

ARKANSAS DEPARTMENT OF
POLLUTION CONTROL AND ECOLOGY

LOCATION - SUBJECT: PERMITS BRANCH

SOLID WASTE SECTION

MINUTE ORDER NUMBER 82- 40

PAGE 1 OF 1 PAGES

The Commission hereby approves the permit applications submitted by the following firms, subject to the provisions of the Solid Waste Management Act, the Solid Waste Management Code, and the permit terms and conditions.

Arkansas Kraft Corporation

Arkansas Kraft Corporation, Morrilton

Sanitary Landfill Permit #S-0176 is modified to eliminate Condition #9 requiring 30 day cover requirements. This modification is based upon 1) the specified water content reduction in the "Wandel Screen Rejects" and clarifier sludge, 2) satisfactory submission of all necessary documentation, and 3) the good operation and compliance exhibited by Arkansas Kraft Corporation in the subject permit.

30 Day cover requirements are removed from Permit #S-0176 contingent upon:

- 1) Waste placed in north-south strips approximately 50 feet wide with final cover to proceed as rapidly as possible with no waste remaining exposed for longer than 1 year without final cover.
- 2) The submitted waste dewatering systems shall be maintained.

COMMISSIONERS

[Handwritten signatures of commissioners]
John P. Saxton
Chairman

*The original signed
minutes were
sent to the
Commission Meeting
Permit Branch.*

SUBMITTED BY John D. Ward

DATE PASSED 5-28-82

ARKANSAS DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY

MEMO

TO: John Ward, Permits Branch Manager
FROM: Mark Witherspoon, Permits Engineer - Land Disposal Section *mw*
DATE: April 22, 1982
SUBJECT: Arkansas Kraft Corporation at Morrilton request for modification of solid waste permit #S-0176

We received a letter from Arkansas Kraft dated February 16, 1982 requesting a permit modification to eliminate the 30 day cover requirements existing in the subject permit. This letter contained a brief summary of reasons for the permit modification. I sent a letter dated February 22, 1982 to Arkansas Kraft outlining material that should be submitted in order to support the permit modification.

Arkansas Kraft submitted the necessary information in a meeting on 3/31/82 and in a letter dated March 30, 1982. The material was reviewed at the 3/31/82 meeting (by Randall Mathis and me) and additional information was requested. This information was submitted in an April 1, 1982 letter from Arkansas Kraft. All correspondence on the subject is included with this memo except the revisions to the drawings.

As a result of: 1) the water reduction in the "Wandel Screen Rejects" and clarifier sludge, 2) satisfactory submission of all material requested in my February 22, 1982 letter, and 3) the good operation and compliance exhibited by Arkansas Kraft so far in their solid waste permit, I recommend to the Commission that the 30 day cover requirements be eliminated from permit #S-0176. However, I also recommend that the following conditions be placed on this permit modification:

- 1) Waste shall be placed in north-south strips approximately 50 feet wide with final cover to proceed as rapidly as possible with no waste remaining exposed for longer than 1 year without final cover.
- 2) The submitted waste dewatering systems shall be maintained.

The district field inspector should also have the authority to make minor adjustments to the operation when weather and construction status require them.

This permit revision should be placed on the agenda for consideration at the May Commission meeting.

MW:vs

cc: Randall Mathis
Bob Blanz
Dwight Witcher - with revised plans
~~Additional copies to CIA file~~

~~Because of the recurring problem with applying intermediate~~
cover, the company is requesting an exemption from this portion of the permit. This request is deemed reasonable since the exposed area can not be worked when wet and neither can dirt for the intermediate layer be applied in an efficient manner.

This request is further supported by internal actions that have been taken in the mill. A waste segregation program has resulted in separation of metal for recycle; removal of selected papers and boxes for recycle or burning; and removal of wood for reuse, burning, or donation to employees for personal use. Consequently, a significant reduction (approximately 50 percent) in the volume of waste for disposal has been realized. A breakdown and description of the materials is attached as Table I. However, the removal of much of this waste means less moisture absorbing material that formerly aided in drying out of the disposal site. This results in more difficulty in placing and packing of the wetter waste material and its cover.

The solid waste disposal site is situated in an area containing soil of the C H to C L classification using the Unified Soils Classification System of the U. S. Corps of Engineers. The clay depth in the permitted area varies from 3 feet to 11.5 feet in depth. (The area of 3 feet depth is the area of initial usage.) Below the clay layer is predominantly medium soft tan and gray weathered shale. These data were included in the McClelland Engineers, Inc. information filed with the permit application.

Surface water from portions of the solid waste disposal site not in use is directed from the area by contouring and terracing so that it is not contaminated by any of the disposal activities. Any leachate that may be generated from the site is diverted by a levee into a concrete collection sump. A 25 gpm at 80 feet head pump is located in the sump to transfer the leachate through a 1 1/4" PVC line into the existing effluent treatment system. (See prints accompanying permit application.)

This information was assembled for your use in considering a verbal request for exemption of intermediate cover during a visit to the Arkansas Department of Pollution Control and Ecology office of Randall Mathis by Messrs. Ed Read and Roger Hoffman on February 3, 1982. Please advise if further information and/or details are needed for your consideration.

Yours very truly,

ARKANSAS KRAFT CORPORATION



George F. Wade
Technical Director

GFW/cw

cc: Mr. Jarrell Southall
Mr. Randall Mathis

ARKANSAS KRAFT CORPORATION
Morrilton, Arkansas

TABLE I

SOURCE AND DESCRIPTION OF MILL SOLID WASTES - JUNE, 1980 AND FEBRUARY, 1982

SOURCE LOCATION	JUNE, 1980		FEBRUARY, 1982	
	DESCRIPTION OF MATERIALS	DAILY VOLUME, DRY TONS	DESCRIPTION OF MATERIALS	DAILY VOLUME, DRY TONS
Pulp Mill	Sand, Char. Cinders, Dirt, Gravel, Slaker Grits, Dregs, Smaller Quantities of Glass, Wood, Metal and Paper	25.2	Sand, Char. Cinders, Dirt, Gravel, Washed Slaker Grits, Dewatered Dregs, Very Small Quantities of Glass, Wood, Metal and Paper	24.8
Paper Mill	Paper, Wood, Dirt, Glass, Plastic, Styrofoam, Metal, and Pulp Spills	3.9	Dirt, Glass, Plastic, Styrofoam, Metals, Pulp Spills	2.0
Woodyard	Bark, Wood, Dirt, Rocks, Metal, Glass and Very Small Amount of Paper	1.8	Bark, Wood, Dirt, Rocks, Metal, Glass and Very Small Amount of Paper	1.8
Recycle Plant	Plastics, Styrofoam, Wire, Metal, Glass, Wood, Rags, Waxes, Paper	20.0	Plastics, Styrofoam, Some Paper Fiber, Metal, Glass	5.2
Vending Area	Paper, Plastic, Styrofoam, Metal	1.0	Plastic, Styrofoam, Very Small Quantity of Metal and Paper	.1
Maintenance	Paper, Wood, Metal, Plastic, Styrofoam, Glass	3.6	Plastics, Styrofoam, Small Amount of Metal, Glass and Paper	1.4
Primary Clarifier Solids	Dewatered Clarifier Solids	16.8	Dewatered Clarifier Solids	0*
Offices	Paper, Plastics, Styrofoam, Metal and Glass	1.8	Plastics, Styrofoam, Glass, Very Small Amount of Paper	.2
TOTALS		74.1		35.5

*UTILIZED AS PART OF FINAL COVER IN LANDFILL, AS NEEDED.



STATE OF ARKANSAS
DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY

8001 NATIONAL DRIVE
LITTLE ROCK, ARKANSAS 72209

PHONE: (501) 562-7444

February 22, 1982



Mr. George F. Wade, Technical Director
Arkansas Kraft Corp.
P. O. Box 711
Morrilton, AR 72110

Re: Arkansas Kraft Solid Waste Permit No. S-0176

Dear Mr. Wade:

Your February 16, 1982 request for exemption of intermediate cover requirements has been referred to me for response.

A review of the referenced permit revealed that a modification was granted November 30, 1981 to include waste drying provisions at the landfill site. We have not received an evaluation of this method of handling the waste moisture content problem from our district inspector or from your office.

If the November permit modification has proved to be unsuitable and cannot be adjusted to provide adequate moisture elimination, the permit must be revised by commission action.

The following material should be submitted in order to present the permit revision to the next session of the commission:

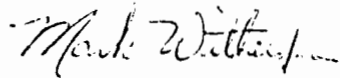
- 1) Originally submitted plans and narratives must be revised to indicate the absence of cell structure and periodic cover. The commission originally required a 30-day cover interval in order to add stability to the completed 25 foot high mound and in order to break up water movement through the mound by the placement of competent clay layers throughout the waste mass. These problems should be addressed in the revised plans and narratives.
- 2) The quantity and quality of additional leachate that would be diverted to the treatment system as a result of the absence of cell structure should be determined.

Mr. George F. Wade
February 22, 1982
Page Two

This additional loading should be compared to the loading parameters established in the development of the treatment system.

If there are any questions, please contact this office.

Sincerely,



Mark Witherspoon
Engineer
Permits Branch

MW:vs

cc: Randall Mathis
Dwight Witcher

Arkansas
Kraft Corporation

Mill Division

P. O. Box 711, Morrilton, Arkansas 72110 Phone 501-354-4521

March 30, 1982

4-1-82
Hand delivered
3/31/82

Arkansas Department of Pollution Control
and Ecology
8001 National Drive
Little Rock, Arkansas 72209

RE: Solid Waste Permit No. S-0176

SUBJECT: Cover Variance Request

On February 3, 1982, an inquiry to the Solid Waste Division was made concerning the cover requirements for the referenced Solid Waste Disposal area at Arkansas Kraft Corporation. A subsequent letter from Mr. Mark Witherspoon, date February 22, 1982 was received which outlined the information that would be necessary for submittal to the commission for consideration of the request. This letter (and attached documents) are provided for that purpose. The letter addresses the questions in the order in which they were listed in the February 22, 1982 letter from the Department.

- 1) Stability of the cellular structure - control of water movement within the mound.

In the original permit application, a list was included showing the materials that would be placed in the landfill. (Ref. D) Because of (a) the necessity of preventing loose paper from blowing and (b) the desire to break up water movement associated with some of these wet materials, it seemed necessary at the time to use a 30 day cover.

The solid waste area was designed on that basis, the application submitted on that basis, and the permit was issued on that basis.

Since then, two important conditions have changed:

A) The mill has initiated a "waste barrel separation" program utilizing specially colored containers so that all office and mill paper and miscellaneous trash that formerly went to the solid waste disposal area are now being handled as follows:

- 1) Office paper and clean old boxes - recycle into pulp and used to make linerboard.
- 2) Asphalt contaminated boxes, carbon paper, etc. - burn in bark boiler.
- 3) Used lumber - segregate and give to employees.
- 4) Pallets - given to employees or to grass farm.

As a result, loose, blowing material is not a problem that necessitates intermediate cover.

B) The mill has segregated one of two major, very wet solid waste streams and virtually eliminated the other, that formerly was placed in the solid waste disposal area.

- 1) The solid waste stream described as "Wandel Screen Rejects" from the recycling operation originally went directly onto the disposal area. This 42 TPD, comprised mostly of plastic strips, sheets, and irregularly shaped pieces, is about 88% water. When dumped in the solid waste disposal area, 37 TPD of water drained into the fill area; necessitating a cellular structure for stability.

With the cooperation of Inspector Dwight Witcher, a system was devised for handling the material freeing the water from the plastics before placing it on the fill area; so that presently, very little water is released on the fill area itself from this component.

- 2) The solid waste stream described as "Carter Press Rejects" was an 88 TPD stream of fibrous cellulosic material containing 80% water. When dumped on the fill site, potentially 70 TPD of water slowly drained into the fill; again necessitating a cellular structure for stability.

Since the solid waste disposal site has been in operation, the company purchased and installed at a cost in excess of \$140,000, a better "Filttec" press for dewatering the primary clarifier underflow. The resulting cake is now either burned, stockpiled for use as part of the final cover, or soil amendment.

B)-2)

It is rarely used as a part of the body of the solid waste disposal fill. This cake is similar to peat moss when composted and makes an excellent agricultural improvement aid.

As a consequence, the cellular structure is not required for stability or to break up water movement within the mound.

The other question that was requested to be addressed is:

11) The quantity and quality of leachate diverted to the leachate system.

A) Quantity

The quantity of leachate going through the fill is expected to be much less than that for which the solid waste disposal site was originally designed and permitted.

- 1) As described in 1B1 on page 2, the Wandel Screen rejects are dewatered before being placed on the disposal site.
- 2) As described in 1B2 on page 2, the "Carter Press Rejects" are now being burned, stockpiled for use as part of the final cover or used as a soil amendment material.
- 3) These factors will reduce - not increase - the quantity of leachate expected through the fill area and subsequently to the waste water treatment system, whether or not there is a cell structure.

B) Quality

The quality of the leachate from the remaining fill materials will be essentially unchanged.

Of course, basic to the soundness of this request for the relief from the placement of unnecessary intermediate cover is the absence of any of the materials listed on page 18 of this Solid Waste Regulations that make frequent cover necessary.

Please review this request for a variance from the requirements of intermediate cover of the Solid Waste Disposal area permitted to Arkansas Kraft Corporation and advise if further details and/or information would be helpful in assessing the request.

GFW/cw

Yours very truly,
ARKANSAS KRAFT CORPORATION

E. M. Read Jr.
Edwin M. Read
V. P. and Mill Manager

Arkansas
Kraft Corporation
Mill Division

P. O. Box 711, Morrilton, Arkansas 72110 Phone 501-354-4521

April 1, 1982

Arkansas Department of Pollution Control
and Ecology
8001 National Drive
Little Rock, Arkansas 72209

ATTN: Mr. John Ward

RE: Permit Number S-0176

SUBJECT: Intermediate Cover Requirement Variance Request

On March 31, 1982, George Wade & Ed Read of Arkansas Kraft Corporation presented to the Arkansas Department of Pollution Control a letter containing information relative to exempting the intermediate cover requirement of the solid waste disposal permit number S-0176 issued to Arkansas Kraft Corporation. The contents of the letter (dated 3-30-81) were discussed with Mr. Randall Mathis and Mr. Mark Witherspoon at this time. During this meeting, the details of the steps taken by Arkansas Kraft Corporation to decrease the quantity of solid waste material generated by the plant and outlined in the March 30, 1982 letter to the Department were discussed. Messrs. Mathis and Witherspoon stated that a letter from Arkansas Kraft Corporation requesting a review of the permit for exclusion of the requirement for intermediate cover would be required. This letter is an official request that the requirement for the 30-day intermediate cover be removed from the permit requirements.

In a letter to the Department (dated February 16, 1982 sent to the attention of Mr. John Ward), the problems with cover, particularly during wet conditions, were outlined. In response to the February 16, 1982 letter, Mr. Mark Witherspoon responded with a letter (dated February 22, 1982) noting the concerns of the Department with the exclusion of the intermediate cover.

Messrs. Mathis & Witherspoon expressed concern that the absence of intermediate cover might adversely affect the leachate from the fill area. It was pointed out by Arkansas Kraft Corporation that less filtrate from the fill area requiring return to the waste treatment system has been experienced as a result of the mill's efforts.

An assessment of the solid waste disposal activity as it exists now as compared to that presented in the original permit is projected as follows (next page); and a graphical representation of the comparison between the two situations is presented on page 3.

Respectfully yours,

ARKANSAS KRAFT CORPORATION

E. M. Read, Jr.

Edwin M. Read, Jr.
Vice President, Mill Mgr.

EMR:vs
attach.

12
4-5-82
Wade

COMPARISON

The leachate percolating thru the solid waste disposal area (SWDA) is composed of rainfall plus the water in the solid waste streams going to the SWDA.

Assumptions:

- A) Assume 10' rainfall in a 7 day period.
- B) Assume the uncovered strip subject to leaching from this rainfall to be;
 - 1) 50' x 100' in the case of the SWDA with the cellular structure (intermediate cover). Case I.
 - 2) 50' x 300' in the case of the SWDA without the cellular structure (final cover only). Case II.

Case I. (Permitted water load in the solid waste disposal area (SWDA) with intermed. cover)

A) Rainfall - $\frac{50' \times 100' \times \frac{10}{12}}{43,560}$ = 0.0956 $\frac{\text{Acre Ft.}}{\text{Week}}$

B) Water load in the two solid waste streams subsequently removed (Ref. EMR letter March 30, page 2) = $\frac{(37T + 70T) \times 7 \times 2000}{(43,560) (62.4)}$ = $\frac{0.5510 \text{ Acre Ft.}}{\text{Week}}$
 + $\frac{0.0956 \text{ Acre Ft.}}{\text{Week}}$ = $\frac{0.6466 \text{ Acre Ft.}}{\text{week}}$

Case II. (Present water load in SWDA - if no intermediate cover) (Ref. EMR letter March 30, page 2)

A) Rainfall - $\frac{50' \times 300' \times \frac{10}{12}}{43,560}$ = 0.2755 $\frac{\text{Acre Ft.}}{\text{Week}}$

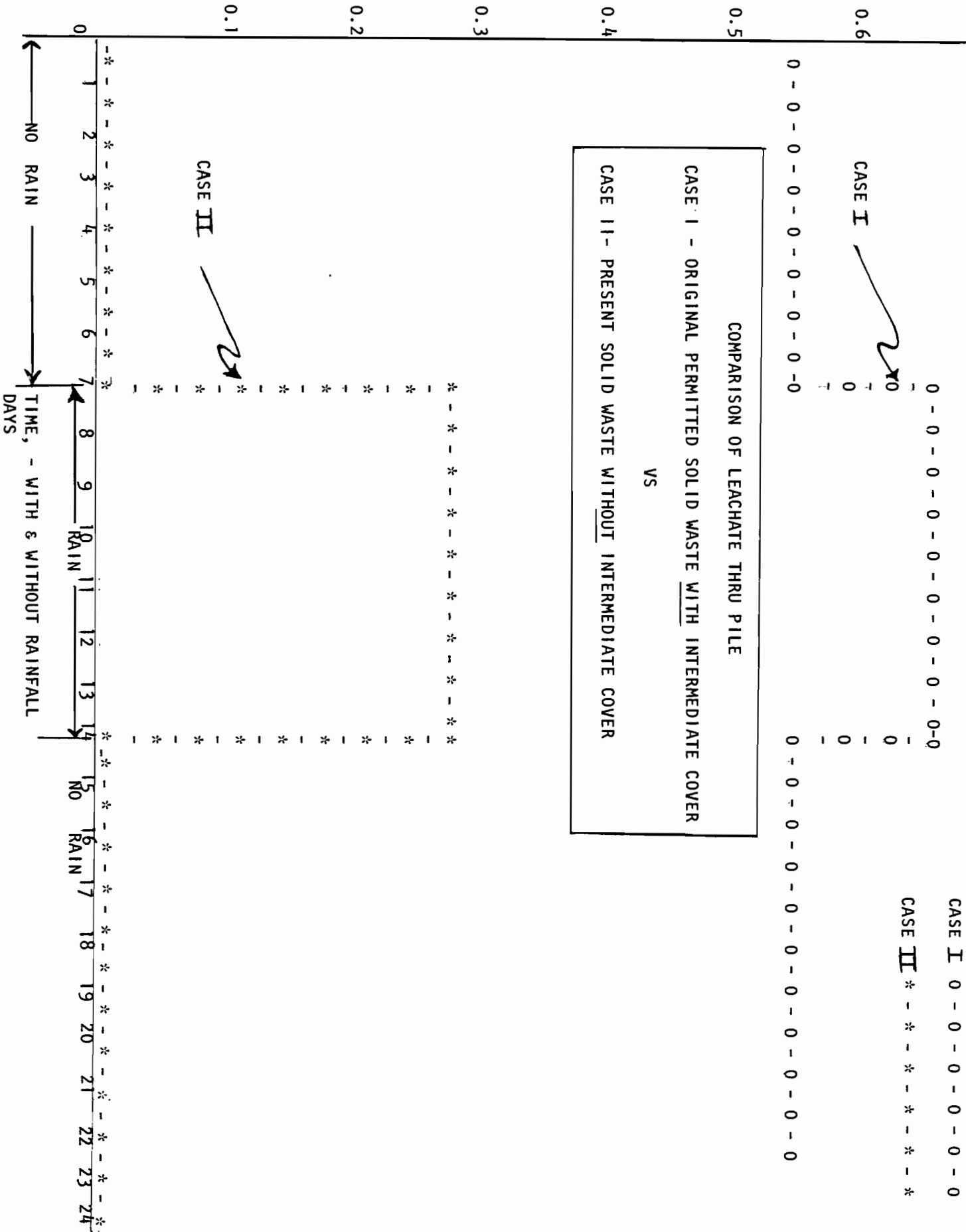
Comparing Case I to Case II, it can be seen that under the present conditions (Case II), we will have less leachate generation, even without intermediate cover, than existed at the time of the original permit with intermediate cover (Case I).

CONCLUSION:

Therefore, the generation or percolation of leachate, including rainwater, in the SWDA should not be a cause for concern.

WATER THRU SWDA

ACRE FEET/WEEK



10 2.18.82

Arkansas
Kraft Corporation
Mill Division

P. O. Box 711, Morrilton, Arkansas 72110 Phone 501-354-4521

February 16, 1982

Arkansas Department of Pollution Control
and Ecology
8001 National Drive
Little Rock, Arkansas 72209

ATTN: Mr. John Ward

RE: Permit Number S-0176

On October 12, 1981, Arkansas Kraft Corporation initiated use of a new solid waste disposal area permitted by the Arkansas Department of Pollution Control and Ecology under permit number S-0176. Since that date, the mill has disposed of solid waste generated in the mill at the permitted site.

Wetness and mud, due to weather conditions, have plagued the operation since October. Consequently, covering of the area at thirty day intervals has not been successful. In November, 1981, the Department inspector observed the operation and granted a waiver of intermediate cover for that time. To date only a small portion of the area has been filled to capacity and the final cover put into place. An area several times larger than the finished area is exposed and again intermediate cover is virtually impossible because of the wet, muddy condition in the area. There is no putrescent material in the dump or being hauled to the dump.

Because of the recurring problem with applying intermediate cover, the company is requesting an exemption from this portion of the permit. This request is deemed reasonable since the exposed area can not be worked when wet and neither can dirt for the intermediate layer be applied in an efficient manner.

This request is further supported by internal actions that have been taken in the mill. A waste segregation program has resulted in separation of metal for recycle; removal of selected papers and boxes for recycle or burning; and removal of wood for reuse, burning, or donation to employees for personal use. Consequently, a significant reduction (approximately 50 percent) in the volume of waste for disposal has been realized. A breakdown and description of the materials is attached as Table I. However, the removal of much of this waste means less moisture absorbing material that formerly aided in drying out of the disposal site. This results in more difficulty in placing and packing of the wetter waste material and its cover.
