→ File

PLANNING MEETING

0900 4/28/79

1. Agenda, 0900, 4/28/79, Task Management/Schedule Meeting
2. Review Top Priorities List
3. Review Action Items from "1800", 4/27/79, Technical Review Meeting
4. Review Tasks Lists

① Analyze current situation
② " next choice
③ Can we steam on B now
④ Solid options

4/28/79

AGENDA

Management/Schedule Meeting
0900 4/28/79

Dynamics of switching back + forth steaming ⇒ solid & vice versa

Releases based on 2/9 ~ 5×10^{-9} + steady

1. Radioactive Releases - Identification and Isolation of Sources - Contamination of Secondary Plant

2. Construction Status:
   a. EPICOR (Cap-Gun II) on schedule
   b. Tank farm on Unit 2 spent fuel pool - All tanks in, pipe welding in progress
   c. Reactor coolant pressure/volume control system
   d. ADHR — All equip except for one tank are on site | going into bldg today
   e. Decontamination efforts/DHR upgrade
   f. Alternate system for solid circulation of OTSG's (in front bldg - mech)
   g. Auxiliary Building Roof Ventilation System — Rad monitors in + being calib | Cut in mon today
   h. Auxiliary Diesel Generator System — tieing in - be ready 5/2

hope to meet 5/8 but elect equip will be late

will calc @ 4 new monitors

3. Plant Status: Levels 400-430" on A

ΔT on A	13	T_H 182.6	169.4
ΔT on B	51	T_H 202.1	151.2
T_{Swan}	171.2	156.8	TC 3[illegible]

   a. RCS temperatures - Thermocouples and RTD's
   b. Pressurizer level - agreement among various indications
   c. Status of OTSG's and Feed System
   d. Source of sodium in RCS Sample #5 - possibility of continuing contamination

once each in loop in Heise · LT-3 has been coming in — what should criteria be for "loss of" level indication

4. Boron Concentration for RCS Makeup

5. Planning, priorities and schedules for going to primary/secondary solid operation and completion of construction activities

6. Plans for processing high level liquid wastes

Options
① Stay Steaming on A till Lag Farm B available
② Try to establish circ in both loops
③ Take B solid ~~now~~ switch to A
④ Take A solid

Do as much as possible by Monday Staff to discuss options.

TOP PRIORITIES

Development of plan for management of radioactivity in Auxiliary and Containment Buildings.	A-1
Identify and isolate sources of iodine leakage.	A-1
Complete tank farm in Unit 2 spent fuel pool.	A-1
Complete roof-top Stack Filtration System.	A-2
Complete contingency plan for emergency cross-tie between the Auxiliary Building and Reactor Building Filtration System.	A-2
Completion of EPICOR (CAP-GUN II) System.	A-2
Development of plan for treatment of Auxiliary Building liquid waste.	B-1
Complete "B" OTSG cooling and modification (long-term).	C-1
Upgrade Decay Heat Removal System.	C-1
Complete calibration of alternate pressurizer level transmitter.	C-1
Development of alternate system for pressure/volume control system.	C-1
Determine suitability of using both steam generators as heat sinks.	C-2
Complete "A" OTSG cooling modification (long-term).	C-2
Complete external valve pit for ADHR System.	C-2

CATEGORY

A	Control (i.e., containment) of radioactivity in Auxiliary and Containment Buildings.
B	Recovery of Auxiliary Building to near normal operations.
C	Place the plant in a cold condition suitable for depressurization with long-term pressure/volume control.

4/28/79

ACTION ITEMS

Technical Review Meeting
1800 4/27/79

		Action
1.	Resolve which instruments are to be used to measure T_h and T_c.	Levenson/ Wilson/ Herbein
2.	Stabilize RCS temperature. Hold T_c at 170°.	Herbein
3.	Determine target RCS temperature.	Wilson
4.	Movements of liquid waste in Units 1 and 2 are to be cleared through Waste Management.	Herbein/ Rusche
5.	Complete temporary feedwater bypass on feedline to "B" OTSG. Prove out line by raising "B" OTSG level by 10%, then secure feed to "B" OTSG. Isolate and drain section of line so connection for alternate solid circulation of "B" OTSG can be made.	Herbein/ Hirst
6.	Emergency contacts to be made through Trailer 201, Phone #944-2500.	All
7.	Check the possibility that the ductwork of the auxiliary roof ventilation system could collapse if AC is lost to the Auxiliary Building ventilation system.	Wilson

0800 4/28/79

PLANT OPERATION STAFF

Task	Description	Priority	Expected Completion	Status	Task Coord.
1.	Obtain RCS sample.	C-1	#6 0500, 5/01		Thorpe/ Hetrick
2.	PZR Heise and diff. pressure gage.	C-1		Recalibrating	Wilson/ Broughton
3.	Obtain MEC approval.	C-1		Need ECM's 109, 154, 37R3, 132, 141, 148, 154, 181, 182, 185, 189, 191, 203.	Porter/ Faulkner
4.	SSRW pumps.	C-1	"A"-In Service "B"-Available "C"-Under Repair	Parts 5/07/79	
5.	Make calculation of RAD levels that will occur in cond. Demins - if we circulate and clean "B" OTSG.	C-1		Tom Crimmins to define shielding requirements.	Cobean/ Gunn
6.	Prepare instructions for loss of gland steam to turbine.	C-1	4/27	In progress.	Floyd
7.	Be prepared to run Existing B Decay Heat Pump on Recirc.	C-1	Expect to run 4/29.		Toole
8.	Miller/Toole make schedule for OTSG to support natural circulation.	C-1			Miller/ Toole
9.	Review tie-in to stack for AB H&V. (Is cap needed?)			No status	Gunn/ Toole/ Thorpe
10.	Repair 6 secondary plant leaks and mop up water.		In progress.	Cleaning up around condensate pumps.	Shovlin/ Kunder
11.	Get sec. plant sump levels down.				Kunder
12.	Open OSTG "B" drains to condenser.				Kunder
13.	Install new rad monitor on vacuum pump exhaust. (Take one from roof and put on same point as HP-R748.)				Weaver/ Kunder

PLANT OPERATION STAFF

Task	Description	Priority	Expected Completion	Status	Task Coord.
14.	Fix the 1-B Reactor coolant waste evaporator (1A in service).				
15.	Degas RCS by using PZR sprays/ heaters; vent every shift.				

PLANT MODIFICATIONS.

Task	Description	Priority	Expected Completion	Status	Task Coord.
WG-2 (L-1)	Decon. water in AB using EPICOR ion exchange process.	A-1	Turn over for test 5/5. Operational 5/7.	27 of 59 ECM's issued.	Cobean
WG-6 (L-2)	Install storage vessels in Fuel Pool "A".	A-1	Schedule to be issued (5/7).	UE&C to relocate their equipment.	Cobean/ Gunn
WG-1	Install AB/FHB Filter system. MEC install high noise level signs.	A-2	Units 1 and 2 (tested) Units 3 and 4 - 5/1	Building complete by 5/24.	Gunn/ Thorpe/ Bachofer
WG-16	Provide cap for Aux. Building stack.	A-2	Turn over for test 4/27.		Gunn
TS-3C	Develop complete package for long-term cooling of OTSG "B". Use Unit #2 Demins for long-term system.	C-1	Instal. comp. 5/8.	Equip. avail. 5/2.	Wilson/ Cobean
TS-3D	Develop "A" OTSG long-term Lay-up.	C-1	4/29	GAI Plan to be issued.	Gunn
TS-10	Install 2/2500 kw diesel generators - check shipping damage - vendor. Run diesel, fill fuel system.	C-1	Run on 5/5.	Instal. comp. 5/4.	Cobean/ Gunn/ Toole
TS-11	Develop electrical distribution system - 13.2 KV line.	C-1	Turn over for test 4/30. Run on 5/5.	Instal. comp. 5/4.	Cobean
TS-6B	Design/install make-up system for RCS.	C-1	Turn over for test 5/5.	Equip. avail. 4/28 (Schedule being revised)	Miller/ Lilly
TS-6C	Evaluate letdown capabilities for mod. to RCS.	C-1		To be scheduled.	
TS-6	RC Loop passive pressure control system.	C-2		Need design from B&R. (Have electrical)	Gunn
TS-14	Shield for decay heat pump.	C-2		Installation to be scheduled by 4/30.	Wilson

PLANT MODIFICATIONS

Task	Description	Priority	Expected Completion	Status	Task Coord.
TS-15	DH removal system by W.			Revision to B issued by 4/27.	
WG-11	Provide and install water chemistry laboratory for use in conjunction with WG-2.			Schedule to be developed 4/28/79.	Lacy/ Fricke
	Open two holes for RB purge to be used for AB air cleaning. - Should we save for RX Bldg. cleanup?				Seelinger
	B&R put together set of flow prints.			Have by 4/27.	Toole/B&R

TECHNICAL SUPPORT

Task	Description		Expected Completion	Status	Task Coord.
LS-2	Tech Spec. deletions, chang and additions for long-ter cooling.		status	NRC inter-actions under negotiation.	Harding (Stair)
TM-35	Establish long-term plan instrumentation requirem	C-1	No status		Croneberge/ Chisholm
AA-61	Updated safety analysis report (B&W).	C-1	Completed	Review Report	B&W

0800 4/28/79

WESTINGHOUSE

TASK	DESCRIPTION	PRIORITY	STATUS/DATE DUE	TASK COORD.	NOTE
I.B.1	Decontaminate for DHR Sys. checkout	1	ongoing DH Valve Room 4/28	Siano	
I.B.2	Install Aux Building TV Monitor System	1	In progress	"	
I.B.4	Install DHR remote ops equip.	1	Ongoing/4/30	"	
I.B.5	DHR flow/pressure tests	1	After installation	"	
II.A.1	ADHR (new) sys design & approval	1	Ongoing/4/30	"	
II.A.1	Final ADHR test procedure	1	Ongoing 5/3	"	
II.A.1	Final ADHR Installation procedure	1	Ongoing 5/10	"	
II.A.2	ADHR Procurement	1	Complete	"	1
II.B	ADHR Installation	1	Ongoing 5/18	"	
	Licensing Report	1	Formal Submittal 4.26 To GPU	"	

NOTES:

1. DHR skid due 4/27/79 from Pullman Co.

WASTE MANAGEMENT GROUP

Task	Description	Priority	Expected Completion	Status	Task Coord.
G-5	Set-up to change AB/FH Bldg. vent. filters.	A-1	On hold (Radiation levels)	AB "A" In Service "B" In Progress FHB "A" In Service	Shovlin/ Bachofer
L-5	Caustic spraying of Aux. Bldg. areas and sump.	A-1		Continue adding to sump.	Kraft/ Seelinger
L-33	Develop plan for tying in tank farm to CAP-GUN "2".	A-1		In progress. Investigating secondary tie to tank farm.	Snyder
	Begin Waste Gas Program to determine location of leak.				Seelinger
	Develop plan for management of decontamination of radio-activity in Aux. & Cont. Bldgs.				Seelinger
	Get RB Bldg. gas sample.				Miller
	Check possibility of determining containment sump level by measuring radiation at containment wall.				Levy/ Industrial Advisory Group

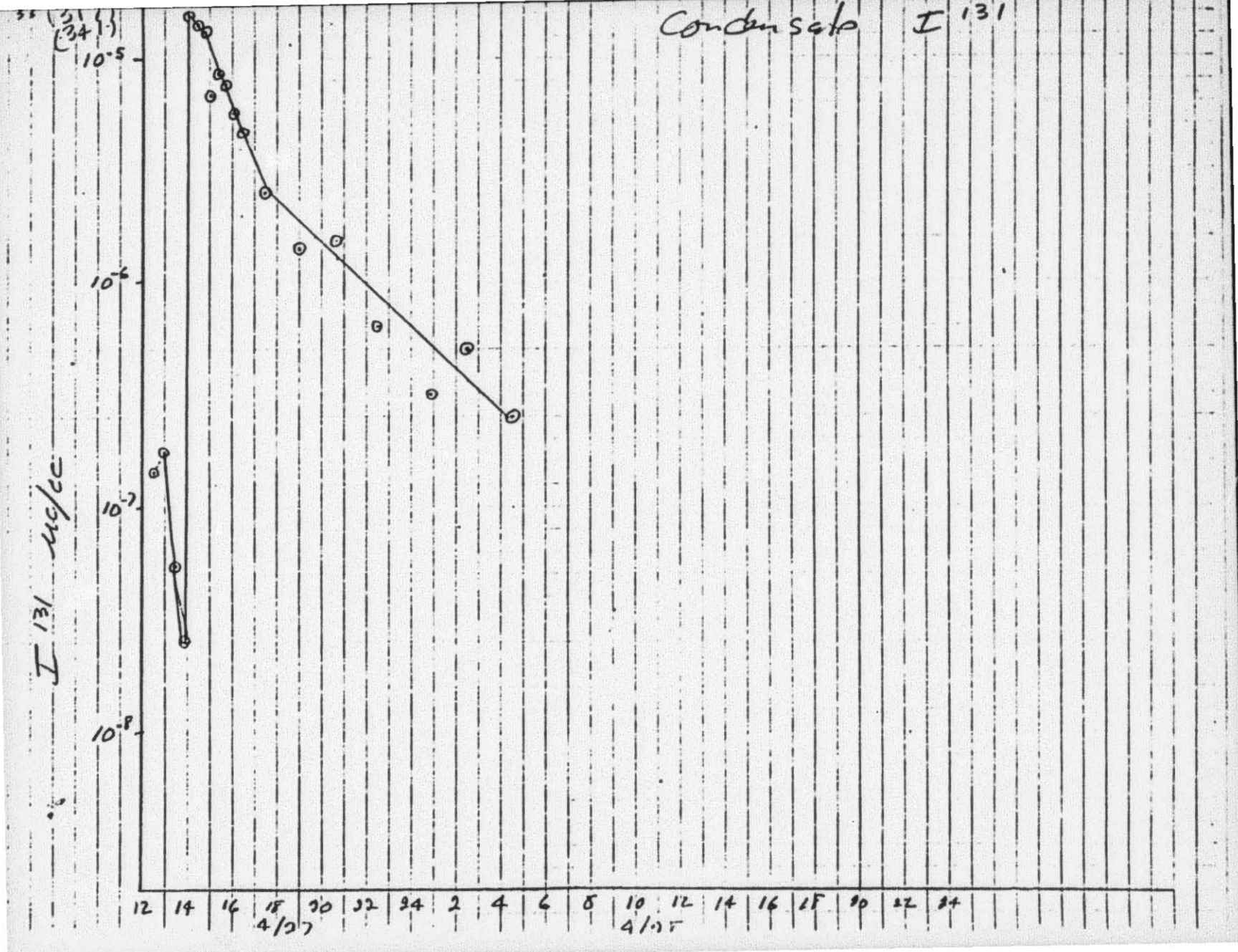
0800 4/28/79

INDUSTRIAL ADVISORY GROUP

Task	Description	Priority	Expected Completion	Status	Task Coord.
1.	Determine method of finding leak in vent header.	1+	Comp. 4/26	Close out memo IA 1	Lawborski
2.	Provide recommendation for alternate methods of P/V control.	1		In progress	Ackerman
11.	Instrument diagnostics.	1		Continous	Ackerman
18.	Risks/Advantages of going to Natural Circulation as is vs. Present Plan.	1	Comp. 4/24	IA 18	Paddlefor
25.	Instrument				
	a. 12 selected TC's on recorder or computer.	1		In progress	Stroupe
	b. TH & TC on recorder.	1		In progress	Stroupe
26.	Review of Natural Circulation				
	a. Loss of pump	1	Comp. 4/26	IA 26A	Levy
	b. Instr. list.	1	Comp. 4/25	IA 26B	Levy
	c. Control of mass volume.	1	Comp. 4/27	IA 26C	Levy
	d. Review and recommend criteria for natural circulation.	1	In progress		Levy
	e. Verification of natural circulation shrink.	1	Comp. 4/26	IA 26E	Levy
	f. Means of determining natural circulation if level indication is lost.	1		In progress	Levy
20.	Evaluate various alternatives to decontaminate plant; long-term.	1		Not started	Lawborski
31.	Alternate pressurized level procedure for comment.	1			Stroup
33.	Evaluate pressurizer volume control option w/o level instr. using make-up tank.	1	In progress		Kelly
34.	Evaluate core significance of ex-cure upper-lower ratio.	1	In progress		Zebroski/ Ackerman

INDUSTRIAL ADVISORY GROUP

Task	Description	Priority	Expected Completion	Status	Task Coord.
12.	Specifications for Reflux Boiler Test				
	a. Feasibility	2		In typing	Fornandoz
	b. Specific parameter	2		In typing	Fornandoz
13.	Water Level/Reactor P/V				
	a. Short-term	2		In progress	Ackerman
	b. Long-term	2		In progress	Ackerman
14.	Model for boron/gas in primary system.	2		Being written	Koler
19.	Time to core melt with no external cooling and removal through flooding of containment.	2		Not started	Fornandoz
22.	Plant Mod - piping and equipment.	2		In progress	Lawborski
32.	Convective simulation of cold shutdown.	2	Comp. 4/25	IA 32	Kolar


Condensate I 131
I 131 μc/cc
10⁻⁵
10⁻⁶
10⁻⁷
10⁻⁸
12 14 16 18 20 22 24 2 4 6 8 10 12 14 16 18 20 22 24
4/27
4/28

PARALLEL WASTE PROCESSING STRATEGY

A

EPICORE I

WASTES CONTAINING $< 10^0$ μCi/ml I^{131}

~42000 GALS AS OF 27 APRIL 1979

18-20 gpm, ~ 50-50 usage

B

EPICORE II

WASTES CONTAINING $10^0 \rightarrow 10^2$ μCi/ml I^{131}

~115000 GALS AS OF 27 APRIL 1979

15-20 gpm, ~ 50-50 usage

C

EPICORE II AUGMENTED

WASTES CONTAINING $> 10^2$ μCi/ml I^{131}

~400 000 GALS AS OF 27 APRIL 1979

(UNIT 2: REACTOR BLDG SUMP + 'A' & 'C' RCBT)

D

EPICORE II AUGMENTED

WASTES CONTAINING $> 10^2$ μCi/ml I^{131}

~1100000 — 1800000 GALS

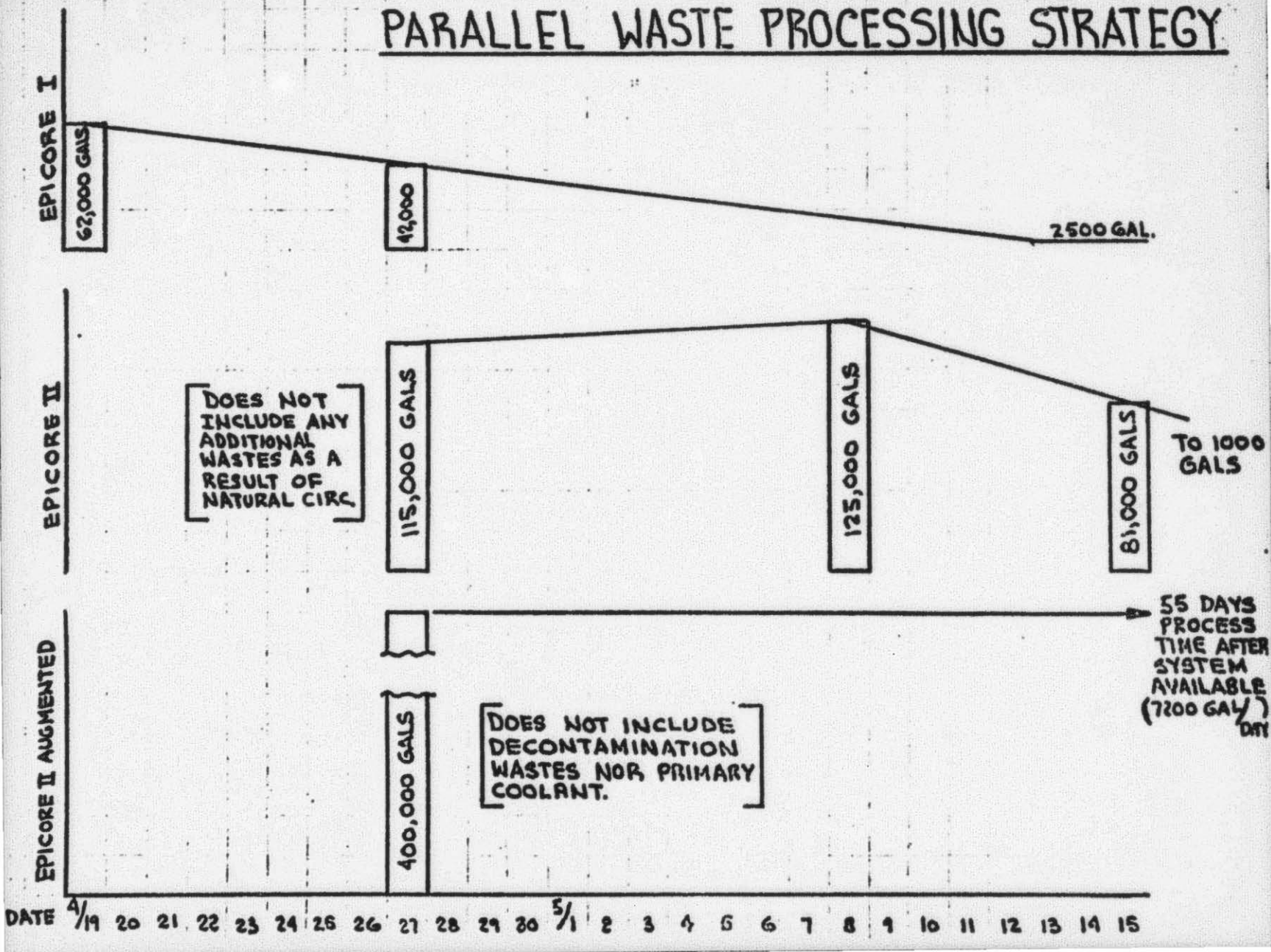
(UNIT 2: DECONTAMINATION WASTES + REACTOR COOLANT VOLUME)

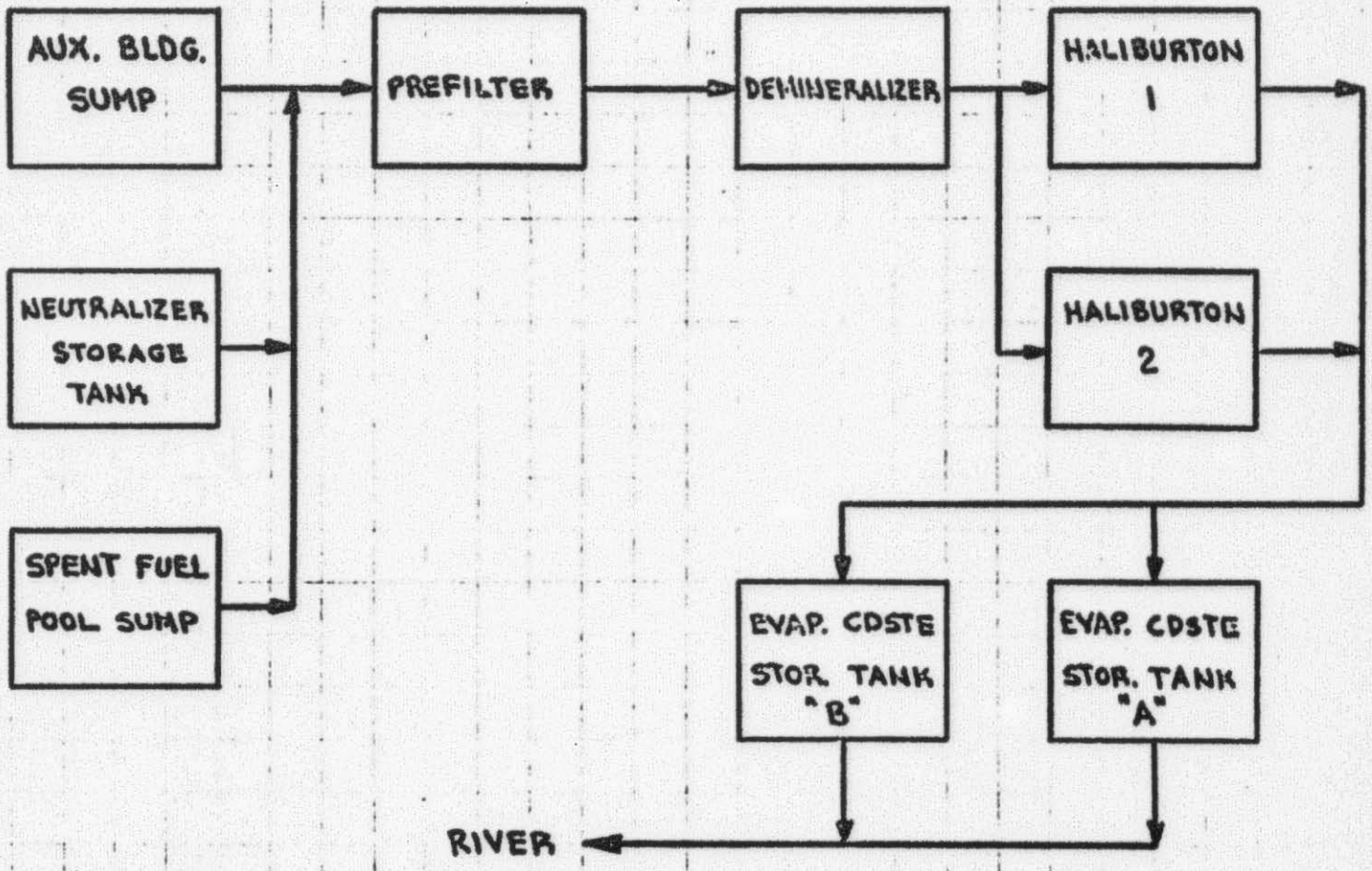
E

TMI 2 RECOVERY ORGANIZATION	
RADWASTE MANAGEMENT GROUP	
DATE: 4-27-79	
DWG. NO.	

4-27-79

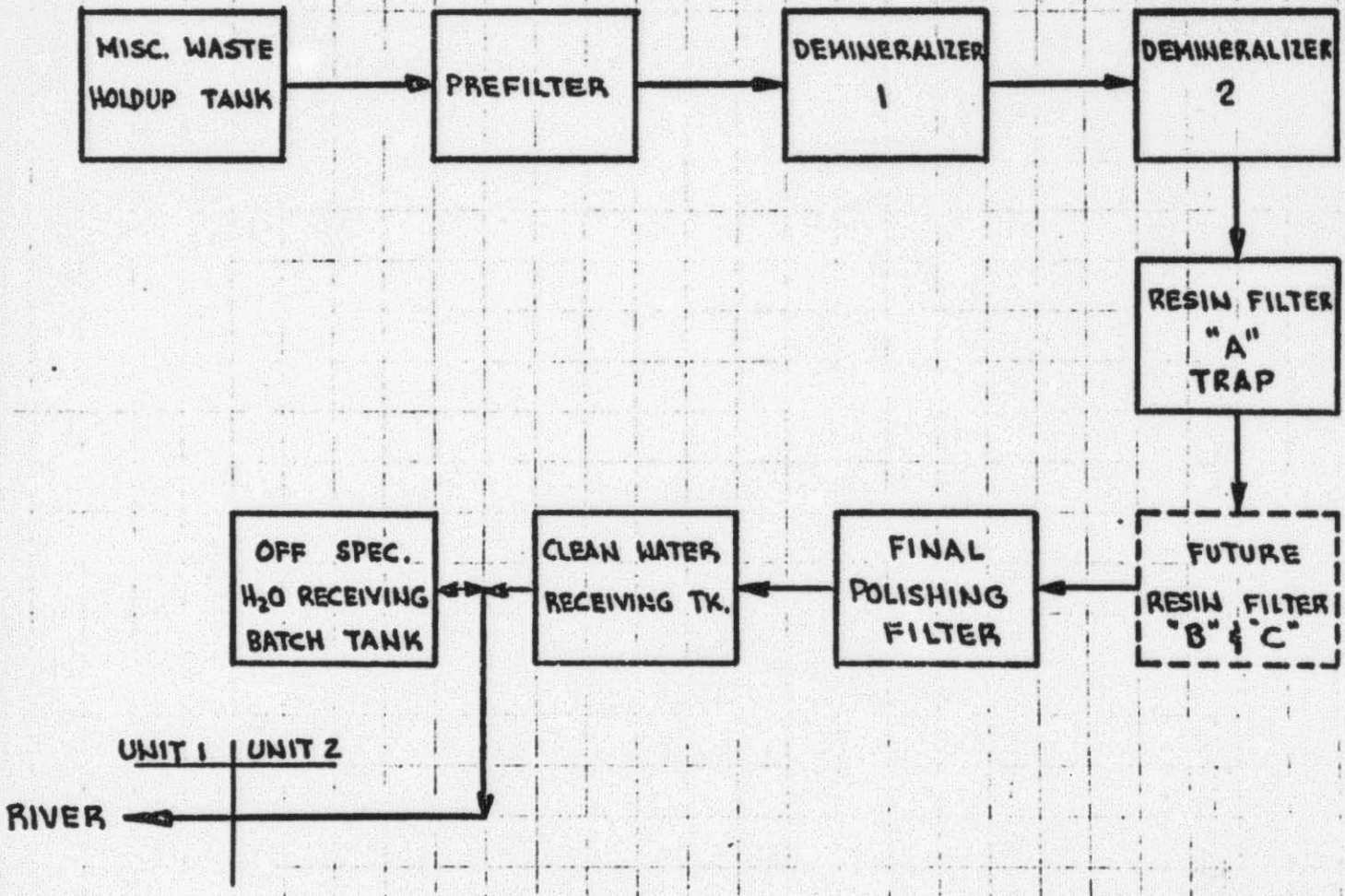
PARALLEL WASTE PROCESSING STRATEGY





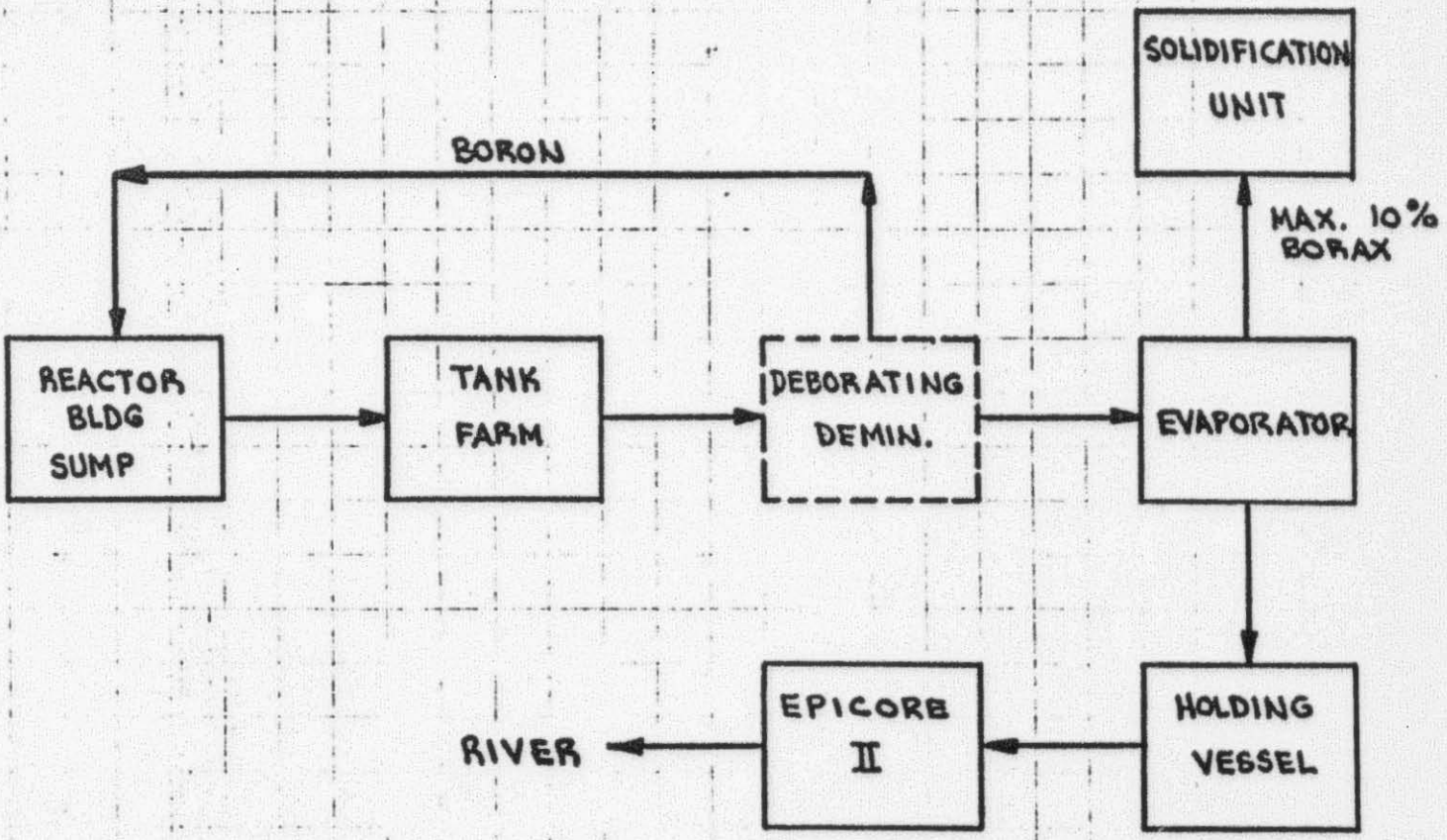
EPICORE I

TMI 2 RECOVERY ORGANIZATION	
RADWASTE MANAGEMENT GROUP	
DATE: 4-21-79	
DWG. NO.	



EPICORE II

TMI 2 RECOVERY ORGANIZATION	
RADWASTE MANAGEMENT GROUP	
DATE: 4-27-79	
DWG. NO.	



EPICORE II AUGMENTED

TMI 2 RECOVERY ORGANIZATION	
RADWASTE MANAGEMENT GROUP	
DATE: 4-27-79	
DWG. NO.	

TMI-2 P.O. WMG	SUBJECT PARALLEL WASTE PROCESSING STRATEGY SOLIDS.	CISIO			PAGE 1 OF 1 PAGES
	REV. 0	1	2	3	
	MICROFILMED				
	ORIGINATOR S. KRAFT				
	DATE 27 APRIL 79				

PARALLEL WASTE PROCESSING STRATEGY

SHIPPING & BURIAL COSTS

A → B EPICOR I : $200,000 —

B → C EPICOR II : $320,000 —

C → D EPICOR II AUGMENTED : $940,000 —

D → E EPICOR II AUGMENTED (DECON+PRIMARY) : $6,—10,000,000 —

TMI-2 R.O. WMG — associates, inc. — CULATION	SUBJECT 0300 27APRIL 1979 WATER SCHED. TO EPICOR-1	CISIO			PAGE 1 OF 1 PAGES
	REV. 0	1	2	3	
	MICROFILMED				
	ORIGINATOR S. KRAFT				
	DATE 27APRIL79				

WATER SCHEDULED TO BE PROCESSED THROUGH

EPICOR-I AS OF 0300 27 APRIL 1979:

UNIT I:	
AUX. BLDG. SUMP	7000 GALS
NEUT. STORAGE TANK	1186 "
NEUT. FEED TANK	90 "
NEUT. MIX TANK	116 "
MISC. WASTE STOR. TANK	15465 "
UNIT II:	
CONTAM. DRAIN TANK 'A'	2235 "
'B' OTSG	16000 "
TOTAL	42092 GALS.

PLUS UNIT I INLEAKAGE RATE = 0.99 GPM TO AUX SUMP → EPICOR I
0.16 GPM TO LAUNDRY → EVAP

TMI-2
R.O.
WMG

sociates, Inc.

CULATION

SUBJECT 0400 27 APRIL 1979 WATER SCHED. TO EPICOR-II AUG				CISIO	PAGE 1 OF 1 PAGES
REV.	0	1	2	3	
MICROFILMED					
ORIGINATOR S. KRAFT					
DATE 27 APRIL 79					

WATER SCHEDULED TO BE PROCESSED THROUGH

EPICOR II - AUGMENTED*:

UNIT II:

RCBT 'A'	70,900	GALS
RCBT 'C'	59,660	"
REACTOR BLDG SUMP	~ 250,000	"
MISC. WASTE HOLD UP TANK	13 150	"
TOTAL	~593710	GALS
	SAY 400,000	"

65 - days at 7200 gpd PROCESS RATE

* DOES NOT INCLUDE DECON WASTES NOR PRIMARY COOLANT

TMI-2 R.O. WMG — associates, inc. — CULATION	SUBJECT 0400 27 APRIL 1979 WATER SCHED. TO EPICOR-II	CISIO			PAGE 1 OF PAGES 1
	REV. 0	1	2	3	
	MICROFILMED				
	ORIGINATOR S. KROFT				
	DATE 27 APRIL 79				

WATER SCHEDULED TO BE PROCESSED THROUGH

EPICOR-II AS OF 0400 27 APRIL 1979

UNIT II:

RCBT 'B'	77250	GALS
AUX. BLDG. SUMP	4715	"
AUX. BLDG SUMP TANK	2246	"
NEUT. TANK 'A'	8780	"
NEUT. TANK 'B'	8780	"
EVAP COND. TEST TANK 'A'	2999	"
EVAP. COND TEST TANK 'B'	10141	"
TOTAL	114911	"

PLUS UNIT II IN LEAKAGE RATE = 0.60 GPM → EPICOR II

TMI-2 R.O. WMG	sociates, Inc. home LCULATION	SUBJECT 0630 19 APRIL 1979 WATER SCHED. TO EPICOR-I	CISID	PAGE 1 OF 1 PAGES
		REV. 0 / MICROFILMED	1 / 2 / 3	
		ORIGINATOR S. KRAFT		
		DATE 27 APRIL 1979		

WATER SCHEDULED TO BE PROCESSED THROUGH

EPICOR-I AS OF 0630 19 APRIL 1979:

UNIT I:

MISC. WASTE STOR. TANK	15578	GALS
NEUT. MIX TANK	126	"
NEUT. FEED TANK	3094	"
NEUT. STOR. TANK	2564	"
AUX. BLDG SUMP	8500	"
SUB TOTAL	29862	GALS

UNIT II:

MISC. WASTE HOLD UP TANK	11940	GALS
CONT. DRAIN TANK 'A'	2610	"
CONT. DRAIN TANK "B"	425	"
NEUT. TANK 'A'	8780	"
NEUT. TANK 'B'	8780	"
TOTAL	62387	GALS

PLUS: UNIT I IN LEAKAGE RATE = 3.05 GPM