



# Department of Energy

Richland Field Office

P.O. Box 550

Richland, Washington 99352

0023192

AUG 14 1992

92-RPB-192

Mr. Bob Martin, Manager  
U.S. Army Corps of Engineers  
Seattle District  
Regulatory Branch  
CENPS-OP-RG  
P.O. Box 3755  
Seattle, Washington 98124-2255

Dear Mr. Martin:

## SECTION 404 CLEAN WATER ACT PERMIT APPLICATION - 300 AREA TREATED EFFLUENT DISPOSAL FACILITY

Enclosed is a Section 404 Clean Water Act (CWA) Permit Application. This application is to allow for the construction of an outfall in the Columbia River. The new outfall will serve the 300 Area Treated Effluent Disposal Facility (TEDF).

The 300 Area contains laboratories, office buildings, and support facilities (a powerhouse, warehouses, and fabrication and maintenance shops). Industrial process effluents from these operations are currently discharged to the 300 Area Process Trench. When operational, the 300 Area TEDF will provide Best Available Treatment Economically Achievable for these effluents with subsequent disposal to the Columbia River. Operation of the 300 Area TEDF will meet Hanford Federal Facility Agreement and Consent Order Milestone M-17-09, "Initiate full scale hot operations of '300 Area Treated Effluent Disposal Facility' (Project L-045H), with permitted disposal of treated effluent to surface water."

The 300 Area TEDF treatment train is shown on Drawing PFD-1, included with the enclosure. The influent to be treated consists of wastewaters from heating and ventilation systems, floor drains, sinks, and process equipment. The average expected flowrate is approximately 300 gallons per minute.



Mr. Bob Martin  
92-RPB-192

-2-

AUG 11 1992

Should you have any questions, please contact Mr. S. D. Stites of my staff on (509) 376-8566.

Sincerely,



R. D. Izatt, Program Manager  
Office of Environmental Assurance,  
Permits, and Policy

RPB:SDS

Enclosure:  
Section 404 Clean Water Act Permit  
Application 300 Area Treated Effluent  
Disposal Facility

cc: R. E. Lerch, WHC  
R. W. Oldham, WHC  
D. B. Jansen, Ecology

Enclosure

SECTION 404 CLEAN WATER ACT PERMIT APPLICATION  
300 AREA TREATED EFFLUENT DISPOSAL FACILITY

**APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT**  
(33 CFR 325)

OMB APPROVAL NO. 0702-0036  
Expires 30 June 1992

Public reporting burden for this collection of information is estimated to average 5 hours per response for the majority of cases, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Applications for larger or more complex projects, or those in ecologically sensitive areas, will take longer. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

The Department of the Army permit program is authorized by Section 10 of the Rivers and Harbors Act of 1899, Section 404 of the Clean Water Act and Section 103 of the Marine, Protection, Research and Sanctuaries Act. These laws require permits authorizing activities in or affecting navigable waters of the United States, the discharge of dredged or fill material into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters. Information provided on this form will be used in evaluating the application for a permit. Information in this application is made a matter of public record through issuance of a public notice. Disclosure of the information requested is voluntary; however, the data requested are necessary in order to communicate with the applicant and to evaluate the permit application. If necessary information is not provided, the permit application cannot be processed nor can a permit be issued.

One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

<p>1 APPLICATION NUMBER (To be assigned by Corps)</p>	<p>3. NAME, ADDRESS, AND TITLE OF AUTHORIZED AGENT</p> <p align="center">N/A</p> <p>Telephone no. during business hours</p> <p>A/C ( ) _____ (Residence) A/C ( ) _____ (Office)</p> <p>Statement of Authorization: I hereby designate and authorize _____ to act in my behalf as my agent in the processing of this permit application and to furnish, upon request, supplemental information in support of the application.</p>
<p>2. NAME AND ADDRESS OF APPLICANT</p> <p>Mr. R. D. Izatt, Program Manager Office of Environmental Assurance, Permits, and Policy U.S. Department of Energy Richland Field Office Richland, Washington 99352 Telephone no. during business hours</p> <p>A/C ( ) _____ (Residence) A/C (509) 376-5441 (Office)</p>	<p>SIGNATURE OF APPLICANT</p> <p>DATE</p>

4 DETAILED DESCRIPTION OF PROPOSED ACTIVITY

4a. ACTIVITY

'See Supplement'

4b. PURPOSE

'See Supplement'

4c. DISCHARGE OF DREDGED OR FILL MATERIAL

'See Supplement'

5. NAMES AND ADDRESSES OF ADJOINING PROPERTY OWNERS, LESSEES, ETC., WHOSE PROPERTY ALSO ADJOINS THE WATERWAY

'See Supplement'

6. WATERBODY AND LOCATION ON WATERBODY WHERE ACTIVITY EXISTS OR IS PROPOSED

The activity will be located in the Columbia River, at approximately River Mile 345:5

7. LOCATION ON LAND WHERE ACTIVITY EXISTS OR IS PROPOSED

ADDRESS:

300 Area, Hanford Site

STREET, ROAD, ROUTE OR OTHER DESCRIPTIVE LOCATION

Benton County,

Washington

99352

COUNTY

STATE

ZIP CODE

U.S. Department of Energy, Richland Field Office

LOCAL GOVERNING BODY WITH JURISDICTION OVERSITE

8. Is any portion of the activity for which authorization is sought now complete?

YES

NO

If answer is "yes" give reasons, month and year the activity was completed. Indicate the existing work on the drawings.

9. List all approvals or certifications and denials received from other federal, interstate, state or local agencies for any structures, construction, discharges or other activities described in this application.

ISSUING AGENCY	TYPE APPROVAL	IDENTIFICATION NO.	DATE OF APPLICATION	DATE OF APPROVAL	DATE OF DENIAL
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'See Supplement'

10. Application is hereby made for a permit or permits to authorize the activities described herein. I certify that I am familiar with the information contained in the application, and that to the best of my knowledge and belief such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities or I am acting as the duly authorized agent of the applicant.

N/A

SIGNATURE OF APPLICANT

DATE

SIGNATURE OF AGENT

DATE

The application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 3 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of The United States knowingly and willfully falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false fictitious or fraudulent statement or entry, shall be fined not more than \$10,000 or imprisoned not more than five years, or both.

**SUPPLEMENT**  
**TO**  
**SECTION 404 CLEAN WATER ACT PERMIT APPLICATION**  
**300 AREA TREATED EFFLUENT DISPOSAL FACILITY**

- 4a. The activity involves the construction of an outfall located in the Columbia River to support the operation of the 300 Area Treated Effluent Disposal Facility (TEDF). Referencing enclosed Drawing C-2, the outfall extends approximately 240 feet into the Columbia River based on the 'low pool' bank location. Referencing enclosed Drawing C-3, the outfall will consist of an eight inch diameter steel pipe encased in concrete. A minimum trench depth of 56 inches will be dug below the river bed with a corresponding minimum width of 44 inches. The outfall pipe will be backfilled with imported aggregate such that the top of the outfall pipe will be at least 36 inches below the original river bed. After the pipe is put in place, the trench will be backfilled with imported aggregate to a depth of approximately two feet below the original river bed. The remaining two feet of trench will then be filled with imported armor rock. The crane for constructing the outfall will be located on a floating barge.
- 4b. This activity will support the operation of the 300 Area TEDF. The operation of the 300 Area TEDF is required to meet Hanford Federal Facility Agreement and Consent Order Milestone M-17-09, "Initiate full scale hot operations of '300 Area Treated Effluent Disposal Facility' (Project L-045H), with permitted disposal of treated effluent to surface water."
- 4c. As shown on Drawings C-2 and C-3, a minimum of 457 cubic yards of material will be dredged from the bottom of the Columbia River. This material will be placed on the river bank or hauled away. Material that is being hauled away will be transported by barge or truck.
- The trench will be backfilled with a minimum of 261 cubic yards of aggregate and a minimum of 196 cubic yards of armor rock. The material will be transported to the site by either barge or truck.
5. The outfall is physically located between the west bank of the Columbia River and Johnson Island. Johnson Island is owned by the U.S. Army Corps of Engineers and operated by the U.S. Fish & Wildlife Service under a 1969 cooperative agreement. The west bank of the Columbia River is owned by the U.S. Government and operated by the U.S. Department of Energy. The outfall is located in the North East Quarter Section 2, Township 10, Range 28E in Benton County.

The coordinates for the outfall are:

**OUTFALL COORDINATES**

	DEGREES	MINUTES	SECONDS
LATITUDE	46	23	1
LONGITUDE	119	16	3

9. Other approvals, certifications and denials are:

PERMIT APPLICATION	ISSUING AGENCY	TYPE APPROVAL	IDENTIFICATION NUMBER	DATE OF APPLICATION	DATE OF APPROVAL	DATE OF DENIAL
HYDRAULIC PROJECT	FISHERIES	PERMIT	NOT AVAILABLE	PREPARATION IN PROGRESS		
NPDES	EPA	PERMIT	WA-000374-3	PREPARATION IN PROGRESS		
WATER QUALITY STANDARDS MODIFICATION REQUEST	ECOLOGY (YAKIMA)	LEASE	NOT AVAILABLE	PREPARATION IN PROGRESS		
LAND LEASE NATURAL RESOURCES	NATURAL RESOURCES	PERMIT	NOT AVAILABLE	PREPARATION IN PROGRESS		

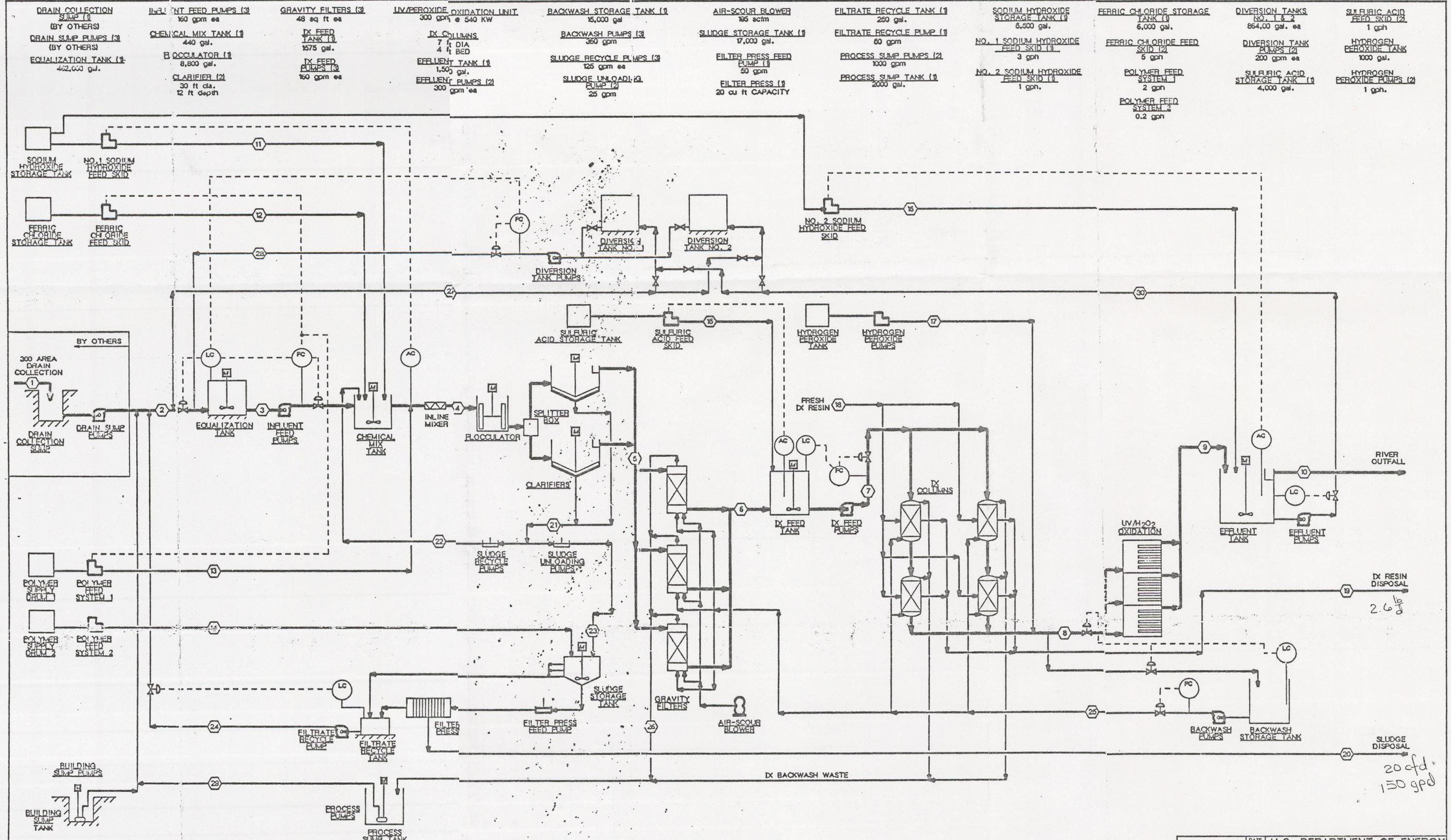
Ecology - State of Washington Department of Ecology

EPA - U.S. Environmental Protection Agency

Fisheries - State of Washington Department of Fisheries

Natural Resources - Washington State Department of Natural Resources

NPDES - National Pollutant Discharge Elimination System



STREAM	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
AVERAGE	200	219	219	302	215	215	215	200	200	200	1.4	2.7	0.8	0.08	0.4	0.07	0.4	0.6	1.7	14	87	83	4	4	15	15	0	0	15	0
MAXIMUM	300	1350*	321	442	514	315	315	300	300	300	2.1	3.9	1.2	0.1	0.7	0.1	0.6	0.8	2.6	20	127	121	6	65*	720*	15	1360*	200*	1000*	300*
MINIMUM	50	66	66	91	65	65	60	60	60	60	0.4	0.8	0.2	0.02	0.13	0.02	0.1	0.2	0.5	4	26	24	1	1	15	15	0	0	15	0
UNITS	gpm	gpm	gpm	gpm	gpm	gpm	gpm	gpm	gpm	gpm	gph	gph	gph	gph	gph	gph	gph	lb/d	lb/d	cf/d	gpm	gpm	gpm	gpm	gpm	gpm	gpm	gpm	gpm	gpm

\* MAX. INSTANTANEOUS



NUMBER	TITLE	REFERENCES

BY-DATE	BY-DATE	REV BY DATE	DESCRIPTION	REV

APPROVAL DATE

U.S. DEPARTMENT OF ENERGY  
RICHLAND FIELD OFFICE

CH2M HILL ENGINEERS

PROJECT TITLE  
1-COAST 300 AREA TREATED EFF. DISPL. FACIL.

PROJECT NO. \_\_\_\_\_ JOB \_\_\_\_\_

SCALE \_\_\_\_\_ ELDG. \_\_\_\_\_ INDEX \_\_\_\_\_

DRAWING NUMBER PFD-1

DATE \_\_\_\_\_

DESIGNED BY \_\_\_\_\_

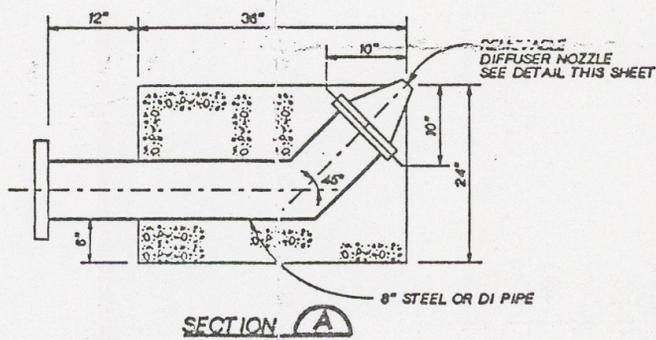
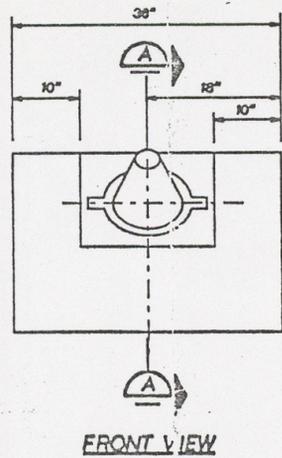
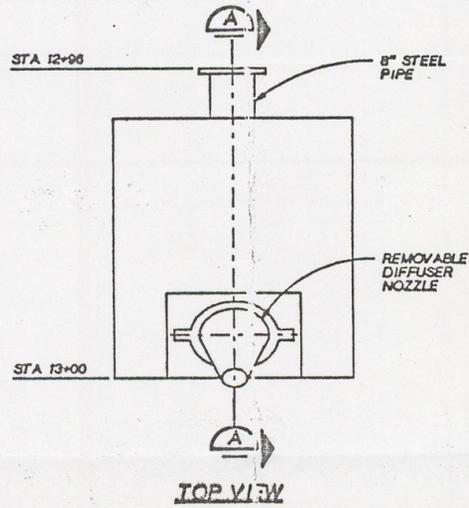
CHECKED BY \_\_\_\_\_

APPROVED BY \_\_\_\_\_

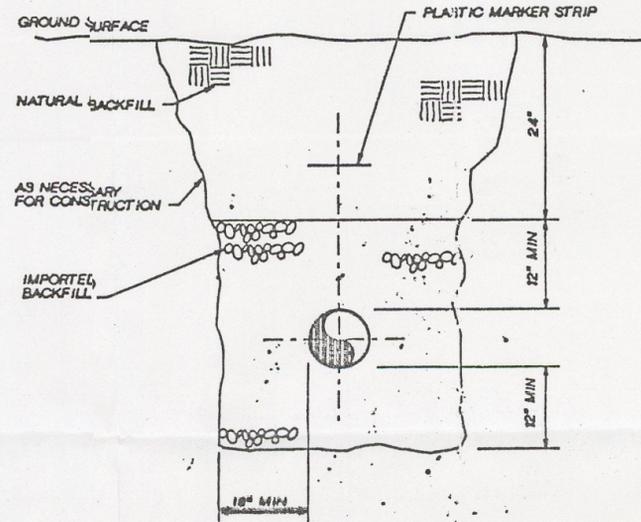
PRELIMINARY

20 cfd  
150 gpd

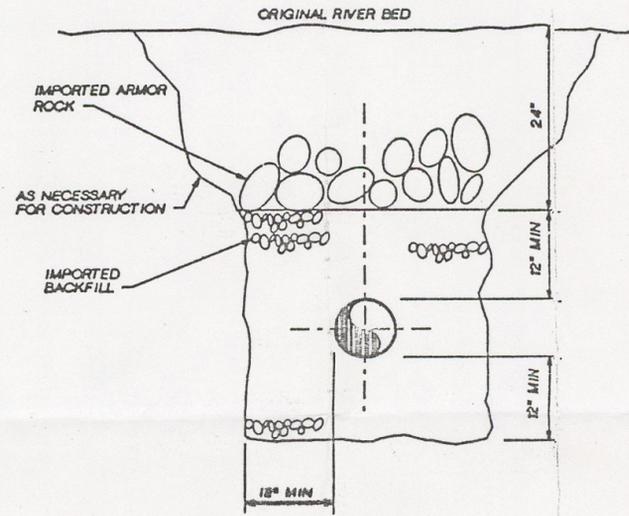
2.6 lb/d



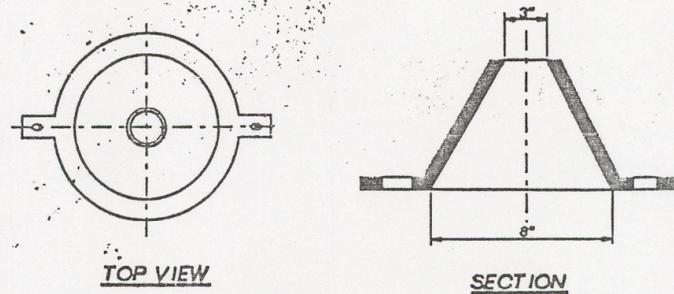
**OUTFALL DIFFUSER DETAIL**  
N.T.S.



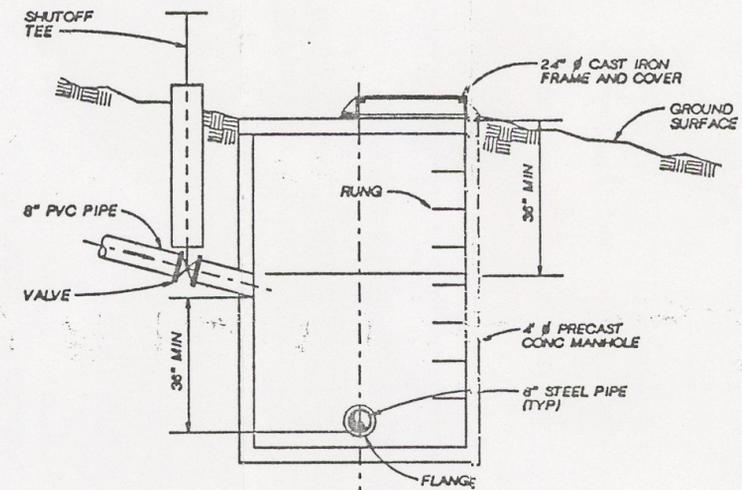
**LAND PIPELINE**  
**TYPICAL TRENCH SECTION**  
**STA. 0+00 TO STA. 21+73**  
N.T.S.



**RIVER PIPELINE**  
**TYPICAL TRENCH SECTION**  
**STA. 21+77 TO APPROX STA. 24+98**  
N.T.S.



**DIFFUSER NOZZLE DETAIL**  
N.T.S.

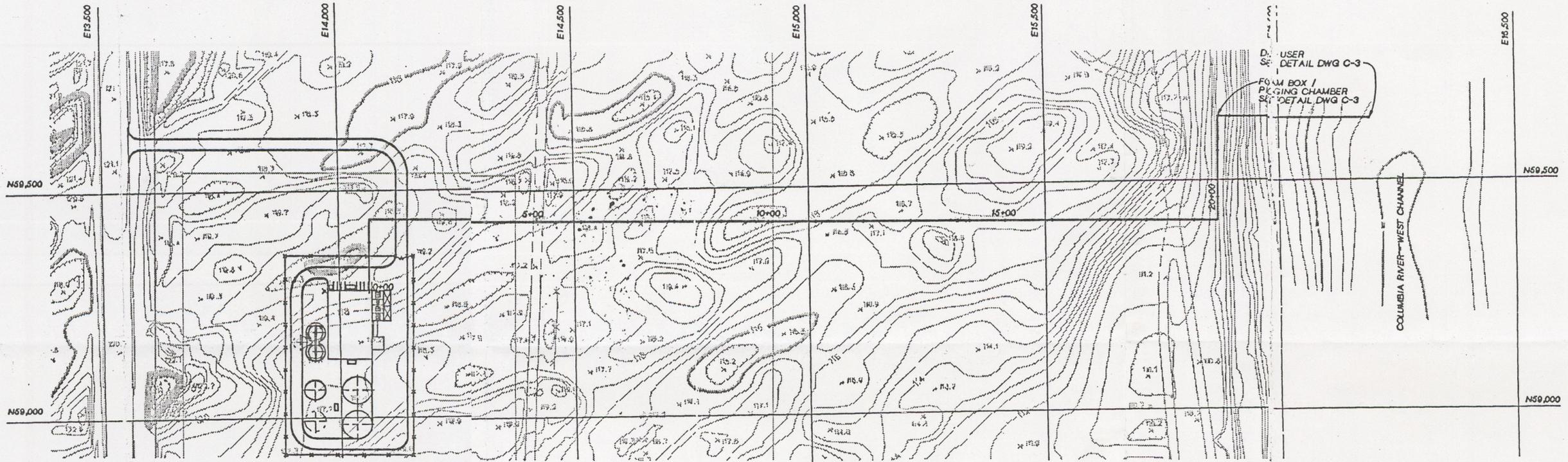


**FOAM BOX / PIGGING CHAMBER**  
**STA 21+75**  
N.T.S.

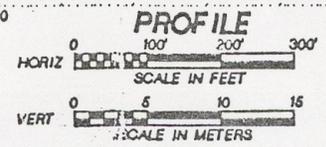
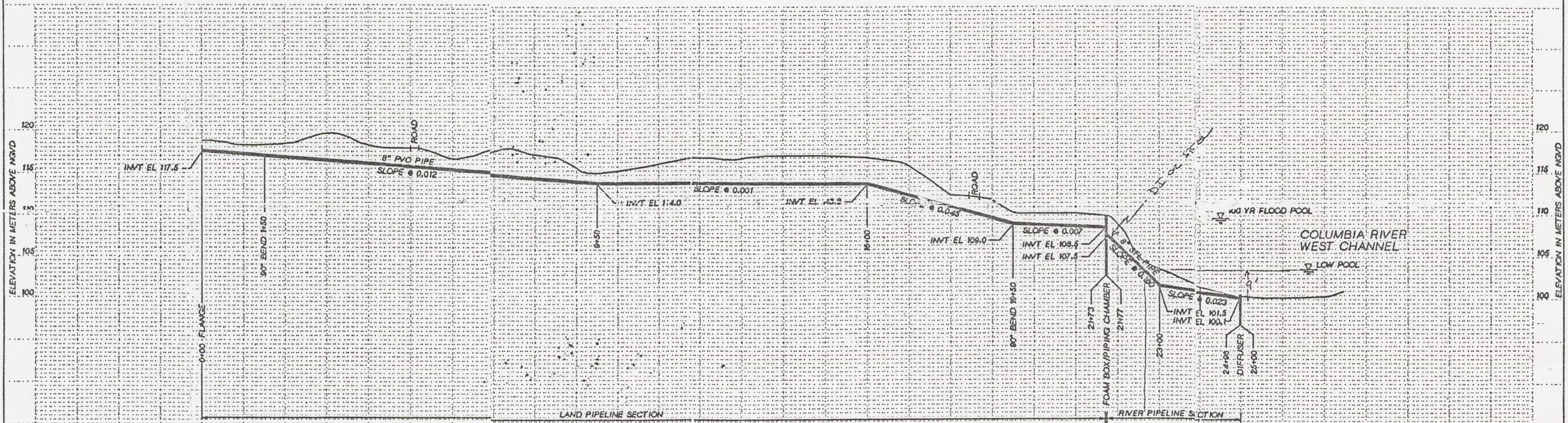
APPROVAL	DATE	U.S. DEPARTMENT OF ENERGY RICHLAND FIELD OFFICE	
BY		CH2M HILL ENGINEERS	
PROJ ENGR		<b>OUTFALL DETAILS</b>	
QA			
APPROVED BY			
SAFETY			
APPROVED BY		PROJECT TITLE	L-0403H 300 AREA TREATED EPL DISPL FACIL
CHECKED BY		PROJ	JOB
DRAWN BY	S.D.GUNDY	SCALE	AS NOTED
DESIGNED BY	J.L.SCOTT	DRAWING NUMBER	C-3
COMMIT REVIEW		SHEET	OF

BY-DATE	BY-DATE	REV BY DATE	DESCRIPTION	REV

PRELIMINARY



NOTES:  
 1. CONTOUR INTERNALS = 0.5 METERS.  
 2. COORDINATES ARE HANFORD PLANT COORDINATES.



APPROVAL DATE		U.S. DEPARTMENT OF ENERGY RICHLAND FIELD OFFICE CH2M HILL ENGINEERS	
BY	DATE	OUTFALL PLAN AND PROFILE	
PROJ ENGR			
GA		PROJECT TITLE L-0421 300 AREA TREATED EFF. DISPL. FACIL.	
APPROVED BY			
SAFETY		FROM: [ ] TO: [ ] JOB: [ ]	
APPROVED BY			
BY		NOTED: [ ] BLDG: [ ] INDEX: [ ]	
CHECKED			
BY		DRAWING NUMBER: [ ] SHEET: [ ] OF: [ ] REV: [ ]	
BY C.J. BROWN	3-18-81		
DESIGNED BY J.L. SCOTT		C-2	



BY-DATE	BY-DATE	REV BY DATE	DESCRIPTION	ISSUED	REV

NUMBER	TITLE	REFERENCES

PRELIMINARY

## CORRESPONDENCE DISTRIBUTION COVERSHEET

<b>Author</b> R. D. Izatt, RL (J. S. Hill, WHC)	<b>Addressee</b> Bob Martin, COE	<b>Correspondence No.</b> Incoming:9203088 XREF:9255644D
<b>Subject:</b> SECTION 404 CLEAN WATER ACT PERMIT APPLICATION - 300 AREA TREATED EFFLUENT DISPOSAL FACILITY		

### INTERNAL DISTRIBUTION

Approval	Date	Name	Location	w/att
		Correspondence Control	A3-01	
		G. D. Carpenter	B2-16	
		C. K. DiSibio	B3-03	
		C. J. Geier	B2-19	
		W. H. Hamilton	N3-10	
		D. E. Kelley	R1-48	
		J. R. Kelly	R3-28	
		R. J. Landon	B2-19	
		R. E. Lerch, Assignee	B2-35	
		J. J. Luke	H4-57	
		P. J. Mackey	B3-15	
		H. E. McGuire, Level 1	B3-63	
		F. J. Muller	L4-78	
		S. M. Price	H4-57	
		R. W. Oldham	H4-57	
		L. Soler	B4-09	
		D. S. Takasumi	L4-78	
		J. E. Turnbaugh	H4-57	
		T. J. Varljen	H5-27	
		T. B. Veneziano	B2-35	
		<b>EDMC</b>	<b>H4-22</b>	
		Project Files	R1-28	
		EPS/File/LB	H4-57	