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PROJECT 9536

FILE

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Water - Section 300

Route List

SEP 6 1958

DATE 5-3-46

SUBJECT Transmittal Letter regarding Eleven
Graphs showing the Quantity of Dissolved
Oxygen in the Columbia and Yakima Rivers.

To Plant Manager: C. H. Gross

FROM Frank A. Valente

COPY NO. - ~~1-22-22~~
plus attachments:
Copy 1-B Eleven Restr.
Graphs #12-22, inc.

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IN REPLY

REFER TO 800.12
11A PA

WAR DEPARTMENT
UNITED STATES ENGINEER OFFICE

HANFORD ENGINEER WORKS

P. O. BOX 800

PASCO, WASHINGTON

Plus Act

11 A 10 11 62:25

3 July 1946.

Plant Manager,
Hanford Engineer Works,
Richland, Washington.

Dear Sir:

Attention: Mr. E. W. Gross

Attached hereto are eleven graphs showing the quantity of dissolved oxygen in the Columbia and Yakima Rivers at various stations adjacent to and below the plant areas. These charts were prepared by Mr. Hanford Thayer.

Chart 17 shows little difference in the dissolved oxygen content of the Columbia River at Richland as compared with the content of the river above the 100-B intake. This chart also illustrates the low dissolved oxygen content at the outlet of 100-F. Mr. Thayer does not know where the sample at the 100-F outlet was taken. According to him, if the sample had been taken in the Columbia River, it would appear to indicate that the river could be considerably affected by plant operations; but if the samples in question were taken in the effluent outlet, the dissolved oxygen content of the river would not be appreciably changed subsequent to the mixture of the effluent with the river.

The dissolved oxygen content in 1943 follows the same general pattern shown in 1943 and 1944. The oxygen content of the Yakima River is considerably lower than the content of the Columbia River during the low period in August. According to Mr. Thayer, in the protection of aquatic life, it is considered that the dissolved oxygen content should not be less than 5 parts per million.

It is believed that the attached charts and Mr. Thayer's comment would be of interest to your Mr. E. W. Gross.

For the Area Engineer:

Very truly yours,

Mark A. Venable

Major, Corps of Engineers,
Acting Chief of Production.

Enclosure:
11-5-46

MASTER

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DISSOLVED OXYGEN YAKIMA RIVER BELOW SEWAGE OUTLET

CHART No. 12

— MON. BETWEEN CENTER AND LEFT BANK
--- CENTER OF RIVER
--- MON. BETWEEN CENTER AND RIGHT BANK

803

DISSOLVED OXYGEN

YAKIMA RIVER AT YAKIMA BRIDGE

Plotted by: [illegible]
 Checked by: [illegible]
 Plotted, Reviewed and Approved by: [illegible]

8013

DISSOLVED OXYGEN

COLUMBIA RIVER AT RICHLAND

- - - - - MINIMUM BETWEEN CENTER AND MOUNTAIN
 - - - - - CENTER OF RIVER
 - - - - - MINIMUM BETWEEN CENTER AND MOUNTAIN

1946

8013

DISSOLVED OXYGEN

COLUMBIA RIVER ABOVE 100-B AREA

Mean between center and left bank
Center of area
Mean between center and right bank

1946

1963

DATA FOR PLUM

YAKIMA RIVER AT YAKIMA BRIDGE
DISSOLVED OXYGEN

8014

DISSOLVED OXYGEN COLUMBIA RIVER AT RICHLAND

AT KOS-RIKKE
AT KOS-UTILE
AT KOS-RIKKE
AT KOS-RIKKE

AT KOS-RIKKE
AT KOS-UTILE
AT KOS-RIKKE
AT KOS-RIKKE

8013

DISSOLVED OXYGEN

CHART NO. 28

MIDWAY BETWEEN CENTER AND LEFT BANK
CENTER OF RIVER
MIDWAY BETWEEN CENTER AND RIGHT BANK

AT 100' B INTAKE
AT 100' B JAIL
AT 100' C INTAKE
AT 100' D INTAKE

1945

DISSOLVED OXYGEN

YAKIMA RIVER BELOW SEWAGE OUTLET

— MIDWAY BETWEEN CENTER AND LEFT BANK
 - - - CENTER OF RIVER
 . . . MIDWAY BETWEEN CENTER AND RIGHT BANK

9013

DISSOLVED OXYGEN

ATKINS-0-1000
ATKINS-0-1000

8.13

DISSOLVED OXYGEN

AT 100 FT INTAKE
AT REICHLAND
AT PASCO-KEMMERICH BRIDGE
AT COLUMBIA RIVER

1966

DISSOLVED OXYGEN

AT 1000 B INTAKE
AT RICHMOND
AT PASCO NEPHEWICK BRIDGE

RECORDED

DATE

FILMED

9/14/94

END