 37744)			31			37	43
3A 3228 4	200	disposed of 1988 (SA 37744)		280	76	<10		<10	9
3A 3228 5	200	disposed of 1988 (SA 37744)			34			41	43
[redacted]	[redacted]	in operation as of 1988 (SA37745)	[redacted]	[redacted]	<10	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	in operation as of 1988 (SA37745)	[redacted]	[redacted]	<10	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	in operation as of 1988 (SA37745)	[redacted]	[redacted]	<10	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	in operation as of 1988 (SA37745)	[redacted]	[redacted]	<10	[redacted]	[redacted]	[redacted]	[redacted]
A99455	50	disposed of 1988 (SA 37744)							<5
[redacted]	[redacted]	in operation as of 1988 (SA37745)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	in operation as of 1988 (SA37745)	[redacted]	[redacted]	<10	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	in operation as of 1988 (SA37745)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
C862796	750	disposed of 1971 (SA 23041)							
E686721	750	disposed of 1987 (SA 37748)			456			<10	
[redacted]	[redacted]	in operation as of 1988 (SA37745)	[redacted]	[redacted]	<10	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	in operation as of 1988 (SA37745)	[redacted]	[redacted]	<10	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	in operation as of 1988 (SA37745)	[redacted]	[redacted]	<10	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	in operation as of 1988 (SA37745)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	in operation as of 1988 (SA37745)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
N227413TETA	500	disposed of 1986 (SA 37747)			<10			<10	
[redacted]	[redacted]	in operation as of 1988 (SA37745)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

CONFIDENTIAL BUSINESS INFORMATION

Serial No	KVA	LAST KNOWN STATUS (w/ source)	WHERE LEAKS WERE FOUND IN 1981 *	PCB TEST RESULTS ** (ppm)					
				May, 1981	July, 1981	1982	1983	1984	1987
	* *See SA 44808-44809*								
	** *See SA 22809 22811 SA 37734 SA 37748 37750-37751 SA 37853 and SA 44808 44810*								

LEGEND

- MW 24 R — EXISTING MONITORING WELL
- +N280200 — COORDINATE GRID POINT (SEE NOTE 4)
- ---800--- EXISTING INDEX ELEVATION CONTOUR
- ---------- EXISTING INTERMEDIATE ELEVATION CONTOUR

NOTES:

1. BASE MAP INFORMATION OBTAINED FROM PLAN ENTITLED "TOPOGRAPHIC AND BOUNDARY SURVEY OF ALLIED PAPER, INC. KALAMAZOO, MI. SECTION 27 TOWN 2 SOUTH, RANGE 11 WEST," PREPARED BY WADE-TRIM, INC., DATED 7/8/99
2. TOPOGRAPHIC INFORMATION WITHIN FRDLS #3,4,5 AND HRDL #6 PROVIDED BY EPA DATED 5/99.
3. ELEVATIONS ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM (NGVD) 1929.
4. COORDINATE GRID IS REFERENCED TO THE MICHIGAN STATE PLANE (SOUTH ZONE) COORDINATE SYSTEM (NAD83)
5. BENCHMARKS:
   BENCHMARK #1- CHISELED SQUARE ON NW CORNER OF CONCRETE PAD AT AIR MONITORING STATION EAST OF CLARIFIER, ELEVATION = 820.15
   BENCHMARK #2- RAILROAD SPIKE IN POWER POLE, ELEVATION = 796.38
   BENCHMARK #3- CHISELED SQUARE ON HEADWALL ON SOUTH SIDE OF CORK STREET AT PORTAGE CREEK, OPPOSITE CORK STREET ENTRANCE TO ALLIED SITE, ELEVATION = 799.41

C:\645\1\04.DWG
L:ON=*;OFF=HRDL*,FRANK CONT INTERV 2MIN-BELOW*
P:STD_POP.DL
8.12.99 STR=54 RES=4K NES
645\1\50\645501.DWG

GRAPHIC SCALE: 0 80 160

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No.	Date	Revisions	Init

Project Mgr _____
Designed by _____
Drawn by _____
Checked by _____
Prof. Eng _____
PE License _____

BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

ALLIED PAPER, INC. • KALAMAZOO, MICHIGAN
BRYANT HRDL/FRDLs CLOSURE

EXISTING SITE PLAN

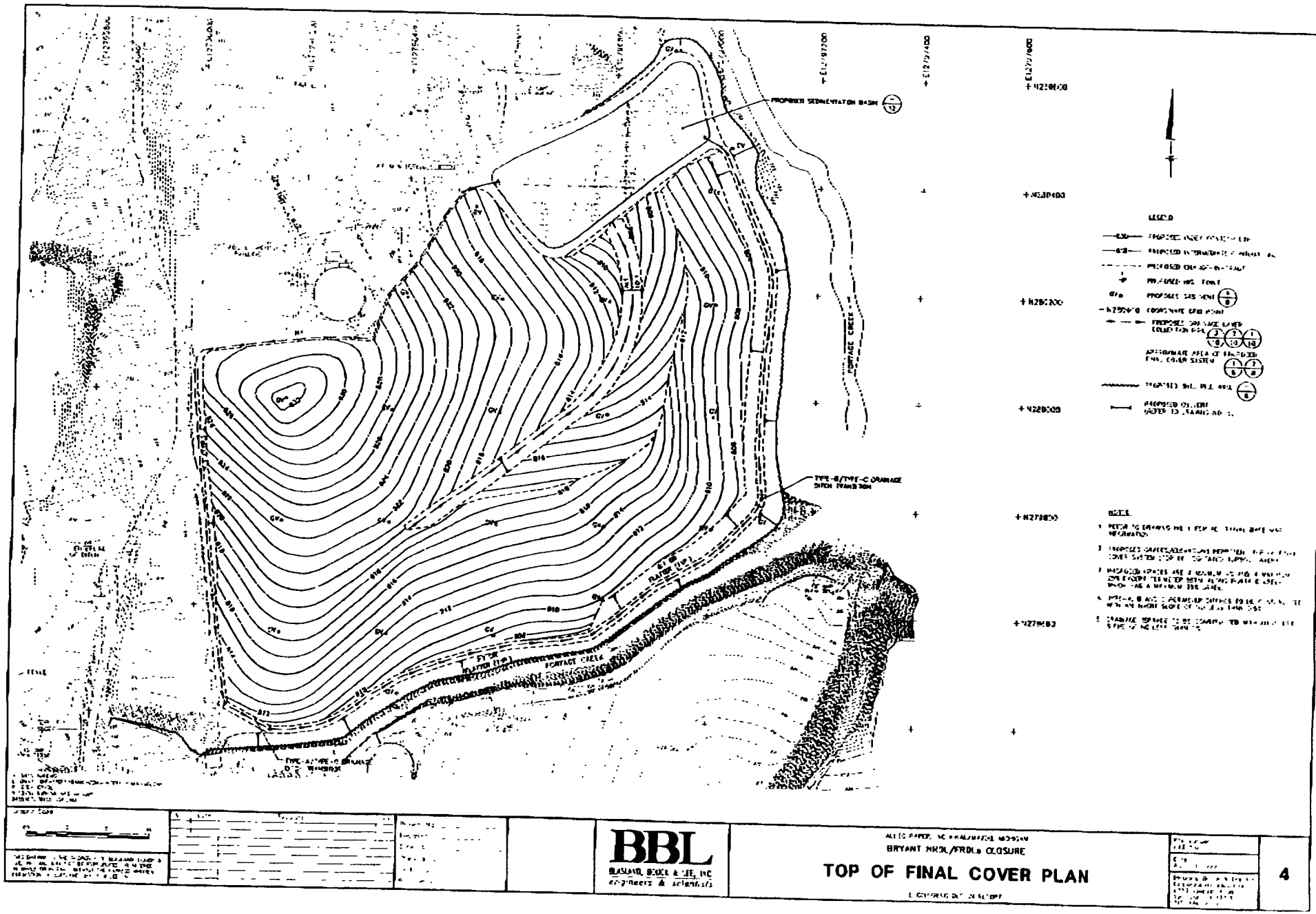
ENGINEERING DESIGN REPORT

File Number
FILE NO.

Date
AUGUST 1999

Blasland, Bouck & Lee, Inc.
Corporate Headquarters
6723 Towpath Road
Syracuse, NY 13214
315-446-9120

1

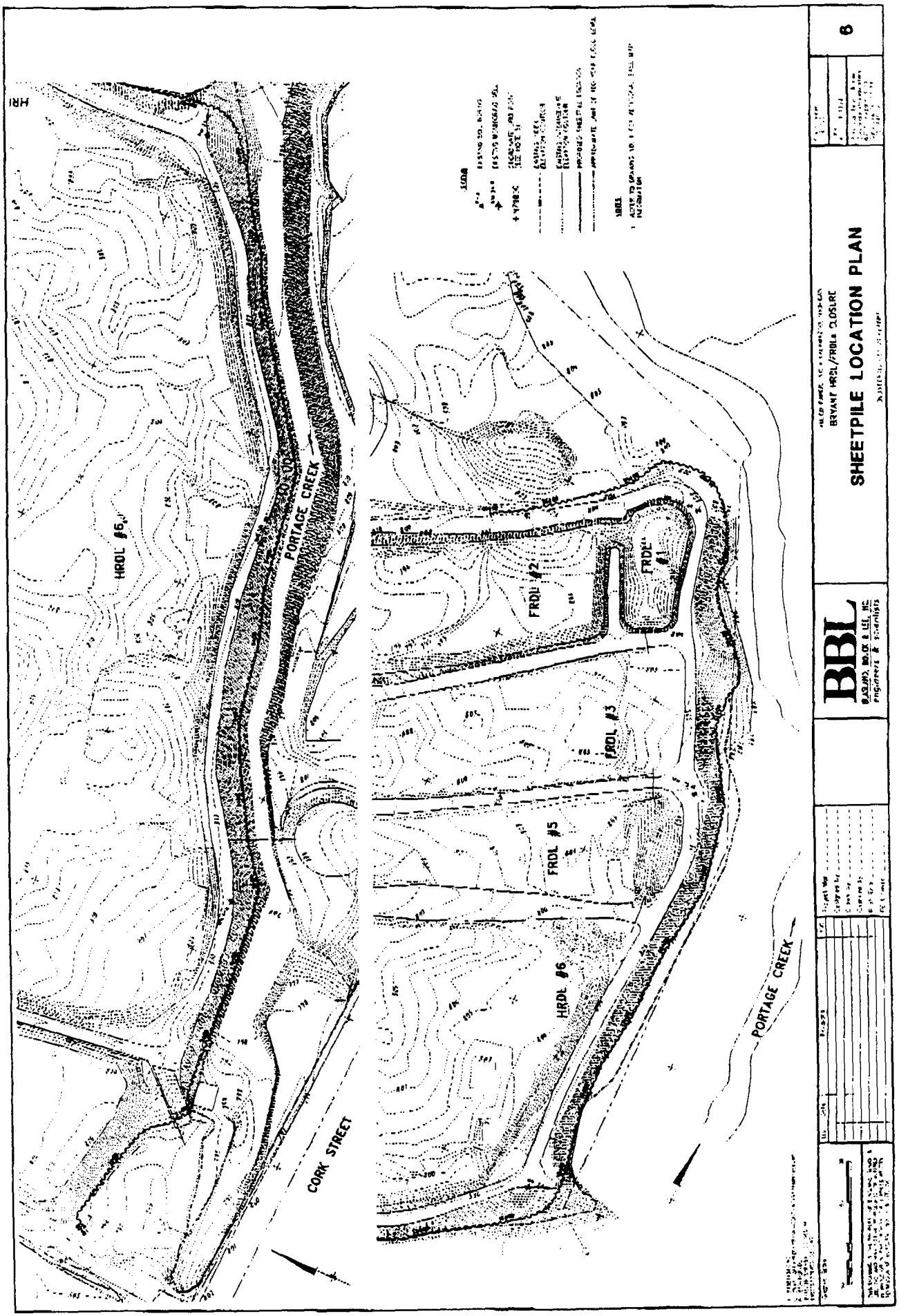


BLASLAND, BOUCK & LEE, INC.
engineers & scientists

ALLIED PAPER, INC./PORTAGE CREEK/KALAMAZOO RIVER SUPERFUND SITE
BRYANT MILL POND/FRDL# CLOSURE

TOP OF FINAL COVER PLAN

4


HRDL #6
PORTAGE CREEK
CORK STREET
FRDL #2
FRDL #1
FRDL #3
FRDL #5
HRDL #6
PORTAGE CREEK
BBL
SHEETPILE LOCATION PLAN
BRYANT HRDL/FRDLs CLOSURE
6

APPENDIX 36-1

APPENDIX 36-1
PORTAGE CREEK
Summary of All Non-Wastewater Citations

Privileged and Confidential Settlement and Joint Defense Communication

BATES NO.	DATE	TYPE OF DOCUMENT	AUTHOR	ADDRESSEE	DESCRIPTION OF CITATION
KA 04500258	06/09/66	Solid Waste Disposal Evaluation Report	Michigan Department of Public Health	Allied Paper Corp.	Must cover landfill each day, prepare plan, control blowing paper, and keep the mill pond from backing up into the area of the dump.
SA 011327	11/26/68	Correspondence	Kalamazoo County Health Department	Allied Paper Corp.	Indicates observation that the landfill is not being covered daily, and the river flood plain is being utilized. Use of the flood plain requires a permit.
SA009857	03/05/69	Correspondence	Section of Environmental Health	Allied Paper Corp.	Inspection of landfill in 2/69 revealed the operation is not a sanitary landfill. Orders Allied to cease operating the site and close the operation or change the facility to a sanitary landfill.
SA 04500261	03/11/69	Solid Waste Disposal Evaluation Report	Michigan Department of Public Health	Allied Paper Corp.	Re: sanitary landfill. Notes Allied is dumping refuse into the surface water and within 50 feet adjacent to Portage Creek, and that the lip is not being properly covered.

CONFIDENTIAL BUSINESS INFORMATION

APPENDIX 36-1
PORTAGE CREEK
Summary of All Non-Wastewater Citations

Privileged and Confidential Settlement and Joint Defense Communication

BATES NO.	DATE	TYPE OF DOCUMENT	AUTHOR	ADDRESSEE	DESCRIPTION OF CITATION
SA 009854	08/21/69	Solid Waste Disposal Evaluation Report	Michigan Department of Public Health		Re: Allied Paper Company. Noncompliance due to open lip and dumping into flood plain.
KA 04800185	10/07/69	Correspondence	Section of Environmental Health	Allied Paper, Inc.	Disposal site is still operating with an open face and refuse is being disposed of into the flood plain. Site is in violation for not spreading, compacting and covering the refuse.
KA 05700207	01/21/70	Correspondence	Kalamazoo County Health Department	Allied Paper Corp.	Allied's sanitary landfill has retrogressed in that the open site of uncompacted refuse is constantly exposed on the site.
SA 009843	09/26/75	Solid Waste Disposal Evaluation Report	Michigan Department of Natural Resources		Re: Allied Paper Company. Noncompliance - some refuse being dumped outside of landfill area; material being dumped into water; material not being compacted; daily cover not complete, material sticking up through cover, and soil placed on refuse not compacted.
SA 009841	10/30/75	Solid Waste Disposal Evaluation Report	Michigan Department of Natural Resources		Noncompliance - must make sure face of fill is covered with 6-inch compacted soil.
MDNR 003949; MDNR 003853; 003956-003958	09/15/77	Correspondence	USEPA	SCM Corporation	Encloses Notice of Violation of oil pollution prevention regulations.

CONFIDENTIAL BUSINESS INFORMATION

APPENDIX 36-1
PORTAGE CREEK
Summary of All Non-Wastewater Citations

Privileged and Confidential
Settlement and Joint
Defense Communication

BATES NO.	DATE	TYPE OF DOCUMENT	AUTHOR	ADDRESSEE	DESCRIPTION OF CITATION
SA 009831	10/02/80	Solid Waste Disposal Evaluation Report	Michigan Department of Natural Resources		Noncompliance: lip on east end not completely covered and some erosion.
SA 009821	03/10/81	Solid Waste Disposal Evaluation Report	Unknown		Noncompliance: small amount of rubbish exposed on east side.
SA 009818	12/15/81	Solid Waste Disposal Evaluation Report	Unknown		Noncompliance: some erosion on northern lip
SA 009817	03/11/82	Sanitary Landfill Evaluation Report	Michigan Department of Natural Resources		Noncompliance re: surface water drainage; completion of area/final cover; approved engineering plans and hydrogeologic evaluation; gas migration; restricted access/attendant.
SA 048842-048846	05/12/82	Complaint	USEPA		Violation of TSCA due to leaking transformers causing a discharge of PCBs.
SA 009816	06/17/82	Sanitary Landfill Evaluation Report	Michigan Department of Natural Resources		Noncompliance re: Approved engineering plans and hydrogeologic evaluation. Also some erosion around north side, some exposed refuse.

CONFIDENTIAL BUSINESS INFORMATION

BATES NO.	DATE	TYPE OF DOCUMENT	AUTHOR	ADDRESSEE	DESCRIPTION OF CITATION
SA 009815	09/29/82	Sanitary Landfill Evaluation Report	Michigan Department of Natural Resources		Noncompliance re: period and adequacy of cover. Also indicates two areas on north lip have an erosion problem.
SA 009814	12/17/82	Sanitary Landfill Evaluation Report	Michigan Department of Natural Resources		Noncompliance re: some erosion on north lip; need some paper picked up on northwest side.
SA 009812	09/30/83	Sanitary Landfill Evaluation Report	Michigan Department of Natural Resources		Noncompliance re: surface water drainage. Also indicates some garbage dumped in wash-out area on north lip; some uncovered paper along the lip that need to be covered.
SA 009810	03/29/84	Sanitary Landfill Evaluation Report	Michigan Department of Natural Resources		Noncompliance re: completion of area/final coverage. Also indicates more erosion in area of test well on north bank.
SA 009809	06/29/84	Sanitary Landfill Evaluation Report	Michigan Department of Natural Resources		Noncompliance re: completion of area/final coverage. Indicates some erosion.

CONFIDENTIAL BUSINESS INFORMATION

BATES NO.	DATE	TYPE OF DOCUMENT	AUTHOR	ADDRESSEE	DESCRIPTION OF CITATION
SA 009806	03/18/85	Sanitary Landfill Evaluation Report	Michigan Department of Natural Resources		Noncompliance re: completion of area/final coverage; fence/screening maintenance. Also indicates some erosion on north lip again, need to cover. Also someone dumped old chair on landfill.
SA 030624	03/27/86	Sanitary Landfill Evaluation Report	Michigan Department of Natural Resources		Noncompliance re: surface water drainage. Also indicates some erosion on northwest portion of lip. Mixture of paper mill waste and fly ash has not started.
SA 006700-006704	08/02/86	Notice of Suit	State of Michigan Attorney General	Allied Paper Corp.	Notice of intent to file civil action against Allied Chemical for discharge of PCBs.

CONFIDENTIAL BUSINESS INFORMATION

BATES NO.	DATE	TYPE OF DOCUMENT	AUTHOR	ADDRESSEE	DESCRIPTION OF CITATION
SA 001766	03/24/87	Sanitary Landfill Evaluation Report	Michigan Department of Natural Resources		Noncompliance re: surface water discharge; engineering plans, hydrogeologic evaluation and construction certification; period and adequacy of cover. Also indicates ponding of water noted on west side of fill adjacent to railroad tracks - provide grading to eliminate such an occurrence. Also noted piles of fly ash; fly ash was to be mixed with sludge and used as cover. Continue with this plan, or cease collection of fly ash and remove piles now present. Further noted leachate on ground from fly ash due to inadequate cover.
SA 049231-049233	05/01/87	Notice	Michigan Department of Natural Resources		Re: Allied Paper Co. Notice of Denial of Renewal of Solid Waste Disposal Area License due to PCBs found in monitoring wells, and disposal of waste outside the area covered by the license.

CONFIDENTIAL BUSINESS INFORMATION

BATES NO.	DATE	TYPE OF DOCUMENT	AUTHOR	ADDRESSEE	DESCRIPTION OF CITATION
SA 001758	12/08/87	Sanitary Landfill Evaluation Report	Michigan Department of Natural Resources		Noncompliance re: surface water drainage; leachate control/management. Also indicates two areas were observed on fill are where ponding of leachate was occurring. Fill should be graded to eliminate ponding and divert leachate to sedimentation basins. Also, fill was being deposited within boundaries of licensed landfill area.
SA 001756	03/29/88	Sanitary Landfill Evaluation Report	Michigan Department of Natural Resources		Re: Allied Paper Co. Ponding of water observed north of active fill area. Fill area shall be graded as to eliminate this ponding problem. Fill was being deposited within marked boundaries, but definitely encroaching the boundary line of south side of fill area. Elevation markers needed to ascertain compliance with fill area requirements.
SA 001755	04/13/88	Correspondence	Kalamazoo County Human Services Department	Allied Paper, Inc.	Inspection revealed facility not in compliance due to: ponding of water observed north of active fill area; fill area shall be graded as to eliminate this ponding problem; fill was being deposited within marked boundaries, but definitely encroaching the boundary line of south side of fill area; elevation markers needed as to ascertain compliance with fill area requirements.

CONFIDENTIAL BUSINESS INFORMATION

BATES NO.	DATE	TYPE OF DOCUMENT	AUTHOR	ADDRESSEE	DESCRIPTION OF CITATION
SA 001741	06/19/89	Sanitary Landfill Evaluation Report	Michigan Department of Natural Resources		Re: Allied Paper Co. Indicates heavy rains have eroded an area of the northwest corner of this landfill site. Eroded area is adjacent to the landfill indicate possible surface water drainage from off the landfill site into the wetlands.
SA 001740	06/23/89	Correspondence	Kalamazoo County Human Services Department	Performance Paper Co.	Inspection revealed heavy rains have eroded an area of the Northwest corner of the landfill. Eroded areas adjacent to landfill indicate possible surface water drainge from off the landfill site into adjoining wetlands.
SA 001729	01/31/90	Sanitary Landfill Evaluation Report	Michigan Department of Natural Resources		Re: Allied Paper. Landfill site appeared to be in good operating condition; heavy rains have eroded the banks of certain areas of the landfill site.
SA 006248	03/30/90	Sanitary Landfill Evaluation Report	Michigan Department of Natural Resources		Re: Allied Paper. Noncompliance re: surface water drainage. Also notes rains have eroded the banks of certain areas of the landfill site. Provide a surface water drainage system that will prevent erosion or washing of the fill.

CONFIDENTIAL BUSINESS INFORMATION

APPENDIX 36-1
PORTAGE CREEK
Summary of All Non-Wastewater Citations

Privileged and Confidential Settlement and Joint Defense Communication

BATES NO.	DATE	TYPE OF DOCUMENT	AUTHOR	ADDRESSEE	DESCRIPTION OF CITATION
SA 006249	04/03/90	Correspondence	Kalamazoo County Human Services Department	Fretco Inc.	Re: Allied Paper. Inspection disclosed violation: rain has eroded the banks of certain areas of the landfill site. Provide a surface water drainage system that will prevent erosion or washing of the fill as required by regulations.
SA 001726	05/08/90	Sanitary Landfill Evaluation Report	Michigan Department of Natural Resources		Re: Allied Paper. Noncompliance re: surface water drainage. Also notes rains have eroded the banks of certain areas of the landfill site. Provide a surface water drainage system that will prevent erosion or washing of the fill.
SA 001725	05/15/90	Correspondence	Kalamazoo County Human Services Department	Fretco Inc.	Re: Allied Paper Inspection disclosed violation· rain has eroded the banks of certain areas of the landfill site Provide a surface water drainage system that will prevent erosion or washing of the fill as required by regulations.

CONFIDENTIAL BUSINESS INFORMATION

APPENDIX 37 – A

APPENDIX 37-A ALLIED - BRYANT MILL POND

OU 1 SEEP SAMPLING - CDM

DATE	LOCATION	MATRIX	Arochlor 1016 (ug/g)	Arochlor 1221 (ug/g)	Arochlor 1232 (ug/g)	Arochlor 1242 (ug/g)	Arochlor 1248 (ug/g)	Arochlor 1254 (ug/g)	Arochlor 1260 (ug/g)
5/23/00	Seep A	Soil	<0.0551	<0.0551	<0.0551	0.255	<0.0551	<0.0551	<0.0551
5/23/00	Seep B	Soil	<0.0585	<0.0585	<0.0585	0.124	<0.0585	<0.0585	<0.0585
5/23/00	Seep C	Soil	<0.0694	<0.0694	<0.0694	<0.0694	<0.0694	<0.0694	<0.0694
5/23/00	Seep D	Soil	<0.0788	<0.0788	<0.0788	<0.0788	<0.0788	<0.0788	<0.0788
5/23/00	Seep E	Soil	<0.0656	<0.0656	<0.0656	<0.0656	<0.0656	<0.0656	<0.0656
5/23/00	Seep F	Soil	<0.0552	<0.0552	<0.0552	<0.0552	<0.0552	<0.0552	<0.0552
5/23/00	Seep G	Soil	<0.0704	<0.0704	<0.0704	0.543	<0.0704	0.116	<0.0704
5/23/00	Seep H	Soil	<0.310	<0.310	<0.310	5.43	<0.310	<0.310	<0.310
5/23/00	Seep I	Soil	<0.170	<0.170	<0.170	1.92	<0.170	0.287	<0.170
5/23/00	Seep J	Soil	<0.0779	<0.0779	<0.0779	0.916	<0.0779	0.2	<0.0779
5/23/00	Seep K	Soil	<0.0630	<0.0630	<0.0630	<0.0630	<0.0630	<0.0630	<0.0630

DATE	LOCATION	MATRIX	Arochlor 1016 (ug/L)	Arochlor 1221 (ug/L)	Arochlor 1232 (ug/L)	Arochlor 1242 (ug/L)	Arochlor 1248 (ug/L)	Arochlor 1254 (ug/L)	Arochlor 1260 (ug/L)
5/23/00	Seep A	Water	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
5/23/00	Seep B	Water	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
5/23/00	Seep C	Water	<0.0521	<0.0521	<0.0521	<0.0521	<0.0521	<0.0521	<0.0521
5/23/00	Seep D	Water	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
5/23/00	Seep E	Water	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
5/23/00	Seep F	Water	<0.0505	<0.0505	<0.0505	<0.0505	<0.0505	<0.0505	<0.0505
5/23/00	Seep G	Water	<0.2	2.04	<0.2	0.591	<0.2	<0.2	<0.2
5/23/00	Seep H	Water	<0.05	0.952	<0.05	0.769	<0.05	<0.05	<0.05
5/23/00	Seep I	Water	<0.05	<0.05	<0.05	0.0511	<0.05	<0.05	<0.05
5/23/00	Seep J	Water	<0.0538	<0.0538	<0.0538	0.202	<0.0538	<0.0538	<0.0538
5/23/00	Seep K	Water	<0.0510	<0.0510	<0.0510	0.0898	<0.0510	<0.0510	<0.0510

[ ] = detected PCB concentrations

CONFIDENTIAL BUSINESS INFORMATION

APPENDIX 37-A
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site

Portage Creek
Surface Water PCB Concentrations

Date Sampled	Identification Number	Concentration (ug/L)	
7/10/98	A64015	0.098	
7/15/98	A64017	0.12	
10/27/98	A66627	0.10	
10/27/98	A66628	0.10	
10/28/98	A66602	0.16	
10/28/98	A66603	0.12	
10/30/98	A66604	0.10	
11/15/98	A66606	0.03	
11/16/98	A66607	0.26	
11/30/98	A66608	0.37	J
11/30/98	A66609	0.28	
12/4/98	A66610	0.13	
12/11/98	A66611	0.10	J
12/18/98	A66612	0.10	J
12/18/98	A66613	0.23	J
12/19/98	A66614	0.098	J
12/19/98	A66615	0.24	J
12/22/98	A66616	0.12	J
12/29/98	A66617	0.33	J
12/29/98	A66618	0.44	J
1/15/99	A66619	0.22	
1/20/99	A66620	0.087	
1/20/99	A66621	0.12	
1/22/99	A66622	0.27	
1/28/99	A66623	0.26	
1/29/99	A66624	0.20	
2/8/99	A66625	0.69	
2/11/99	A66626	0.034	J
3/2/99	A66629	0.035	J
3/11/99	A66630	0.12	J
3/12/99	A66631	0.089	J
3/25/99	A66632	0.07	J
4/9/99	A66633	0.046	J
4/15/99	A66634	0.102	J
4/22/99	A66635	0.085	
4/20/99	A66636	0.045	U
4/23/99	A66637	0.15	
5/6/99	A66638	0.22	J
5/7/99	A66639	0.074	J
5/10/99	A66640	1.2	J
Average		0.20	J

Notes:

(1) All samples were collected immediately downstream of Alcott Dam.

(2) All concentrations quantified as Aroclor 1242, 1248, and/or 1260.

(3) *J qualifier indicates that PCBs were positively identified, but* the associated numerical value is an estimated concentration.

APPENDIX 37-A. ALLIED SITE - ADDITIONAL PCB GROUNDWATER MONITORING RESULTS

GROUNDWATER MONITORING RESULTS											
DATE	LOCATION	PARAMETERS ANALYZED	TOTAL PCB CONCENTRATION (ug/L)	Aroclor 1016 (ug/L)	Aroclor 1221 (ug/L)	Aroclor 1232 (ug/L)	Aroclor 1242 (ug/L)	Aroclor 1248 (ug/L)	Aroclor 1254 (ug/L)	Aroclor 1260 (ug/L)	SOURCE
6/15/93	MW 1	PCB S (total)	<0 01								Quarterly landfill monitoring data collected by LTI loose lab sheets
6/15/93	MW 1	PCB S (dissolved)	<0 01								Quarterly landfill monitoring data collected by LTI loose lab sheets
6/17/94	MW 1	PCB S (total)	<0 01								Quarterly landfill monitoring data collected by LTI loose lab sheets
6/17/94	MW 1	PCB S (dissolved)	<0 01								Quarterly landfill monitoring data collected by LTI loose lab sheets
6/16/93	MW 2	PCB S (total)	<0 01								Quarterly landfill monitoring data collected by LTI loose lab sheets
6/16/93	MW 2	PCB S (dissolved)	<0 01								Quarterly landfill monitoring data collected by LTI loose lab sheets
6/17/94	MW 2	PCB S (total)	<0 01								Quarterly landfill monitoring data collected by LTI loose lab sheets
6/17/94	MW 2	PCB S (dissolved)	<0 01								Quarterly landfill monitoring data collected by LTI loose lab sheets
6/16/93	MW 3	PCB S (total)	<0 01								Quarterly landfill monitoring data collected by LTI loose lab sheets
6/16/93	MW 3	PCB S (dissolved)	<0 01								Quarterly landfill monitoring data collected by LTI loose lab sheets
6/17/94	MW 3	PCB S (total)	0 01				0 01				Quarterly landfill monitoring data collected by LTI loose lab sheets
6/17/94	MW 3	PCB S (dissolved)	<0 01								Quarterly landfill monitoring data collected by LTI loose lab sheets
6/16/93	MW 5	PCB S (total)	0 39								Quarterly landfill monitoring data collected by LTI loose lab sheets
6/16/93	MW 5	PCB S (dissolved)	0 13								Quarterly landfill monitoring data collected by LTI loose lab sheets
6/17/94	MW 5	PCB S (total)	0 80				0 80				Quarterly landfill monitoring data collected by LTI loose lab sheets
6/17/94	MW 5	PCB S (dissolved)	0 16				0 16				Quarterly landfill monitoring data collected by LTI loose lab sheets
6/15/93	MW 17A	PCB S (total)	<0 01								Quarterly landfill monitoring data collected by LTI loose lab sheets
6/15/93	MW 17A	PCB S (dissolved)	<0 01								Quarterly landfill monitoring data collected by LTI loose lab sheets
6/17/94	MW 17A	PCB S (total)	0 01				0 01				Quarterly landfill monitoring data collected by LTI loose lab sheets
6/17/94	MW 17A	PCB S (dissolved)	<0 01								Quarterly landfill monitoring data collected by LTI loose lab sheets
6/15/93	MW 17B	PCB S (total)	<0 01								Quarterly landfill monitoring data collected by LTI loose lab sheets
6/15/93	MW 17B	PCB S (dissolved)	<0 01								Quarterly landfill monitoring data collected by LTI loose lab sheets
6/17/94	MW 17B	PCB S (total)	0 02				0 02				Quarterly landfill monitoring data collected by LTI loose lab sheets
6/17/94	MW 17B	PCB S (dissolved)	0 01				0 01				Quarterly landfill monitoring data collected by LTI loose lab sheets
6/15/93	MW 19B	PCB S (total)	0 02								Quarterly landfill monitoring data collected by LTI loose lab sheets
6/15/93	MW 19B	PCB S (dissolved)	<0 01								Quarterly landfill monitoring data collected by LTI loose lab sheets
6/17/94	MW 19BR	PCB S (total)	0 01				0 01				Quarterly landfill monitoring data collected by LTI loose lab sheets
6/17/94	MW 19BR	PCB S (dissolved)	0 01				0 01				Quarterly landfill monitoring data collected by LTI loose lab sheets
6/15/93	MW 19C	PCB S (total)	<0 01								Quarterly landfill monitoring data collected by LTI loose lab sheets
6/15/93	MW 19C	PCB S (dissolved)	<0 01								Quarterly landfill monitoring data collected by LTI loose lab sheets
6/17/94	MW 19C	PCB S (total)	<0 01								Quarterly landfill monitoring data collected by LTI loose lab sheets
6/17/94	MW 19C	PCB S (dissolved)	<0 01								Quarterly landfill monitoring data collected by LTI loose lab sheets
6/15/93	MW 19D	PCB S (total)	<0 01								Quarterly landfill monitoring data collected by LTI loose lab sheets
6/15/93	MW 19D	PCB S (dissolved)	<0 01								Quarterly landfill monitoring data collected by LTI loose lab sheets
6/17/94	MW 19D	PCB S (total)	0 01				0 01				Quarterly landfill monitoring data collected by LTI loose lab sheets
6/17/94	MW 19D	PCB S (dissolved)	0 01				0 01				Quarterly landfill monitoring data collected by LTI loose lab sheets
6/16/93	MW 21	PCB S (total)	<0 01								Quarterly landfill monitoring data collected by LTI loose lab sheets
6/16/93	MW 21	PCB S (dissolved)	<0 01								Quarterly landfill monitoring data collected by LTI loose lab sheets
6/17/94	MW 21	PCB S (total)	<0 01								Quarterly landfill monitoring data collected by LTI loose lab sheets
6/17/94	MW 21	PCB S (dissolved)	<0 01								Quarterly landfill monitoring data collected by LTI loose lab sheets
6/16/93	MW 112	PCB S (total)	<0 01								Quarterly landfill monitoring data collected by LTI loose lab sheets
6/16/93	MW 112	PCB S (dissolved)	<0 01								Quarterly landfill monitoring data collected by LTI loose lab sheets
6/17/94	MW 112	PCB S (total)	0 02				0 02				Quarterly landfill monitoring data collected by LTI loose lab sheets
6/17/94	MW 112	PCB S (dissolved)	<0 01								Quarterly landfill monitoring data collected by LTI loose lab sheets

[redacted] Indicates detected levels of PCB s

Appendix 37-A (b): BRYANT MILL POND SEDIMENT REMOVAL ACTION CONFIRMATORY PCB RESULTS - EAST SIDE FLOOD PLAIN

SAMPLE LOCATION	SAMPLE TYPE	SAMPLE DATE	PCB (mg/kg)
A2-CF-GS-01	Confirmation	4/27/99	ND
B2-CF-GS-01	Confirmation	4/26/99	ND
B3-CF-GS-01	Confirmation	4/26/99	ND
B4-CF-GS-01	Confirmation	4/26/99	ND
B4-WALL-SB	Confirmation	4/26/99	0 95
C3-CF-GS-01	Confirmation	4/21/99	ND
C4-CF-GS-01	Confirmation	4/21/99	ND
C4-CF-GS-01D	Confirmation	4/21/99	ND
C5-CF-GS-01	Confirmation	4/21/99	ND
C6-WALL	Confirmation	4/28/99	46
C6-WALL-SB	Confirmation	4/21/99	0 34
C6-WALL-OB	Confirmation	4/21/99	0 65
C6-WALL-OVER	Confirmation	4/28/99	1
C6-CF-GS-01	Confirmation	4/19/99	ND
C7-CF-GS-01	Confirmation	4/19/99	ND
C7-CF-GS-01D	Confirmation	4/19/99	ND
C8-CF-GS-01	Confirmation	4/19/99	ND
C8-WALL	Confirmation	4/28/99	ND
C8-WALL-OVER	Confirmation	4/28/99	0 44
F8-WALL	Confirmation	4/28/99	28
F8-WALL-OVER	Confirmation	4/28/99	ND
D5-CF-GS-01	Confirmation	4/15/99	ND
D6-CF-GS-01	Confirmation	4/19/99	ND
D7-CF-GS-01	Confirmation	4/15/99	ND
D8-CF-GS-01	Confirmation	4/15/99	ND
E5-CF-GS-01	Confirmation	4/14/99	ND
E6-CF-GS-01	Confirmation	4/14/99	ND
E7-CF-GS-01	Confirmation	4/14/99	ND
E7-CF-GS-01D	Confirmation	4/14/99	ND
F6-CF-GS-01	Confirmation	4/13/99	ND
F6-CF-GS-01D	Confirmation	4/13/99	ND
G6-CF-GS-01	Confirmation	4/13/99	ND
E8-CF-GS-01	Confirmation	4/13/99	ND
G8-CF-GS-01	Confirmation	4/8/99	ND
G9-CF-GS-01	Confirmation	4/8/99	ND
G9-WALL	Confirmation	4/8/99	270
G9-WALL-02	Confirmation	4/29/99	1 6
G9-WALL-OVER	Confirmation	4/29/99	ND
G10-CF-GS-01	Confirmation	4/8/99	ND
G10-WALL	Confirmation	4/8/99	580
G10-WALL-02	Confirmation	4/29/99	ND
G10-WALL-OVER	Confirmation	4/29/99	ND
H7-CF-GS-01	Confirmation	4/7/99	ND
H8-CF-GS-01	Confirmation	4/6/99	ND
H8-CF-GS-01D	Confirmation	4/6/99	ND
H9-CF-GS-01	Confirmation	4/7/99	ND
H10-CF-GS-01	Confirmation	4/8/99	ND
H10-WALL	Confirmation	4/8/99	100
H10-WALL-02	Confirmation	4/29/99	13
H10-WALL-OVER	Confirmation	4/29/99	ND
H10-WALL-OVER-D	Confirmation	4/29/99	ND
I6-CF-GS-01	Confirmation	4/7/99	ND
I7-CF-GS-01	Confirmation	4/5/99	ND
I8-CF-GS-01	Confirmation	4/5/99	ND
I9-CF-GS-01	Confirmation	4/5/99	ND
I10-CF-GS-01	Confirmation	4/6/99	ND
I10-WALL	Confirmation	4/29/99	12
I10-WALL-OVER	Confirmation	4/29/99	ND
J5-CF-GS-01	Confirmation	4/5/99	ND
J6-CF-GS-01	Confirmation	4/1/99	ND
J7-CF-GS-01	Confirmation	4/1/99	ND
J8-CF-GS-01	Confirmation	3/31/99	ND

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Appendix 37-A (b): BRYANT MILL POND SEDIMENT REMOVAL ACTION CONFIRMATORY PCB RESULTS - EAST SIDE FLOOD PLAIN

SAMPLE LOCATION	SAMPLE TYPE	SAMPLE DATE	PCB (mg/kg)
J9-CF-GS-01	Confirmation	3/31/99	ND
J10-CF-GS-01	Confirmation	4/6/99	ND
J10-MIDPOINT	Confirmation	4/6/99	3 8
J11-CF-GS-01	Confirmation	5/3/99	ND
J11-WALL	Confirmation	5/3/99	ND
J11-WALL-OVER	Confirmation	5/3/99	0 28
J11-WALL-OVER-D	Confirmation	5/3/99	ND
K6-CF-GS-01	Confirmation	3/30/99	ND
K7-CF-GS-01	Confirmation	3/30/99	ND
K8-CF-GS-01	Confirmation	3/30/99	ND
K9-CF-GS-01	Confirmation	3/30/99	ND
K10-CF-GS-01	Confirmation	3/30/99	ND
K10-CF-GS-01D	Confirmation	3/31/99	ND
K11-CF-GS-01	Confirmation	3/31/99	ND
K11-WALL	Confirmation	3/31/99	52
K11-WALL-01	Wall	4/30/99	160
K11-WALL-OVER	Wall	4/30/99	ND
L7-CF-GS-01	Confirmation	3/29/99	ND
L8-CF-GS-01	Confirmation	3/29/99	ND
L9-CF-GS-01	Confirmation	3/29/99	ND
L10-CF-GS-01	Confirmation	3/31/99	ND
L11-CF-GS-01	Confirmation	3/31/99	ND
L11-WALL	Confirmation	3/31/99	4 2
L11-WALL-01	Wall	4/30/99	6 7
L11-WALL-OVER	Wall	4/30/99	ND
M7-CF-GS-01	Confirmation	3/25/99	ND
M8-CF-GS-01	Confirmation	3/25/99	ND
M9-CF-GS-01	Confirmation	3/25/99	ND
M10-CF-GS-01	Confirmation	3/25/99	ND
M11-CF-GS-01	Confirmation	3/25/99	ND
M11-WALL	Confirmation	3/25/99	33
M11-WALL-01	Wall	4/30/99	6 1
M11-WALL-OVER	Wall	4/30/99	ND
N7-CF-GS-01	Confirmation	3/24/99	0 12
N8-CF-GS-01	Confirmation	3/24/99	ND
N8-MIDPOINT	Confirmation	3/24/99	ND
N9-CF-GS-01	Confirmation	3/24/99	ND
N10-CF-GS-01	Confirmation	3/23/99	ND
N10-CF-GS-01D	Confirmation	3/23/99	ND
N11-CF-GS-01	Confirmation	3/24/99	ND
N11-OVERBUR	Confirmation	3/24/99	0 3
N11-SLUDGE	Confirmation	3/24/99	ND
N11-WALL	Confirmation	3/31/99	0 96
O8-CF-GS-01	Confirmation	3/18/99	3 8
O8-CF-GS-02	Confirmation	4/29/99	ND
O9-CF-GS-01	Confirmation	3/23/99	3 1
O9-CF-GS-02	Confirmation	4/29/99	ND
O10-CF-GS-01	Confirmation	3/23/99	ND
O11-CF-GS-01	Confirmation	3/23/99	ND
O11-WALL	Confirmation	3/23/99	1 5
P10-CF-GS-01	Confirmation	3/18/99	0 26
P11-CF-GS-01	Confirmation	3/22/99	ND
P11-WALL	Confirmation	3/22/99	ND
Q10-CF-GS-01	Confirmation	3/18/99	0 26
Q10-CF-GS-01D	Confirmation	3/22/99	ND
Q10-WALL	Confirmation	3/22/99	ND
R10-CF-GS-01	East Bank	3/17/99	ND
R10-WALL	Confirmation	3/22/99	0 69
S8-CF-GS-01	East Bank	3/16/99	0 24
S9-CF-GS-01	East Bank	3/16/99	ND
S10-CF-GS-01	East Bank	3/17/99	1 8
S10-WALL	East Bank	3/17/99	15

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Appendix 37-A (b): BRYANT MILL POND SEDIMENT REMOVAL ACTION CONFIRMATORY PCB RESULTS - EAST SIDE FLOOD PLAIN

SAMPLE LOCATION	SAMPLE TYPE	SAMPLE DATE	PCB (mg/kg)
S10-WALL-01	Wall	5/1/99	0 44
S10-WALL-OVER	Wall	5/1/99	ND
T7-CF-GS-01	East Bank	3/15/99	ND
T8-CF-GS-01	East Bank	3/15/99	0.3
T8-CF-GS-01D	East Bank	3/15/99	0.39
T9-CF-GS-01	East Bank	3/16/99	ND
T10-WALL	Wall	5/1/99	ND
T10-CF-GS-01	Confirmation	5/1/99	ND
T10-WALL-OVER	Confirmation	5/1/99	ND
U7-CF-GS-01	East Bank	3/13/99	ND
U8-CF-GS-01	East Bank	3/13/99	ND
U9-CF-GS-01	East Bank	3/15/99	ND
U10-WALL	Wall	5/1/99	ND
T10-CF-GS-01	Confirmation	5/1/99	ND
T10-WALL-OVER	Confirmation	5/1/99	0 4
V7-CF-GS-01	East Bank	3/12/99	ND
V8-CF-GS-01	East Bank	3/13/99	ND
V9-CF-GS-01	East Bank	3/13/99	ND
V10-CF-GS-01	East Bank	3/15/99	0.33
V10-WALL	East Bank	3/15/99	1.5
W7-CF-GS-01	East Bank	3/11/99	ND
W8-CF-GS-01	East Bank	3/12/99	ND
W9-CF-GS-01	East Bank	3/13/99	ND
W9-CF-GS-01D	East Bank	3/13/99	ND
W9-WALL	East Bank	3/13/99	1
X7-CF-GS-01	East Bank	2/25/99	ND
X8-CF-GS-01	East Bank	3/12/99	ND
X9-WALL	East Bank	3/12/99	0.27
X9-CF-GS-01	East Bank	3/12/99	0 14
Y06-CF-GS-01	East Bank	2/22/99	ND
Y06-CF-GS-01D	East Bank	2/22/99	ND
Y8-CF-GS-01	East Bank	3/11/99	ND
Y7-CF-GS-01	East Bank	3/11/99	ND
Y8-WALL	East Bank	3/11/99	1.3
Y7-CF-GS-01D	East Bank	3/11/99	ND
Z05-CF-GS-01	East Bank	2/22/99	ND
Z06-CF-GS-01	East Bank	2/20/99	ND
Z7-CF-GS-01	East Bank	3/11/99	ND
Z8-CF-GS-01	East Bank	3/11/99	ND
Z8-WALL	East Bank	3/11/99	ND
AA07-CF-GS-10	East Bank	2/20/99	ND
AA08-CF-GS-01	East Bank	2/23/99	ND
AA09-CF-GS-01	East Bank	2/23/99	ND
AB36-CF-GS-01	Creek Bed	1/7/99	ND
AC37-SB-3	East Bank	12/15/98	0.14
AC37-SR-36	East Bank	12/15/98	ND
AD37-CF-GS-01	Creek Bed	1/7/99	1.2
AE37-CF-GS-01D	Creek Bed	1/12/99	1.6
AE37-CF-GS-02	East Bank	12/10/98	ND
AE38-CB-30	East Bank	12/12/98	ND
AE38-SR-6	East Bank	12/29/98	2.1
AE38-CF-GS-01	East Bank	12/29/98	ND
AE38-CF-GS-01D	East Bank	12/29/98	ND
AF37-CF-GS-01	East Bank	12/29/98	ND
AF38-SR-6	East Bank	12/12/98	0.59
AG37-CF-GS-01	East Bank	12/29/98	ND
AG38-SR-6	East Bank	12/12/98	ND
AH37-CF-GS-01	East Bank	12/29/98	0.33
AH38-SR-6	East Bank	12/12/98	0.19
AI37-CF-GS-01	East Bank	12/29/98	ND
AI38-SR-6	East Bank	12/12/98	2.2
AI38-CF-GS-10	East Bank	12/28/98	0.69

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Appendix 37-A (b): BRYANT MILL POND SEDIMENT REMOVAL ACTION CONFIRMATORY PCB RESULTS - EAST SIDE FLOOD PLAIN

SAMPLE LOCATION	SAMPLE TYPE	SAMPLE DATE	PCB (mg/kg)
AJ37-CF-GS-01	East Bank	12/29/98	0 42
AJ38-SR-6	East Bank	12/12/98	0 76
AJ38-CF-GS-10	East Bank	12/28/98	0 88
AK37-CF-GS-01	East Bank	12/29/98	ND
AK38-EBNK-15	East Bank	12/10/98	ND
AK38-PC-15	East Bank	12/10/98	ND
AK38-SB-23	East Bank	12/11/98	ND
AK-38-SR-6	East Bank	12/11/98	2 6
AK-38-CF-GS-01	East Bank	12/28/98	ND
AL37-SB-3	East Bank	12/11/98	ND
AL37-SB-6	East Bank	12/11/98	0.22
AL37-CF-GS-10	East Bank	12/29/98	ND
AL38-SR-6	East Bank	12/12/98	0 42
AM36-EBNK-23	East Bank	12/10/98	1
AM36-ISLD-36	East Bank	12/10/98	ND
AM36-BERM-01	East Bank	1/13/98	0 88
AM37-SB-3	East Bank	12/11/98	0.57
AM-37-SR-6	East Bank	12/11/98	ND
AM37-CF-GS-10	East Bank	12/29/98	ND
AM38-SR-6	East Bank	12/12/98	ND
AO36-SR-6	East Bank	12/12/98	ND
AO36-CF-GS-01	East Bank	12/23/98	ND
AO37-SR-6	East Bank	12/11/98	ND
AO37-FBR-30	East Bank	12/10/98	5 5
AO37-CF-GS-01	East Bank	12/22/98	ND
AO37-CF-GS-02	East Bank	1/7/99	ND
AP36-SB-3	East Bank	12/11/98	ND
AP36-SR-6	East Bank	12/11/98	ND
AP36-SR-6	East Bank	12/11/98	ND
BB07-CF-GS-01	East Bank	2/20/99	ND
BB8-CF-GS-01	East Bank	2/24/99	ND
BB09-CF-GS-01	East Bank	2/23/99	ND
BB10-CF-GS-01	East Bank	2/23/99	ND
CC06-CF-GS-01	East Bank	2/19/99	ND
CC7-CF-GS-01	East Bank	2/25/99	ND
CC8-CF-GS-01	East Bank	2/24/99	ND
CC9-CF-GS-01	East Bank	2/23/99	ND
CC10-CF-GS-01	East Bank	2/23/99	ND
DD6-CF-GS-01	East Bank	2/19/99	ND
DD7-CF-GS-01	East Bank	2/25/99	ND
DD8-CF-GS-01	East Bank	2/25/99	ND
DD9-CF-GS-01	East Bank	2/26/99	ND
DD9-CF-GS-01D	East Bank	2/26/99	ND
DD10-CF-GS-01	East Bank	2/26/99	ND
EE5-CF-GS-01	East Bank	2/13/99	ND
EE6-CF-GS-01	East Bank	2/19/99	ND
EE7-CF-GS-01	East Bank	2/27/99	ND
EE9-CF-GS-01	East Bank	2/27/99	ND
EE8-CF-GS-01	East Bank	2/27/99	ND
EE9-WALL	East Bank	2/27/99	ND
FF06-CF-GS-01	East Bank	2/17/99	ND
FF7-CF-GS-01	East Bank	3/1/99	ND
FF7-CF-GS-01 (MS)	East Bank	3/1/99	NA
FF7-CF-GS-01 (MSD)	East Bank	3/1/99	NA
FF8-CF-GS-01	East Bank	3/1/99	ND
FF8-WALL	East Bank	3/1/99	ND
GG5-CF-GS-01	East Bank	2/11/99	ND
GG06-CF-GS-01	East Bank	2/17/99	ND
GG7-CF-GS-01	East Bank	3/3/99	ND
GG08-WALL	Wall	3/3/99	ND
GG8-CF-GS-01	East Bank	3/3/99	ND
HH5-CF-GS-01	East Bank	2/11/99	ND

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Appendix 37-A (b): BRYANT MILL POND SEDIMENT REMOVAL ACTION CONFIRMATORY PCB RESULTS - EAST SIDE FLOOD PLAIN

SAMPLE LOCATION	SAMPLE TYPE	SAMPLE DATE	PCB (mg/kg)
HH6-CF-GS-01	East Bank	2/13/99	0.2
HH7-CF-GS-01	East Bank	3/4/99	ND
HH8-CF-GS-01	East Bank	3/4/99	1 4
HH8-CF-GS-02	East Bank	3/8/99	ND
HH8-WALL	Wall	3/4/99	ND
II5-CF-GS-01	East Bank	2/13/99	ND
II6-CF-GS-01	East Bank	2/13/99	0.15
II7-CF-GS-01	East Bank	3/5/99	ND
II7-CF-GS-01D	East Bank	3/5/99	ND
II8-CF-GS-01	East Bank	3/5/99	ND
II8-CF-GS-01 (MS)	East Bank	3/5/99	NA
II8-CF-GS-01 (MSD)	East Bank	3/5/99	NA
II8-SR-6	East Bank	1/6/99	11
II8-SR-6D	East Bank	1/6/99	10
II9-CF-GS-01	East Bank	3/8/99	ND
II9-SR-6	East Bank	1/6/99	3.2
II9-SR-01	Confirmation	3/29/99	9 6
II9-SB-03	Confirmation	3/29/99	2.7
JJ6-CF-GS-01	East Bank	2/13/99	ND
JJ7-CF-GS-01	East Bank	2/15/99	ND
JJ08-D1-GS-01	Depth Samples	10/21/98	ND
JJ08-D2-GS-01	Depth Samples	10/21/98	ND
JJ08-D3-GS-01	Depth Samples	10/21/98	0 54
JJ8-CF-GS-01	East Bank	3/8/99	ND
JJ9-SR-6	East Bank	1/6/99	0.67
JJ9-CF-GS-01	East Bank	3/10/99	0.35
II9-WALL	East Bank	3/10/99	74
JJ10-SR-6	East Bank	1/7/99	47
JJ10-D1-GS-01	Depth Samples	10/17/98	28
JJ10-D2-GS-01	Depth Samples	10/17/98	59
JJ10-D3-GS-01	Depth Samples	10/17/98	7.9
JJ10-CF-GS-01	East Bank	3/11/99	0.6
JJ10-WALL	East Bank	3/11/99	0.65
JJ11-SR-6-10	Half Node	1/26/99	0.5
JJ11-SB2-10	Half Node	1/26/99	0.37
JJ12-SR-6	Preliminary	3/10/99	ND
JJ12-SB-3	Preliminary	3/10/99	ND
JJ12-SR-6-10	Half Node	1/26/99	15
JJ12-CF-GS-01	East Bank	3/13/99	ND
JJ12-WALL	Confirmation	3/22/99	42
JJ12-CF-GS-01	Confirmation	3/25/99	ND
KK7-CF-GS-01	East Bank	2/15/99	ND
KK8-CF-GS-01	East Bank	2/15/99	ND
KK9-CF-GS-01	East Bank	2/16/99	ND
KK9-CF-GS-01D	East Bank	2/16/99	ND
KK10-CF-GS-01	East Bank	3/4/99	ND
KK11-CF-GS-01	East Bank	3/4/99	ND
KK11-WALL	Wall	3/4/99	ND
KK12-CF-GS-01	East Bank	3/2/99	ND
KK12-SR-6	East Bank	1/8/99	120
KK12-WALL	Wall	3/2/99	ND
KK13-SR-6	East Bank	1/6/99	ND
KK13-D1-GS-01	Depth Samples	10/17/98	ND
KK13-D2-GS-01	Depth Samples	10/17/98	ND
KK13-D3-GS-01	Depth Samples	10/17/98	ND
KK14-SR-6-10	Half Node	1/26/99	ND
KK14-SB2-10	Half Node	1/26/99	ND
KK15-SR-6-10	Half Node	1/26/99	ND
KK15-SB2-10	Half Node	1/26/99	ND
KK15-WALL	East Bank	2/26/99	ND
LL10-CF-GS-01	East Bank	2/17/99	ND
LL14-CF-GS-01	East Bank	2/27/99	ND

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Appendix 37-A (b): BRYANT MILL POND SEDIMENT REMOVAL ACTION CONFIRMATORY PCB RESULTS - EAST SIDE FLOOD PLAIN

SAMPLE LOCATION	SAMPLE TYPE	SAMPLE DATE	PCB (mg/kg)
LL17-CF-GS-10	East Bank	2/24/99	ND
LL17-CF-GS-10D	East Bank	2/24/99	ND
LL12-CF-GS-01	East Bank	3/8/99	ND
LL12-SR-6	East Bank	1/8/99	110
LL12-SR-6D	East Bank	1/8/99	190
LL13-CF-GS-01	East Bank	2/27/99	ND
LL15-CF-GS-01	East Bank	2/26/99	ND
LL16-SR6-10	Half Node	1/27/99	0 12
LL16-SB2-10	Half Node	1/27/99	0.73
LL17-SR6-10	Half Node	1/27/99	2.2
LL17-SR-6	Preliminary	3/12/99	ND
LL17-SB-2	Preliminary	3/12/99	ND
LL17-SB-3	Preliminary	3/12/99	ND
LL17-WALL	East Bank	3/15/99	9.5
LL17-WALL	Confirmation	3/22/99	ND
TREE-SR-6	Preliminary	3/12/99	ND
TREE-SB-2	Preliminary	3/12/99	ND
TREE-SB-3	Preliminary	3/12/99	ND
LL18-SR6-10	Half Node	1/27/99	0.67
LL18-SB2-10	Half Node	1/27/99	ND
MM15-CF-GS-01	East Bank	2/26/99	ND
MM16-CF-GS-01	East Bank	2/25/99	ND
MM17-SR-6	East Bank	1/8/99	200
MM17-D1-GS-01	Depth Samples	10/21/98	ND
MM17-D2-GS-01	Depth Samples	10/21/98	ND
MM17-D3-GS-01	Depth Samples	10/21/98	ND
MM17-CF-GS-01	East Bank	2/24/99	ND
MM18-SR-6	East Bank	1/6/99	1 7
MM18-SR-6D	East Bank	1/6/99	1.7
MM18-CF-GS-10	East Bank	2/24/99	ND
MM18-WALL	East Bank	3/15/99	0.95
MM19-CF-GS-10	East Bank	2/24/99	ND
MM19-WALL	East Bank	3/15/99	ND
MM18-D1-GS-01	Depth Samples	10/17/98	0.074
MM18-D2-GS-01	Depth Samples	10/17/98	0.088
MM18-D3-GS-01	Depth Samples	10/17/98	ND
MM19-D1-GS-01	Depth Samples	10/17/98	0 08
MM19-D2-GS-01	Depth Samples	10/17/98	0 027
MM19-D3-GS-01	Depth Samples	10/17/98	0.0074
MM20-SR6-10	Half Node	1/27/99	0.8
MM20-SR6-10D	Half Node	1/27/99	0.38
MM20-SB2-10	Half Node	1/27/99	ND
MM20-WALL	East Bank	3/1/99	ND
NN17-CF-GS-01	East Bank	2/25/99	ND
NN18-CF-GS-01	East Bank	2/24/99	ND
NN19-CF-GS-01	East Bank	2/23/99	ND
NN20-CF-GS-01	East Bank	2/23/99	0.25
NN21-CF-GS-01	East Bank	2/23/99	ND
NN21-SR-6	East Bank	1/6/99	2.5
NN21-SR-6D	East Bank	1/6/99	2.3
NN21-WALL	East Bank	3/1/99	ND
OO19-CF-GS-01	East Bank	2/23/99	ND
OO20-CF-GS-01	East Bank	2/23/99	ND
OO21-CF-GS-01	East Bank	2/23/99	0.12
OO22-CF-GS-01	East Bank	2/23/99	ND
OO23-CF-GS-01	East Bank	2/23/99	ND
OO24-CF-GS-01	East Bank	2/23/99	ND
OO24-SR-6	East Bank	1/6/99	0.77
OO25-SR-6	East Bank	12/19/98	0 82
OO25-SR-3	East Bank	12/19/98	ND
OO25-WALL	East Bank	3/1/99	ND
OO25-WALL-DUP	East Bank	3/1/99	ND

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Appendix 37-A (b): BRYANT MILL POND SEDIMENT REMOVAL ACTION
CONFIRMATORY PCB RESULTS - EAST SIDE FLOOD PLAIN

SAMPLE LOCATION	SAMPLE TYPE	SAMPLE DATE	PCB (mg/kg)
PP23-CF-GS-01	East Bank	2/19/99	ND
PP24-CF-GS-01	East Bank	2/19/99	ND
PP25-CF-GS-01	East Bank	2/20/99	ND
PP25-CF-GS-01	East Bank	2/22/99	ND
PP25-SB-3	East Bank	12/18/98	ND
PP25-SR-6	East Bank	12/18/98	ND
PP26-CF-GS-01	East Bank	3/1/99	0.65
PP26-SR-6	East Bank	12/19/98	Cancel
PP26-SB-3	East Bank	12/19/98	2.6
PP26-SB-3D	East Bank	12/19/98	0.054
PP26-WALL	East Bank	3/1/99	ND
PP27-SR-6	East Bank	12/19/98	ND
PP27-SB-3	East Bank	12/19/98	ND
QQ24-CF-GS-01	East Bank	2/19/99	0.1
QQ245-CF-GS-01	East Bank	2/18/99	ND
QQ26-SB-3	East Bank	12/18/98	ND
QQ26-SR-6	East Bank	12/18/98	1.8
QQ26-CF-GS-01	East Bank	2/15/99	ND
QQ27-SR-6	East Bank	12/19/98	ND
QQ27-SB-3	East Bank	12/19/98	ND
QQ27-CF-GS-01	Confirmation	2/13/99	ND
QQ27-WALL	Confirmation	3/1/99	0.75
RR26-CF-GS-01	East Bank	2/18/99	ND
RR27-CF-GS-01	East Bank	2/15/99	ND
RR27-SB-3	East Bank	12/18/98	ND
RR27-SR-6	East Bank	12/18/98	0.74
RR28-SR-6	East Bank	12/19/98	1.7
RR28-SB-3	East Bank	12/19/98	ND
RR28-CF-GS-01	East Bank	2/11/99	ND
RR28-WALL	East Bank	3/1/99	0.51
RR29-SR-6	East Bank	12/19/98	0.25
RR-29-SB-3	East Bank	12/19/98	ND
SS27-CF-GS-01	East Bank	2/15/99	ND
SS28-SR-6	East Bank	12/30/98	1.7
SS28-CF-GS-01	East Bank	2/11/99	1
SS29-SB-3	East Bank	12/18/98	ND
SS29-SR-6	East Bank	12/18/98	4 8
SS29-CF-GS-01	East Bank	2/11/99	0.3
SS30-SR-36	East Bank	12/17/98	2.2
SS30-SR-3	East Bank	12/17/98	0.55
SS30-CF-GS-01	East Bank	2/12/99	ND
SS30-CF-GS-01D	East Bank	2/12/99	ND
SS30-WALL	East Bank	3/1/99	0.9
TT29-CF-GS-01	East Bank	2/11/99	ND
TT30-CF-GS-01	East Bank	2/11/99	ND
TT31-CF-GS-01	Creek Bed	1/7/99	ND
TT32-SR-36	East Bank	12/17/98	0.055
UU32-CF-GS-01	Creek Bed	1/7/99	ND
UU33-SR-36	East Bank	12/15/98	0.24
VV32-CF-GS-10	Half Node	12/31/98	ND
VV33-SR-36	East Bank	12/15/98	1.1
VV33-CF-GS-01	East Bank	12/30/98	ND
VV34-SR-36	East Bank	12/15/98	0.7
WW-33-CF-GS-01	East Bank	12/31/98	0.062
WW34-SR-36	East Bank	12/15/98	ND
XX34-SR-36	East Bank	12/15/98	0.13
XX35-SR-36	East Bank	12/15/98	ND
XX35-SB-3	East Bank	12/16/98	ND
YY34-CF-GS-1	Creek Bed	1/7/99	ND
YY35-SR-36	East Bank	12/15/98	0.09
ZZ35-CF-GS-01	Creek Bed	1/7/99	ND
ZZ35-CF-GS-01D	Creek Bed	1/7/99	ND

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Appendix 37-A (b): BRYANT MILL POND SEDIMENT REMOVAL ACTION CONFIRMATORY PCB RESULTS - EAST SIDE FLOOD PLAIN

SAMPLE LOCATION	SAMPLE TYPE	SAMPLE DATE	PCB (mg/kg)
ZZ36-SR-36	East Bank	12/15/98	ND
LGN4-C-01	Lagoon 4	5/6/99	24
LGN6-SW-01	Lagoon 6	5/6/99	24
LGN6-NE-01	Lagoon 6	5/6/99	41
LF1-01	Landfill Sample	5/5/99	1.5
LF2-01	Landfill Sample	5/5/99	4.9
LF3-01	Landfill Sample	5/5/99	2.8
SC-SS-CB-01	Creek Bank	5/26/99	ND
SC-SS-CB-02	Creek Bank	2/26/99	ND

Data Source: EPA Interim Removal Action at Bryant Mill Pond Sample Tracking Data Sheets (6/11/99 summary table)
ND: non-detect

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Appendix 37-A (a): BRYANT MILL POND SEDIMENT REMOVAL ACTION
CONFIRMATORY PCB RESULTS - WEST SIDE FLOOD PLAIN

SAMPLE LOCATION	SAMPLE TYPE	SAMPLE DATE	PCB (mg/kg)
A1-CF-GS-01	Confirmation	2/2/99	ND
B1-CF-GS-01	Confirmation	2/3/99	ND
C1-CF-GS-10	half node	2/1/99	ND
C1-CF-GS-01	Confirmation	2/4/99	3.2
C1-CF-GS-02	Confirmation	2/6/99	ND
C2-CF-GS-01	West Bank	1/30/99	0.2
C3-CF-GS-10	half node	1/30/99	0.18
C3-CF-GS-10D	half node	1/30/99	0.15
D1-CF-GS-10	half node	2/1/99	ND
D1-CF-GS-10	Confirmation	2/4/99	3.2
D1-CF-GS-02	Confirmation	2/6/99	ND
D2-CF-GS-01	Confirmation	2/1/99	ND
D2-CF-GS-01D	Confirmation	2/1/99	ND
D3-CF-GS-01	West Bank	1/29/99	ND
D3-CF-GS-01D	West Bank	1/29/99	ND
D4-CF-GS-01	West Bank	1/26/99	ND
D4-CF-GS-01D	West Bank	1/26/99	ND
E02-CF-GS-01	West Bank	1/27/99	ND
E03-CF-GS-01	West Bank	1/21/99	ND
E04-CF-GS-01	West Bank	1/21/99	ND
E05-CF-GS-10	half node	1/21/99	2.6
F02-CF-GS-01	West Bank	1/27/99	ND
F02-CF-GS-01D	West Bank	1/27/99	ND
F03-CF-GS-01	West Bank	1/21/99	ND
F04-CF-GS-01	West Bank	1/20/99	ND
F05-CF-GS-01	West Bank	1/20/99	0.11
F05-CF-GS-01D	West Bank	1/20/99	0.24
G02-CF-GS-01	West Bank	1/21/99	ND
G02-CS-WALL	sidewall	1/21/99	0.48
G03-CF-GS-01	West Bank	1/26/99	ND
G04-CF-GS-01	West Bank	1/18/99	ND
G05-CF-GS-01	West Bank	1/19/99	ND
H02-CF-GS-01	West Bank	1/19/99	ND
H03-CF-GS-01	West Bank	12/31/98	ND
H04-CF-GS-01	West Bank	12/31/98	ND
H04-CF-GS-01D	West Bank	12/31/98	ND
H05-CF-GS-01	West Bank	1/18/99	ND
I02-CF-GS-10	half node	12/19/98	ND
I03-CF-GS-01	West Bank	12/19/98	ND
I04-CF-GS-01	West Bank	12/30/98	ND
I05-CF-GS-01	West Bank	1/27/99	ND
I05-CF-GS-10	half node	12/30/98	ND
I06-CF-GS-10	half node	1/18/99	ND
J03-CF-GS-01	West Bank	12/19/98	ND
J03-CF-GS-01D	West Bank	12/19/98	ND
J04-CF-GS-01	West Bank	12/17/98	ND
J04-CF-GS-02	West Bank	12/18/98	ND
J05-CF-GS-10	half node	12/18/98	ND
K04-CF-GS-01	West Bank	12/17/98	ND
K04-CF-GS-02	West Bank	12/18/98	ND
K05-CF-GS-01	West Bank	12/18/98	ND
L05-CF-GS-01	West Bank	12/17/98	ND
L05-CF-GS-02	West Bank	12/18/98	ND
L06-CF-GS-01	West Bank	12/18/98	ND
M05-CF-GS-01	West Bank	12/8/98	ND
M06-CF-GS-01	West Bank	12/16/98	ND
M07-CF-GS-10	West Bank	12/30/98	ND
N05-CF-GS-01	West Bank	12/7/98	ND
N06-CF-GS-01	West Bank	12/16/98	ND
N07-CF-GS-10	West Bank	12/30/98	ND
O05-CF-GS-01	West Bank	12/7/98	3.3
O06-CF-GS-01	West Bank	12/16/98	ND
O07-CF-GS-01	West Bank	12/22/98	ND
O07-CF-GS-01D	West Bank	12/22/98	ND
P06-CF-GS-01	West Bank	12/16/98	ND
P07-CF-GS-01	West Bank	12/21/98	ND
P08-CF-GS-01	West Bank	12/21/98	ND
P09-CF-GS-01	West Bank	12/29/98	ND
Q05-CF-GS-01	West Bank	12/5/98	ND
Q06-CF-GS-01	West Bank	12/16/98	ND
Q07-CF-GS-01	West Bank	12/21/98	ND
Q08-CF-GS-01	West Bank	12/21/98	ND
Q08-CF-GS-01D	West Bank	12/21/98	ND
Q09-CF-GS-01	West Bank	12/29/98	ND
R05-CF-GS-01	West Bank	12/5/98	ND
R06-CF-GS-01	West Bank	12/16/98	ND
R06-CF-GS-01D	West Bank	12/16/98	ND
R07-CF-GS-01	West Bank	12/28/98	ND
R08-CF-GS-01	West Bank	12/28/98	ND
R09-CF-GS-01	West Bank	12/29/98	ND
S05-CF-GS-01	West Bank	12/5/98	ND
S06-CF-GS-01	West Bank	12/15/98	ND
S07-CF-GS-01	West Bank	12/23/98	ND
S07-CF-GS-01	West Bank	12/29/98	ND
T04-CF-GS-01	West Bank	12/4/98	ND
T05-CF-GS-01	West Bank	12/15/98	ND
T06-CF-GS-01	West Bank	12/15/98	ND
U04-CF-GS-01	West Bank	12/4/98	ND
U04-CF-GS-01D	West Bank	12/4/98	ND
U05-CF-GS-01	West Bank	12/11/98	ND
U06-CF-GS-01	West Bank	12/15/98	ND
V03-CF-GS-01	West Bank	12/4/98	ND
V04-CF-GS-01	West Bank	12/11/98	ND
V05-CF-GS-01	West Bank	12/14/98	ND
V06-CF-GS-10	half node	12/14/98	ND
W03-CF-GS-01	West Bank	12/3/98	ND

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Appendix 37-A (a): BRYANT MILL POND SEDIMENT REMOVAL ACTION
CONFIRMATORY PCB RESULTS - WEST SIDE FLOOD PLAIN

SAMPLE LOCATION	SAMPLE TYPE	SAMPLE DATE	PCB (mg/kg)
W04-CF-GS-01	West Bank	12/10/98	ND
W05-CF-GS-01	West Bank	12/12/98	ND
W05-LYR-01	sidewall	12/12/98	ND
W06-CF-GS-10	half node	12/14/98	ND
X03-CF-GS-01	West Bank	12/3/98	ND
X04-CF-GS-01	West Bank	12/3/98	ND
X05-CF-GS-01	West Bank	12/10/98	ND
X05-CF-GS-01D	West Bank	12/10/98	ND
X06-CF-GS-01	Confirmation	2/22/99	ND
Y03-CF-GS-01	West Bank	12/2/98	ND
Y04-CF-GS-01	West Bank	12/9/98	ND
Y04-SLG-GS-01	Sludge	12/9/98	ND
Y05-CF-GS-01	West Bank	12/11/98	ND
Y05-CF-GS-01D	West Bank	12/11/98	3 8
Z03-CF-GS-01	West Bank	12/2/98	ND
Z04-CF-GS-01	West Bank	12/2/98	ND
AA01-CF-GS-01	West Bank	11/4/98	ND
AA02-CF-GS-01	West Bank	11/4/98	1 8
AA03-CF-GS-01	West Bank	11/4/98	ND
AA04-CF-GS-01	West Bank	11/5/98	ND
AA05-CF-GS-01	West Bank	11/5/98	ND
AA06-CF-GS-01	West Bank	11/18/98	ND
AA07-CF-GS-10	creek diversion	1/21/99	ND
AB34-CF-GS-01	West Bank	10/8/98	ND
AB34-CF-GS-01D	West Bank	10/8/98	ND
AB35-CF-GS-01	West Bank	10/8/98	ND
AC34-CF-GS-01	West Bank	10/9/98	0 36
AC35-CF-GS-01	West Bank	10/7/98	ND
AC36-CF-GS-10	half node	10/27/98	ND
AC36-CF-GS-01	West Bank	1/7/99	1
AD35-CF-GS-01	West Bank	10/7/98	ND
AD35-CF-GS-02	West Bank	10/9/98	0 19
AD36-CF-GS-01	West Bank	10/7/98	9 69
AD36-CF-GS-02	HS West Bank	10/26/98	ND
AE35-CF-GS-01	West Bank	10/9/98	ND
AE36-CF-GS-10	half node	10/28/98	ND
AE36-CF-GS-01	West Bank	1/7/99	ND
AF35-CF-GS-01	West Bank	10/7/98	3 7
AF35-CF-GS-02	HS West Bank	10/26/98	ND
AF36-CF-GS-01	West Bank	10/7/98	ND
AG35-CF-GS-01	West Bank	10/7/98	ND
AG36-CF-GS-01	West Bank	10/5/98	ND
AH35-CF-GS-01	West Bank	10/5/98	ND
AH36-CF-GS-01	West Bank	10/5/98	ND
AH36-CF-GS-01D	West Bank	10/5/98	ND
AI35-CF-GS-01	West Bank	10/5/98	ND
AI36-CF-GS-01	West Bank	10/3/98	ND
AJ35-CF-GS-01	West Bank	10/3/98	ND
AJ36-CF-GS-01	West Bank	10/3/98	2 8
AJ36-CF-GS-02	HS West Bank	10/24/98	28
AJ36-CF-GS-03	HS West Bank	10/27/98	ND
AK35-CF-GS-01	West Bank	10/2/98	ND
AK36-CF-SS-01	West Bank	10/2/98	7 1
AK36-CF-GS-02	HS West Bank	10/24/98	0 42
AL35-CF-GS-01	West Bank	10/2/98	ND
AL36-CF-GS-01	West Bank	10/2/98	2 1
AL36-CF-GS-02	HS West Bank	10/24/98	0 5
AM35-CF-GS-01	West Bank	10/2/98	14
AM35-CF-GS-02	HS West Bank	10/26/98	ND
AO35-SR-8	West Bank	1/19/99	ND
BB01-CF-GS-01	West Bank	11/3/98	ND
BB02-CF-GS-01	West Bank	11/3/98	21
BB02-CF-GS-01D	West Bank	11/3/98	11
BB02-CF-GS-02	HS West Bank	11/9/98	ND
BB02-SW-GS-01	QC	11/24/98	ND
BB02-NW-GS-01	QC	11/24/98	0 37
BB02-SE-GS-01	QC	11/24/98	0 26
BB02-NE-GS-01	QC	11/24/98	0 89
BB03-CF-GS-01	West Bank	11/3/98	ND
BB04-CF-GS-01	West Bank	11/7/98	ND
BB05-CF-GS-01	West Bank	11/13/98	ND
BB05-CF-GS-01D	West Bank	11/13/98	ND
BB06-CF-GS-01	West Bank	11/18/98	ND
BB07-CF-GS-10	creek diversion	1/21/99	ND
CC02-CF-GS-01	West Bank	11/2/98	ND
CC03-CF-GS-01	West Bank	11/2/98	ND
CC04-CF-GS-01	West Bank	11/7/98	ND
CC05-CF-GS-01	West Bank	11/14/98	ND
CC05-CF-GS-01D	West Bank	11/14/98	ND
CC06-CF-GS-10	half node	11/17/98	ND
DD02-CF-GS-01	West Bank	10/31/98	ND
DD03-CF-GS-01	West Bank	10/30/98	0 4
DD04-CF-GS-01	West Bank	11/7/98	ND
DD05-CF-GS-10	half node	11/17/98	ND
DD05-CF-GS-01	West Bank	12/4/98	ND
DD06-CF-GS-10	half node	11/18/98	ND
EE02-CF-GS-01	West Bank	10/31/98	ND
EE03-CF-GS-01	West Bank	10/29/98	1 8
EE03-CF-GS-01D	West Bank	10/29/98	1 9
EE03-CF-GS-02	HS West Bank	11/6/98	ND
EE04-CF-GS-01	West Bank	11/9/98	ND
EE05-CF-GS-10	half node	11/17/98	ND
FF02-CF-GS-01	West Bank	10/30/98	ND
FF03-CF-GS-01	West Bank	10/29/98	15 3
FF03-CF-GS-02	HS West Bank	11/6/98	ND
FF04-CF-GS-01	West Bank	11/9/98	ND

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Appendix 37-A (a): BRYANT MILL POND SEDIMENT REMOVAL ACTION
CONFIRMATORY PCB RESULTS - WEST SIDE FLOOD PLAIN

SAMPLE LOCATION	SAMPLE TYPE	SAMPLE DATE	PCB (mg/kg)
FF05-CF-GS-01	West Bank	11/18/98	ND
FF05-CF-GS-01D	West Bank	11/18/98	ND
GG02-CF-GS-01	West Bank	10/28/98	ND
GG03-CF-GS-10	half node	10/29/98	ND
GG03-CF-GS-01	West Bank	12/4/98	ND
GG04-CF-GS-01	West Bank	11/11/98	ND
GG05-CF-GS-10	half node	11/19/98	ND
HH03-CF-GS-01	West Bank	10/28/98	ND
HH04-CF-GS-10	West Bank	10/29/98	ND
HH04-CF-GS-01	West Bank	12/5/98	ND
HH05-CF-GS-10	half node	11/19/98	ND
II03-CF-GS-01	West Bank	10/28/98	ND
II04-CF-GS-01	West Bank	10/29/98	ND
II05-CF-GS-10	half node	11/20/98	ND
JJ04-CF-GS-01	West Bank	10/29/98	0 18
JJ05-CF-GS-01	West Bank	10/27/98	2 9
JJ05-CF-GS-02	HS West Bank	11/5/98	ND
JJ06-CF-GS-10	half node	11/20/98	ND
JJ06-CF-GS-10D	half node	11/20/98	ND
KK05-CF-GS-01	West Bank	10/27/98	ND
KK06-CF-GS-01	West Bank	10/27/98	ND
KK06-CF-GS-01D	West Bank	10/27/98	1 1
KK07-CF-GS-10	half node	11/20/98	ND
LL06-CF-GS-01	West Bank	10/26/98	ND
LL06-CF-GS-01D	West Bank	10/26/98	ND
LL07-CF-GS-01	West Bank	10/26/98	0 46
LL08-CF-GS-01	West Bank	11/21/98	ND
LL09-CF-GS-01	West Bank	11/23/98	ND
LL09-CF-GS-01D	West Bank	11/23/98	ND
LL10-CF-GS-10	half node	11/24/98	ND
LL11-CF-GS-01	West Bank	10/21/98	0 85
MM07-CF-GS-01	West Bank	10/24/98	ND
MM08-CF-GS-01	West Bank	10/26/98	ND
MM09-CF-GS-01	West Bank	11/23/98	ND
MM10-CF-GS-01	West Bank	10/23/98	ND
MM10-CF-GS-01D	West Bank	10/23/98	0 4
MM11-CF-GS-01	West Bank	10/23/98	1
MM12-CF-GS-01	West Bank	10/22/98	0 49
MM13-CF-GS-01	West Bank	10/20/98	ND
MM14-CF-GS-01	West Bank	10/20/98	ND
MM15-CF-GS-10	half node	12/1/98	ND
NN07-CF-GS-01	West Bank	10/24/98	ND
NN08-CF-GS-01	West Bank	10/24/98	ND
NN09-CF-GS-01	West Bank	10/24/98	3 9
NN09-CF-GS-02	HS West Bank	11/11/98	0 35
NN10-CF-GS-01	West Bank	10/23/98	1 8
NN10-CF-GS-02	HS West Bank	11/13/98	ND
NN11-CF-GS-01	West Bank	10/23/98	9 6
NN11-CF-GS-02	HS West Bank	11/13/98	ND
NN12-CF-GS-01	West Bank	10/21/98	0 96
NN13-CF-GS-01	West Bank	10/21/98	0 53
NN14-CF-GS-01	West Bank	10/20/98	0 47
NN15-CF-GS-01	West Bank	10/20/98	0 76
NN16-CF-GS-01	West Bank	12/1/98	ND
NN16-CF-GS-01D	West Bank	12/1/98	ND
NN17-CF-GS-10	half node	11/25/98	ND
OO08-CF-GS-01	West Bank	10/24/98	ND
OO09-CF-GS-01	West Bank	10/24/98	ND
OO13-CF-GS-10	half node	11/17/98	0 15
OO14-CF-GS-01	West Bank	10/22/98	ND
OO15-CF-GS-01	West Bank	10/20/98	ND
OO16-CF-GS-01	West Bank	10/20/98	ND
OO17-CF-GS-01	West Bank	11/25/98	ND
OO18-CF-GS-01	West Bank	11/24/98	ND
OO19-CF-GS-10	half node	10/27/98	ND
OO20-CF-GS-10	half node	10/27/98	ND
OO21-CF-GS-10	half node	11/20/98	ND
PP15-CF-GS-01	West Bank	10/22/98	ND
PP16-CF-GS-01	West Bank	10/19/98	ND
PP17-CF-GS-01	West Bank	10/20/98	ND
PP17-CF-GS-01D	West Bank	10/22/98	ND
PP19-CF-GS-01	West Bank	11/23/98	ND
PP18-CF-GS-01	West Bank	11/24/98	ND
PP20-CF-GS-01	West Bank	10/14/98	ND
PP21-CF-GS-01	West Bank	10/14/98	ND
PP22-CF-GS-01	West Bank	10/14/98	ND
PP23-CF-GS-10	half node	11/24/98	ND
QQ15-CF-GS-01	West Bank	10/20/98	13
QQ15-CF-GS-02	West Bank	10/29/98	0 31
QQ16-CF-GS-01	West Bank	10/19/98	ND
QQ16-CF-GS-01D	West Bank	10/19/98	ND
QQ17-CF-GS-01	West Bank	10/16/98	ND
QQ18-CF-GS-01	West Bank	10/16/98	66
QQ18-CF-GS-02	HS West Bank	11/19/98	ND
QQ19-CF-GS-01	West Bank	10/15/98	46 3
QQ19-CF-GS-02	HS West Bank	10/29/98	ND
QQ20-CF-GS-01	West Bank	10/14/98	ND
QQ21-CF-GS-01	West Bank	10/14/98	ND
QQ22-CF-GS-01	West Bank	10/15/98	0 28
QQ23-CF-GS-01	West Bank	10/15/98	ND
QQ23-CF-GS-01D	West Bank	10/15/98	ND
QQ24-CF-GS-10	half node	10/29/98	ND
RR16-CF-GS-01	West Bank	10/19/98	ND
RR17-CF-GS-01	West Bank	10/19/98	14
RR17-CF-GS-02	HS West Bank	11/18/98	ND
RR18-CF-GS-01	West Bank	10/14/98	4 1

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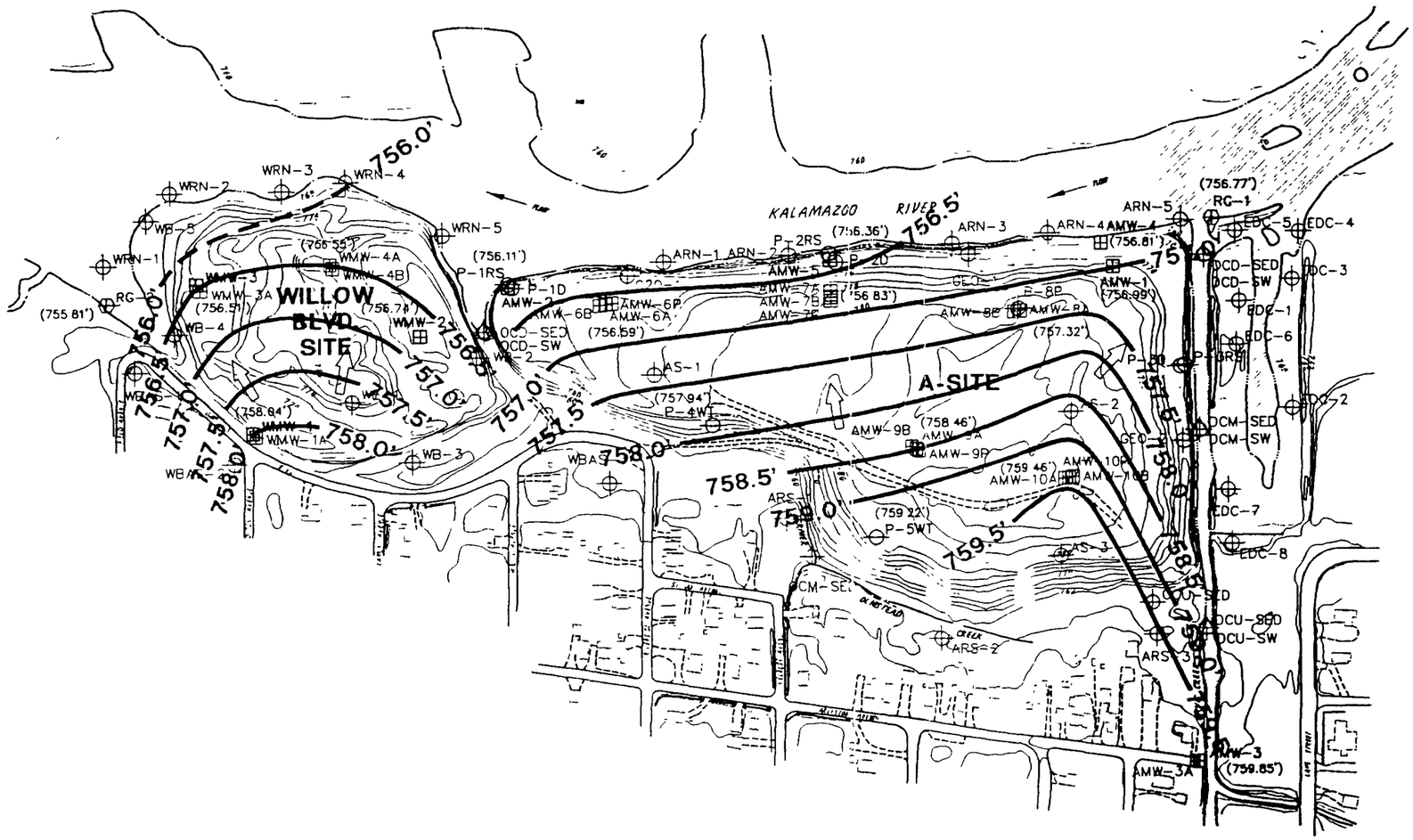
Appendix 37-A (a): BRYANT MILL POND SEDIMENT REMOVAL ACTION CONFIRMATORY PCB RESULTS - WEST SIDE FLOOD PLAIN

SAMPLE LOCATION	SAMPLE TYPE	SAMPLE DATE	PCB (mg/kg)
RR18-CF-GS-02	HS West Bank	11/16/98	40
RR18-CF-GS-03	HS West Bank	11/20/98	ND
RR19-CF-GS-01	West Bank	10/14/98	16 41
RR19-CF-GS-02	HS West Bank	11/12/98	ND
RR19-CF-GS-02D	HS West Bank	11/12/98	ND
RR20-CF-GS-01	West Bank	10/20/98	ND
RR25-CF-GS-01	Confirmation	2/18/99	ND
RR25-CF-GS-10	half node	10/29/98	0 098
SS17-CF-GS-10	half node	10/29/98	0 92
SS18-CF-GS-01	West Bank	10/16/98	ND
SS18-CF-GS-02	West Bank	11/17/98	ND
SS26-CF-GS-01	West Bank	10/15/98	ND
TT28-CF-GS-01	West Bank	10/12/98	ND
TT29-CF-GS-10	half node	10/27/98	1 2
TT30-CF-GS-10	half node	10/27/98	ND
UU30-CF-GS-01	West Bank	10/12/98	0 73
UU31-CF-GS-10	half node	10/27/98	0 44
UU31-CF-GS-01	West Bank	12/10/98	ND
UU32-CF-GS-01	West Bank	12/10/98	ND
WW32-CF-GS-01	West Bank	10/9/98	0 35
XX33-CF-GS-10	half node	10/29/98	ND
XX33-CF-GS-01	West Bank	12/9/98	ND
YY33-CF-GS-01	West Bank	10/8/98	ND
YY33-GRY	West Bank	12/21/98	ND
ZZ34-CF-GS-10	half node	10/27/98	ND
ZZ34-CF-GS-01	West Bank	12/9/98	ND

Data Source EPA Interim Removal Action at Bryant Mill Pond Sample Tracking Data Sheets (6/11/99 summary table)
ND non-detect

CONFIDENTIAL BUSINESS INFORMATION

APPENDIX 38-A



LEGEND

- AMW-4 — EXISTING MONITORING WELL
- WMW-3 — NEW MONITORING WELL OR CLUSTER
- WB-1 — NEW BORING
- GEO-1 — NEW GEOTECHNICAL BORING
- P-2D — NEW PIEZOMETER
- SW-1 — NEW SURFACE WATER SAMPLE
- RG-1 — NEW RIVER GAUGE STATION
- —780— ELEVATION CONTOUR (NGVD 1929)
- EDGE OF WATER OR DRAINAGE CHANNEL
- UNPAVED ROAD/TRAIL
- (759.22') GROUNDWATER ELEVATION
- 759.0' — INTERPOLATED GROUNDWATER ELEVATION CONTOUR LINE
- 756.0' — EXTRAPOLATED GROUNDWATER ELEVATION CONTOUR LINE
- GROUNDWATER FLOW DIRECTION

150' 0 300'
SCALE

NOTES:

1 UNLESS OTHERWISE INDICATED ALL SAMPLE LOCATIONS SURVEYED BY WADE-TRIM INC OCTOBER 1993 THROUGH JANUARY 1994 SAMPLES ARN-1 THROUGH ARN-5 AND WRN-1 THROUGH WRN-5 WERE SURVEYED BY BLASLAND BOUCK & LEE, INC JULY 1993

2 TOPOGRAPHIC MAPPING PRODUCED USING PHOTOGRAMMETRIC METHODS BY LOCKWOOD, INC FROM AERIAL PHOTOGRAPHY FLOWN APRIL 1991 TOPOGRAPHIC CHANGES AFTER APRIL 1991 ARE NOT SHOWN

Source: BBL, 1995
Technical Memorandum 9
February 1995

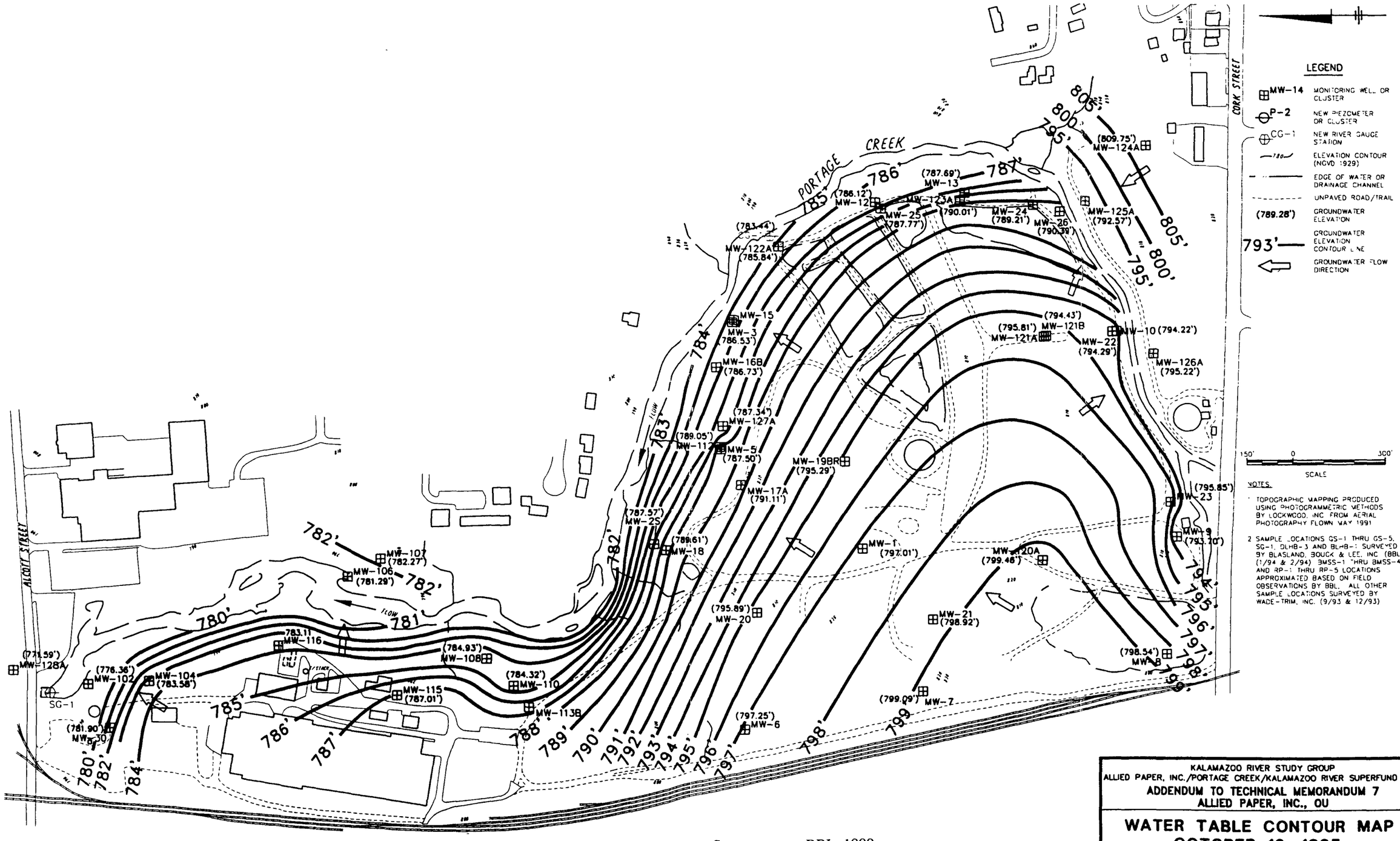
BLASLAND, BOUCK & LEE, INC.
ENGINEERS & SCIENTISTS

KALAMAZOO RIVER STUDY GROUP
ALLIED PAPER, INC. / PORTAGE CREEK / KALAMAZOO RIVER SUPERFUND SITE
TECHNICAL MEMORANDUM 9
WILLOW BOULEVARD / A-SITE OU

WATER TABLE CONTOUR MAP OCTOBER 8, 1993

FIGURE **8**

KE60205463



NOTES

1. TOPOGRAPHIC MAPPING PRODUCED USING PHOTOGRAMMETRIC METHODS BY LOCKWOOD, INC. FROM AERIAL PHOTOGRAPHY FLOWN MAY 1991
2. SAMPLE LOCATIONS GS-1 THRU GS-5, SG-1, DLHB-3 AND BLHB-1 SURVEYED BY BLASLAND, BOUCK & LEE, INC. (BBL) (1/94 & 2/94) BMSS-1 THRU BMSS-4, AND RP-1 THRU RP-5 LOCATIONS APPROXIMATED BASED ON FIELD OBSERVATIONS BY BBL. ALL OTHER SAMPLE LOCATIONS SURVEYED BY WADE-TRIM, INC. (9/93 & 12/93)

Source: BBL, 1999
Addendum to Technical Memorandum 7
October 1999

KALAMAZOO RIVER STUDY GROUP
ALLIED PAPER, INC./PORTAGE CREEK/KALAMAZOO RIVER SUPERFUND SITE
ADDENDUM TO TECHNICAL MEMORANDUM 7
ALLIED PAPER, INC., OU

WATER TABLE CONTOUR MAP
OCTOBER 13, 1995

BBL BLASLAND, BOUCK & LEE, INC. engineers & scientists

FIGURE 3

P DJ-B.PCP, G1-FY-B.PCP
X 64551X1B
- ON= *, OFF= REF*
10/4/99 SYR 54-RLP JMS RCA
54551402/64551101.DWG

APPENDIX 39-A

ALLIED PAPER, INC./PORTAGE CREEK/KALAMAZOO RIVER
SUPERFUND SITE

ALLIED PAPER, INC. OPERABLE UNIT
GROUNDWATER AND SURFACE WATER ELEVATIONS

Location	Reference Elevation[1]	Water Level Elevation[2]												
		9/9/93	9/27/93	12/14/93	5/16/94	6/15/94	9/21/95	10/13/95	3/6/97	7/29/97	5/6/98	8/5/98	10/3/98	12/15/98
MW-1	833.19	797.64	797.69	797.49	-	826.39	-	797.01	-	-	-	-	-	-
MW-2	793.29	789.25	789.31	789.12	788.81	788.85	-	788.76	-	-	-	-	-	-
MW-2S	791.12	787.67	788.30	787.46	-	787.73	-	787.57	787.56	-	-	-	-	-
MW-3	797.14	787.14	787.22	787.06	-	-	-	786.53	-	-	-	-	-	-
MW-4	801.60	790.82	-	790.79	-	-	-	-	-	-	-	-	-	-
MW-5	791.77	787.56	787.96	787.81	-	-	-	787.50	787.95	-	-	-	-	-
MW-5R	811.87	-	-	-	-	-	-	-	-	-	792.26	791.82	-	792.13
MW-6	812.70	798.01	-	797.77	-	-	-	797.25	-	-	-	-	-	-
MW-7	818.94	800.95	800.01	799.72	799.81	799.79	-	799.09	-	-	-	-	-	-
MW-7B	818.30	798.64	800.35	798.46	798.50	798.54	-	797.85	-	-	-	-	-	-
MW-8	810.20	799.07	799.08	-	798.88	798.80	-	798.54	798.39	-	-	-	-	-
MW-8A	810.74	799.02	798.59	798.84	798.82	798.79	-	798.67	-	-	-	-	-	-
MW-9	802.97	795.97	-	795.93	-	-	-	793.70	-	-	-	-	-	-
MW-10	810.09	794.79	-	-	-	-	-	794.22	-	-	-	-	-	-
MW-11	808.99	799.07	799.20	799.13	-	-	-	798.13	-	-	-	-	-	-
MW-12	809.21	788.19	-	787.91	-	-	-	786.92	-	-	-	-	-	-
MW-12R	808.30	788.22	788.62	786.87	-	787.47	-	786.89	-	-	-	-	-	-
MW-13	790.66	788.08	-	788.28	788.11	-	-	787.69	-	-	-	-	-	-
MW-14	786.79	785.40	-	785.37	-	-	-	-	-	-	-	-	-	-
MW-15	795.24	786.71	786.84	786.70	-	-	-	786.17	-	-	-	-	-	-
MW-16B	803.61	787.18	787.33	787.23	-	-	-	786.73	-	-	-	-	-	-
MW-16C	804.14	793.14	793.13	792.99	-	-	-	792.38	-	-	-	-	-	-
MW-17A	810.28	791.62	791.65	791.50	791.53	791.33	-	791.11	-	-	-	-	-	-
MW-17B	810.07	791.77	791.83	791.69	791.73	791.52	-	791.29	-	-	-	-	-	-
MW-18	793.47	789.74	789.92	789.72	789.77	789.72	-	789.61	-	-	-	-	-	-
MW-19BR	822.06	795.89	797.12	795.90	796.41	795.72	-	795.29	-	-	-	-	-	-

(See Notes on Page 4)

from: Addendum to Tech Memo 7
Vol 1 of 2 [illegible]

ALLIED PAPER, INC /PORTAGE CREEK/KALAMAZOO RIVER
SUPERFUND SITE

ALLIED PAPER, INC OPERABLE UNIT
GROUNDWATER AND SURFACE WATER ELEVATIONS

Location	Reference Elevation[1]	Water Level Elevation[2]												
		9/9/93	9/27/93	12/14/93	5/16/94	6/15/94	9/21/95	10/13/95	3/6/97	7/29/97	5/6/98	8/5/98	10/3/98	12/15/98
MW-19C	822 09	795 50	795 54	795 54	795 81	795 35	-	794 89	-	-	-	-		-
MW-19D	821 98	795 40	795 57	795 53	795 79	795 33	-	794 87	-	-	-	-	-	-
MW-20	810 99	796 60	796 73	796 47	796 50	796 34	-	795 89	-	-	-	-	-	
MW-20B	811 49	796 46	796 75	796 37	796 49	796 24	-	793 73	-	-	-	-	-	-
MW-21	804 25	799 69	-	799 44	-	-		798 92	-	-	-	-		-
MW-22	810 35	794 87	-	794 70	794 59	-	-	794 29	-	-	-	-	-	-
MW-22A	810 33	795 43	795 79	795 23	795 63	794 95	-	794 43	796 14	-	-	-	-	-
MW-22AR	807 81	-	-	-	-	-	-	-	-	-	795 28	794 31	794 00	794 31
MW-22B	810 37	796 23	796 56	796 32	796 58	796 37	-	795 96	-	-	-	-	-	-
MW-23	813 13	796 25	796 29	796 06	796 11	795 98	-	795 85	-	-	-	-	-	-
MW-24	807 63	790 13	790 50	789 65	-	807 63	-	789 21	-	-	-	-	-	-
MW-24R	809 13	-	-	-	-	-	-	-	-	-	789 35	789 18	-	789 47
MW-25	808 95	789 68	789 84	789 01	-	-	-	787 77	789 79	-	-	-	-	-
MW-25R	808 53	-	-	-	-	-	-	-	-	-	789 57	787 99	-	-
MW-26	792 10	790 10	790 18	790 06	-	-	-	790 39	-	-	-	-	-	-
MW-30	796 58	782 52	-	782 33	782 18	782 28	-	781 9	-	-	-	-	-	-
MW-101	783 83	779 15	-	779 38	-	-	-	-	-	-	-	-	-	-
MW-102	783 64	776 94	-	776 84	-	781 18	-	776 36	-	-	-	-	-	-
MW-103	783 83	781 83[3]	-	781 81	781 33	781 70	-	-	-	-	-	-	-	-
MW-104	785 75	784 13[3]	784 27	783 99	783 93	784 05	-	783 58	-	-	-	-	-	-
MW-105	783 95	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	783 82	781 48	781 75	781 51	-	-	-	781 29	-	-	-	-	-	-
MW-107	797 47	783 34	-	785 17	783 37	783 17	-	782 27	-	-	-	-	-	-
MW-108	787 13	785 11	785 70	-	-	-	-	784 93	-	-	-	-	-	-
MW-109	785 44	783 32	-	784 17	784 21	-	-	-	-	-	-	-	-	-
MW-110	787 57	784 32	-	784 09	-	784 27	-	784 32	-	-	-	-	-	-
MW-111	787 97	787 32[3]	-	787 35	-	-	-	787 23[3]	-	-	-	-	-	-

(See Notes on Page 4)

ALLIED PAPER, INC /PORTAGE CREEK/KALAMAZOO RIVER
SUPERFUND SITE

ALLIED PAPER, INC OPERABLE UNIT
GROUNDWATER AND SURFACE WATER ELEVATIONS

Location	Reference Elevation[1]	Water Level Elevation[2]												
		9/9/93	9/27/93	12/14/93	5/16/94	6/15/94	9/21/95	10/13/95	3/6/97	7/29/97	5/6/98	8/5/98	10/3/98	12/15/98
MW-112	791 62	789 25	789 48	789 28	-	-	-	789 05	-	-	-	-	-	-
MW-113A	796 70	790 50	-	788 19	790 45	790 51	-	790 23	-	-	-	-	-	-
MW-113B	796 63	788 11	-	790 47	788 40	788 01	-	787 12	-	-	-	-	-	-
MW-114	797 48	790 68	790 74	790 60	-	-	-	790 37	-	-	-	-	-	-
MW-115	795 48	787 47	-	787 35	-	-	-	787 01	-	-	-	-	-	-
MW-116	794 12	783 55	-	783 62	-	-	-	783 11	-	-	-	-	-	-
MW-120A	822 21	800 32	800 77	800 69	801 21	800 57	-	799 46	799 79	-	-	-	-	-
MW-120B	821 85	795 05	799 07	798 87	798 85	798 68	-	798 27	-	798 48	-	-	-	-
MW-121A	812 42	796 07	796 81	796 04	796 27	795 64	-	795 81	797 02	-	-	-	-	-
MW-121B	812 30	796 08	797 30	796 11	796 41	795 70	-	795 59	796 53	795 67	-	-	-	-
MW-122A	806 51	788 01	788 12	788 86	789 91	787 19	786 97	785 84	790 99	-	-	-	-	-
MW-122AR	806 62	-	-	-	-	-	-	-	-	-	792 94	788 01	785 84	789 88
MW-122B	806 18	788 35	788 51	788 31	788 37	788 08	-	787 68	-	-	-	-	-	-
MW-123A	805 79	791 86	791 82	791 67	793 06	791 60	-	790 01	-	-	-	-	-	-
MW-123B	805 59	789 40	791 87	790 79	791 89	790 49	-	790 94	-	-	-	-	-	-
MW-124A	843 74	812 26	812 99	811 21	811 41	810 82	-	809 75	-	-	-	-	-	-
MW-124B	844 43	803 74	805 01	803 55	803 68	803 43	-	802 92	-	-	-	-	-	-
MW-125A	810 05	792 62	792 72	792 65	792 45	792 27		792 57[4]	-	-	-	-	-	
MW-125B	809 92	796 34	797 15	797 34	797 67	797 62	-	797 95	-	-	-	-	-	-
MW-125P	810 38	801 01	800 84	800 41	800 57	800 68	-	-	-	-	-	-	-	-
MW-126A	805 68	795 48	796 57	795 46	795 63	795 45	-	795 22	795 94	-	-	-	-	-
MW-126AR	805 12	-	-	-	-	-	-	-	-	-	795 06	794 72	-	-
MW-126B	805 18	796 06	796 45	796 13	796 46	796 10	-	795 73	-	-	-	-	-	-
MW-127A	791 65	787 35	787 69	787 58	787 40	787 10	-	787 34	-	-	-	-	-	-
MW-128A	788 65	772 20	772 61	772 37	772 52	772 32	-	771 59	-	-	-	-	-	-
P-1	809 49	794 14	-	802 25	802 75	-	-	-	-	-	-	-	-	-
P-1C	801.91	DRY	-	DRY	DRY	-	-	-	-	-	-	-	-	-

(See Notes on Page 4)

ALLIED PAPER, INC./PORTAGE CREEK/KALAMAZOO RIVER
SUPERFUND SITE

ALLIED PAPER, INC. OPERABLE UNIT
GROUNDWATER AND SURFACE WATER ELEVATIONS

Location	Reference Elevation[1]	Water Level Elevation[2]												
		9/9/93	9/27/93	12/14/93	5/16/94	6/15/94	9/21/95	10/13/95	3/6/97	7/29/97	5/6/98	8/5/98	10/3/98	12/15/98
P-1R	809.73	-	-	-	-	-	-	-	-	-	796.28	796.23	-	795.89
P-2	807.07	794.20	-	793.79	794.70	-	-	-	-	-	-	-	-	-
P-2C	801.53	DRY	-	DRY	DRY	-	-	-	-	-	-	-	-	-
P-3	805.82	791.58	-	791.02	793.08	-	-	DRY	-	-	-	-	-	-
P-3C	799.65	790.52	-	790.07	792.15	-	-	-	-	-	-	-	-	-
CG-1	788.78	-	783.92	-	-	-	783.53	783.44	-	-	-	-	-	-

Notes:

[1] Units of feet above mean sea level.

[2] Elevation of the top of the well's inner casing was used as reference.

[3] Water was above ground surface within these wells.

[4] Measurement taken October 11, 1995.

- No measurement taken.

Refer to field notes (Appendix A) for additional water level data collected for individual wells during sampling from October 2 to 12, 1995.

TABLE 15

Allied Paper, Inc /Portage Creek/Kalamazoo River
Superfund Site

Allied Paper Residuals Disposal Area Ground Water Elevations (1981 to 1991)

Sampling Date	MW-1	MW-2	MW-3	MW-4	MW-5	MW 6	MW-7	MW 8	MW-9	MW-10	MW-11	MW-12	MW-15	MW-16B	MW-16C
12/1/81	796 41	780 41	784 80	--	--	--	---	--	--	--	--	--	--	--	--
1/13/82	805.73	785 58	786 98	--	--	--	--	--	--	--	--	--	--	--	--
4/1/82	799 23	785 99	787 64	--	--	--	--	--	--	--	--	--	--	--	--
5/28/82	798 54	788 86	787 49	791 09	788 15	--	--	--	--	--	--	--	--	--	--
2/21/84	796 96	788 90	786 67	--	788 04	--	--	--	--	--	--	--	--	--	--
4/20/84	798 23	788 80	786 89	--	788 23	--	--	--	--	--	--	--	--	--	--
6/13/84	797 87	788 60	786 63	--	787 33	--	--	--	--	--	--	--	--	--	--
12/11/84	797 96	788 68	787 80	--	787 97	--	--	--	--	--	--	--	--	--	--
4/26/85	799 42	789 47	789 06	--	788 28	--	--	--	--	--	--	--	--	--	--
6/27/85	798 39	788 76	787 42	--	787 54	--	--	--	--	--	--	--	--	--	--
10/1/85	797 84	788 80	786 82	--	787 68	-	--	--	--	--	--	--	--	--	--
11/25/85	798 75	789 10	787 28	791 76	788 20	798 55	800 81	799 30	796 19	795 24	800 44	789 70	--	--	--
3/25/86	798 26	788 95	787 35	--	788 12	--	--	--	--	--	--	--	--	--	--
9/3/86	797 72	788 87	786 76	--	789 87	--	--	--	--	--	--	--	--	--	--
11/25/86	797 67	788 87	787 03	--	787 99	--	--	--	--	--	--	--	--	--	--
3/24/87	797 45	788 86	786 59	--	787 80	--	--	--	--	--	--	--	--	--	--
6/10/87	797 32	788 79	786 28	--	787 07	--	--	--	--	--	--	--	--	--	--
9/17/87	797 61	788 94	786 42	--	787 77	--	--	--	--	--	--	--	--	--	--
12/10/87	797 43	789 02	786 49	--	787 07	--	--	--	--	--	--	--	--	--	--
3/8/88	798 04	789 09	787 07	--	788 19	--	--	--	--	--	--	--	--	--	--
6/13/88	797 68	788 95	786 73	--	787 06	--	--	--	--	--	--	--	--	--	--
7/15/88	797.49	788 91	786 64	790 57	786 50	--	--	--	--	--	--	--	786 73	791.17	787 39
8/30/88	797 34	789 01	786 39	--	787 29	--	--	--	--	--	--	--	--	--	--
12/27/88	798 14	789 12	787 12	--	788 21	--	--	--	--	--	--	--	--	--	--
3/1/89	797 76	789 15	786 93	791.40	787 93	--	--	--	--	--	--	--	--	--	--
6/19/89	798 81	789 46	787 59	--	787 95	--	--	--	--	--	--	--	--	--	--
9/7/89	798 15	789 43	787 19	--	787 90	--	--	-	-	--	--	--	--	--	-
10/4-9/89	797 81	789 32	787 02	--	787 81	797 81	799 94	798 85	796 13	794 05	798 74	787 37	787 24	787 62	792 92
11/27-28/89	797 72	789 30	786 68	791 11	787 96	797 77	799 89	798 87	795 92	793 97	798 94	787 93	786 90	787 40	792 79
12/5/89	797 69	789 30	786 69	791 07	787 98	--	--	--	795 93	795 10	799 01	787 99	--	--	-
1/3/90	797 50	789 22	786 43	790 91	787 87	797 72	799 86	798 84	795 84	794 11	798 93	787 83	786 82	787 29	792 72
2/27-28/90	797 78	789 38	786 65	791 09	787 99	797 89	800 10	798 98	796 03	794 50	799 36	788 26	786 82	787 55	793 01
3/29/90	800 18	791 22	789 19	--	790 29	--	--	--	--	--	--	--	--	--	--
6/28/90	797 83	789 47	781 15	--	787 76	--	--	--	--	--	--	--	--	--	--
9/25/90	797 59	789 37	786 63	--	787 77	--	--	--	--	--	--	--	--	--	--
12/10/90	798 51	789 56	787 34	--	788 15	--	--	--	--	--	--	--	--	--	--
3/21/91	798 06	789 43	787 25	--	788 00	--	--	--	--	--	--	--	--	--	--
6/24/91	798 54	789 54	787.86	--	787 54	--	--	--	--	--	--	--	--	--	--

(See notes on page 3)

from: Description of the Current Situation, Vol 2 of 7 BBL, May 1992

TABLE 15
(Cont'd.)
Allied Paper, Inc./Portage Creek/Kalamazoo River
Superfund Site

Allied Paper Residuals Disposal Area Ground Water Elevations (1981 to 1991)

Sampling Date	MW-17A	MW-17B	MW-18	MW-19B	MW-19C	MW-19D	MW-20	MW-21	MW-22	MW-23	MW-24	MW-25	MW-26	MW-30	MW-112
12/1/81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1/13/82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4/1/82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5/28/82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2/21/84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4/20/84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
8/13/84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/11/84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4/26/85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6/27/85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10/1/85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
11/25/85			--	--	--	--	--	--	--	--	--	--	--	--	
3/25/86	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
9/3/86	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
11/25/86	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3/24/87	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6/10/87	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
9/17/87	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/10/87	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3/8/88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6/13/88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7/15/88	791.22	791.37	789 52	796.12	795 54	795 52	795 85	--	--	--	--	--	--	--	--
8/30/88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/27/88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3/1/89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6/19/89	782 77	783 00	--	798 73	798 28	797 62	--	--	--	--	--	--	--	--	--
9/7/89	781 89	782 35	--	797 60	797 09	796 20	--	--	--	--	--	--	--	--	--
10/4-9/89	791 85	791 96	789 96	796 45	795 90	796 03	796 37	799 51	794 12	795 81	789 14	789 27	790 20	780 72	789 52
11/27-28/89	791 73	791 82	789 88	796 30	795 75	795 82	796 41	799 51	794 04	795 89	787 99	789 15	790 26	782 04	789 46
12/5/89	791 69	791 81	--	796 28	795 74	795 84	--	799 41	794 29	795 90	--	789 03	790 35	--	789 44
1/3/90	791 51	791 60	789 81	795 93	795 45	795 51	796 45	799 46	794 16	795 85	789 11	788 54	790 37	782 85	789 34
2/27-28/90	791 71	791 83	790 01	796 20	795 72	795 77	796 65	799 73	794 55	796 03	789 88	789 43	790 43	783 46	789 46
3/29/90	793 61	792 34	--	798 46	798 23	797 90	--	801 11	--	--	--	--	--	--	--
6/28/90	791 78	791 95	--	796 37	796 80	795 94	--	799 66	--	--	--	--	--	--	789 45
9/25/90	791 61	791 73	--	795 90	795 43	795 47	--	799 47	--	--	--	--	--	--	789 39
12/10/90	792 32	792 48	--	797 54	797 03	797 09	--	800 23	--	--	--	--	--	--	789 79
3/21/91	791 95	792 19	--	796 90	796 48	796 49	--	799 94	--	--	--	--	--	--	789 62
6/24/91	792.42	792.58	--	797.42	796 99	797 00	--	800 22	--	--	--	--	--	--	789 65

(See notes on page 3)

TABLE 15
(Cont'd)
Allied Paper, Inc./Portage Creek/Kalamazoo River
Superfund Site

Allied Paper Residuals Disposal Area Ground Water Elevations (1981 to 1991)

Notes

-- Data not available, elevation not measured or well not sampled
All elevations are in feet relative to USGS Datum

TABLE 3-6

ALLIED PAPER, INC., /PORTAGE CREEK/KALAMAZOO RIVER
SUPERFUND SITE

WILLOW BOULEVARD/A-SITE OPERABLE UNIT
GROUNDWATER/LEACHATE AND SURFACE WATER ELEVATIONS

Location	Reference Elevation[1]	09/15/93	09/17/93	09/20/93	09/23/93	09/26/93	09/30/93	10/04/93	10/06/93	10/08/93	10/11/93	12/15/93
Willow Boulevard Site												
WMW-1	763.78	757.92	758.07	757.99	757.89	--	758.45	--	758.12	758.02	758.05	758.01
WMW-1A	764.41	757.92	758.07	758.00	757.89	--	758.46	--	758.15	758.04	758.06	758.04
WMW-2	766.16	756.76	757.33	757.05	756.77	--	757.52	--	756.88	756.74	756.74	756.72
WMW-3	769.16	756.06	756.74	756.38	756.04	--	756.85	--	757.17	755.94	755.96	755.92
WMW-3A	771.19	756.48	757.13	756.96	756.54	--	757.24	--	756.84	756.51	756.54	756.49
WMW-4A	774.54	756.17	757.12	757.12	756.43	--	757.13	--	756.61	756.55	756.46	756.43
WMW-4B	774.39	756.30	757.17	757.14	756.51	--	757.18	--	756.53	756.31	756.34	756.44
A-Site												
AMW-1	775.02	757.09	758.03	757.49	757.03	--	757.83	757.46	757.09	756.99	757.03	756.97
AMW-2	772.37	756.22	757.03	756.61	756.34	754.62	757.11	756.72	756.24	756.11	756.02	756.07
AMW-3	769.06	750.51	--	--	--	753.30	760.15	--	759.92	759.86	759.91	759.94
AWM-3A	765.27	--	--	759.85	--	--	760.18	--	759.92	759.85	759.92	759.92
AMW-4	772.42	756.90	--	--	--	757.16	757.67	757.33	756.91	756.81	756.85	756.80
AMW-5	775.05	--	757.30	756.84	756.48	756.73	757.31	756.94	756.50	756.37	756.39	756.37
AMW-6P	774.16	767.20	767.21	767.09	766.97	--	767.72	--	767.27	767.14	767.16	766.84
AMW-6A	773.85	756.60	757.53	757.07	756.81	--	757.63	--	756.72	756.59	756.61	757.63
AMW-6B	773.99	756.26	757.12	756.72	756.48	--	757.23	--	756.42	756.30	756.33	756.24
AMW-7P	779.51	769.39	769.57	769.75	769.69	--	770.18	--	770.03	770.15	770.07	770.36
AMW-7A	779.69	756.90	757.74	757.20	756.85	--	757.68	--	756.95	756.83	756.86	756.70
AMW-7B	778.33	757.32	757.80	757.41	757.02	--	757.77	--	756.09	755.98	757.02	756.93
AMW-8A	785.19	757.41	758.10	757.73	757.32	--	758.10	--	757.43	757.32	757.35	757.29
AMW-8B	784.94	757.38	757.98	757.62	757.30	--	758.11	--	757.43	757.31	757.37	757.27
AMW-9P	784.88	775.89	776.07	776.07	775.99	--	775.94	--	776.06	776.23	776.24	775.85
AMW-9A	785.52	758.57	758.98	758.59	758.39	--	759.07	--	758.55	758.46	758.49	758.42
AMW-9B	785.79	758.58	758.82	758.65	758.34	--	759.03	--	758.51	758.41	758.46	758.38
AMW-10P	787.68	778.92	779.06	779.19	779.13	--	779.05	--	779.02	779.42	779.24	779.40
AMW-10A	787.41	762.89	765.59	764.55	--	--	761.16	--	759.59	759.46	759.62	759.51
AMW-10B	787.67	759.04	759.13	758.81	758.76	--	759.33	--	758.84	758.72	759.45	758.78
P-1D	772.35	Dry	Dry	Dry	Dry	--	Dry	Dry	Dry	Dry	Dry	Dry
P-1RS	769.93	Dry	Dry	Dry	Dry	--	Dry	Dry	Dry	Dry	Dry	Dry
P-2D	775.43	Dry	Dry	Dry	Dry	--	Dry	Dry	Dry	Dry	Dry	Dry
P-2RS	773.14	Dry	Dry	Dry	Dry	--	Dry	Dry	Dry	Dry	Dry	Dry
P-3D	772.37	Dry	Dry	Dry	Dry	--	Dry	Dry	Dry	Dry	Dry	Dry
P-3RS	771.24	Dry	Dry	Dry	Dry	--	Dry	Dry	Dry	Dry	Dry	Dry
P-4WT	762.19	--	758.27	758.07	757.91	--	758.46	--	758.03	757.94	--	757.97
P-5WT	760.87	759.52	759.46	759.26	759.16	--	759.63	--	759.33	759.22	759.32	759.25
River Gauges												
RG-1	760.95	756.78	757.55	757.21	756.93	757.13	757.63	757.31	756.93	756.77	756.95	756.90
RG-2	758.80	755.97	756.71	756.39	755.95	756.26	756.94	756.52	755.94	755.81	755.83	755.72

Notes:
Elevations are expressed in units of feet above mean sea level.
[1]Elevation of the top of the inner casing used as reference.
-- No measurement taken.

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