TVA 64 (\$5-9-65)
UNITED STATES GOVERNMENT

## Memorandum

#### TENNESSEE VALLEY AUTHORITY

FDP '83 0922 011

TO: H. S. Fox, Director of Fossil and Hydro Power, 716 EB-C

FROM: M. N. Sprouse, Manager of Engineering Design, W11A9 C-K

DATE : SEP 2 2 1983

SUBJECT: KINGSTON STEAM PLANT - ANNUAL ASH DISPOSAL AREA INSPECTION

Attached is a report from D. R. Galloway to R. E. Harris dated September 20, 1983 (FDP 830920 012), concerning the joint inspection of the Kingston Steam Plant ash disposal area. This report includes recommendations for corrective work. I concur with these recommendations.

M. N. Sprouse

REH

OPT:DRG:EFS Attachments

cc: R. O. Barnett, W9D224 C-K

C. Bonine, E7B24 C-K

J. P. Darling, 546 CST2-C, w/attachments

MEDS, W5B63 C-K

0. P. Thornton, 102 SPT-K

F. Van Meter, 500 SPT-K (3)

Principally Prepared By: D. R. Galloway, Extension 3273

S63252.03

BC/PM: OF

MO: \_\_\_\_



## Memorandum

#### TENNESSEE VALLEY AUTHORITY

FDP '83 0920 012

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R. E. Harris, Civil Project Engineer, Fossil Design Projects, 338 SPT-K

FROM

D. R. Galloway, Civil Engineer, Fossil Design Projects, 334 SPT-K

DATE

SEP 2 0 1983

SUBJECT: KINGSTON STEAM PLANT - ANNUAL ASH DISPOSAL AREA INSPECTION

On August 24, 1983, V. Hutchinson of F&H PR, S. Ahmed of EN DES, and I inspected the ash disposal area at Kingston Steam Plant. We were accompanied on the inspection by E. McClung, Yard Operations Supervisor. Findings were discussed with Mr. McClung and Plant Superintendent, H. F. Clayton.

The last annual inspection was made on August 4, 1983 (CDB 820825 016). An interim inspection was made on March 23, 1983 (FDP 830405 010).

On the attached print of drawing  $10\,\mathrm{N}420$ , the different areas are designated.

#### Change In Dikes Since Last Inspection

There has been no significant change in the exterior dikes since last year's annual inspection.

The dikes appear to be stable and generally in good condition. Wetness is still evident at the toe of exterior slope of the south end of dike "C" (see picture number 1 and recommendation number 1). Several small trees were observed along the slope of this dike (see recommendation number 2).

The seepage repair along the east dike adjacent to the condenser intake channel (see pictures numbers 2 and 3) will begin by late September. CSB will construct a clay key and slope cover in accordance with EN DES plans.

An interior ash dike is being constructed for the containment of future dredging. This dike extends northeast from the deflector dike. The divider dike spillway slot has been eliminated by filling with ash.

#### Change In Pond Operation Since Last Inspection

There has been no basic change in pond operation since last year's annual inspection.

#### Condition Of Spillways, Skimmers, And Outlets

The standard spillways and skimmers in the stilling pool area appear to be in good condition and functioning properly. The spillway on the west end has been raised a section higher than the remaining spillways. Vegetation could be seen growing with at least one of the spillways/skimmers (see recommendation number 3).



R. E. Harris SFP 2 0 1983

#### KINGSTON STEAM PLANT - ANNUAL ASH DISPOSAL AREA INSPECTION

The vegetation at the base of the discharge end wall appeared to be excessive (see picture number 4 and recommendation number 4).

The spillway in the divider dike has been filled with ash, as previously noted. The passage of water into the stilling pool is provided by spillways constructed by plant personnel in 1980 and 1981.

#### Action On Recommendation Of Last Inspection

Vegetation was still observed within the spillway; however, I feel this is a regrowth condition. Vegetation was also apparent at the base of the discharge concrete end wall.

#### Recommendations

- 1. Plant personnel should continue to monitor the seepage at the toe of the exterior slope of the sound end of dike "C". Should contact F&H PR, Chattanooga, and EN DES immediately if any changing conditions are observed.
- 2. Should remove all small trees and brush from exterior slope of dike
- 3. Should remove any vegetation within the spillway/skimmers.
- 4. Should remove the weeping willow trees and vegetation at and around the base of the discharge end wall.

Concur:

Robert E. Harris

Pota to

O. P. Thornton

DRG:EFS Attachments

cc: O. P. Thornton, 102 SPT-K, w/attachments

OPT:EFS - SEP 2 0 1983 cc (Attachment):

B O Barrata HODO

R. O. Barnett, W9D224 C-K, w/attachments

MEDS, W5B63 C-K, w/attachment, except drawing

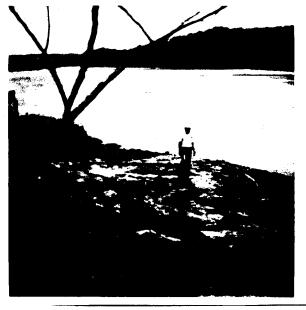
M. N. Sprouse, W11A9 C-K

Principally Prepared By: D. R. Galloway, Extension 3273 S63252.04



## KINGSTON STEAM PLANT 1983

1 SEEPAGE AT TOE OF DIKE C.



2 SEEPAGE AT EAST DIKE.

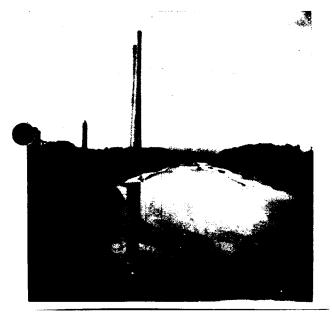


3 SEEPAGE AT EAST DIKE.

# KINGSTON STEAM PLANT 1983



DISCHARGE / OUTLET NOTE:
 VEGETATION.



(5) ASH DISCHARGE CHANNEL.



6 ASH EMBANKMENT ADJACENT TO EAST DIKE. UNITED STATES GOVERNMENT

### Memorandum

## FDP 83 04 05 01.0

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: Robert E. Harris, Civil Project Engineer, Fossil Design Project, 338 SPT-K

FROM \_ : J. P. Hillier Stivers, Civil Engineer, Fossil Design Project, 337 SPT-K

DATE : APR 5 1983

SUBJECT: INTERIM DISPOSAL AREA INSPECTION

Plant:	Kingston	n Steam Plan	t	Area: Ash Disposal Area				
Date of	last anno	ual inspecti	on: Augu	st 4, 198	2			
Date of	this ins	pection: M	larch 23, 19	983 Wea	ther: cloud	y and col	l <b>a</b>	
Inspecto		Jerry Chumle Ed McClung ( Joel Paris (	Yard Supvr	James J. P.	Hoskins, Jr. Hillier Stiv	, (EN DES ers (EN I	ES)	
Discuss	ed with:					**************************************		
					Excellent	Good	Poor	
Vegetat: Condition Condition General	ive cover on of stan on of out condition	n of perimet on slopes ndard skimme let structur n of divider ash?	rs and spi e and chan dike	nel		X X X X		
Has acti inspecti	ion been i	taken on rec	ommendation		ual			

Comments: (1) The small area of wetness at the toe of the exterior slope near the south end of dike C (noted in the August 4, 1982 inspection) is still being watched. It is believed that no danger exists at this time. The plant is to continue to observe this area. (2) Vegetation was growing inside the skimmer of one of the spillways. This vegetation is to be removed. (3) The acidic drainage between the ash dike and intake channel is approximately the same as last year. EN DES and F&H PR are studying ways to eliminate the acidic drainage.

J. P. H. Stivers

JPHS:PH

cc: 0. P. Thornton, 102 SPT-K

OPT:PH -4 / 5/83

cc: R. O. Barnett, W9D224 C-K

MEDS, W5B63 C-K

M. N. Sprouse, W11A9 C-K

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