VERIFY ALL DOCUMENTS FOR CURRENT REVISION AND PENDING CHANGES PRIOR TO EACH USE.
INIT_____ DATE_____

NO.	DATE	REVISION	DR	CH	APPROVED		
B	~~06-11-87~~	GENERAL REVISION	TJK	RJL	AJD RJL	AJD	MDW
C	8-28-87	REVISION PER EBAR 934B	TJK	RJL	AJD RJL	AJD	MDW
O	6/20/89	ER 16336			AJD		

STREAM NUMBERS	1	1	3	4	5	6	7	8		10	11	12	13	14	15	16	17	18	19A	19B	19C	19D	19E	19F	20A	20B
PARAMETERS	SOLIDS TRANSFER TO TANKS 1A SLURRY HOLD 1B MAIN MIX TKS (SEE NOTES)	1C SOLIDS TRANSFER TO SHIM TANK	LIQUID TRANSFER TO SLURRY TANKS	LIQUID TRANSFER TO CHEM. ADDITION TANK	DEMIN. WATER TO SPARGER & FLUSH CHEM. ADDITION, SLURRY & DECON TANK	DEMIN. WATER FILL LINES FOR SLURRY TANKS	DEMIN. WATER FILL LINES FOR CHEM. ADDITION TANKS	NITRIC ACID TO CHEM. ADDITION & SLURRY TANKS 70%	CAUSTIC TO CHEM. ADDTION SLURRY TANKS 50%	SLURRY PUMPS DISCH. TO V-11 OR V-01	SLURRY PUMPS DISCH. TO V-11 OR V-01	65-G-07 DECON. PUMP DISCH. TO USERS	65-G-08 DECON. PUMP DISCH. TO USERS	DRAIN TANK SLURRY PUMP DISCH.	VACUUM BLOWER 65-H-01	NOT USED	RECIRC. PUMP DISCH.	VENTURI SCRUBBER INLET	STEAM SUPPLY TO D-07	STEAM SUPPLY TO D-08	STEAM SUPPLY TO D-09	STEAM SUPPLY TO 65-D-01	STEAM SUPPLY TO EJECTORS	STEAM SUPPLY TO AREA HEATERS	CONDEN. FROM D-07	CONDEN. FROM D-08
OPERATING FLOW RATE: POWDERS(LBS/HR)	6000	3000																								
LIQUIDS/SLURRY(GPM)		–	20	20	20-90	40	40	0.8-8.0	0.5-5.2	60-90	60-90	2-20	50	100			TBD	NA							0-0.4	0-0.4
TOTAL PER BATCH-HOT OPS: POWDERS (LBS)	9613	VARIES	NA	NA			–										NA	NA								
(NOMINAL) LIQUIDS/SLURRY(GALS.)		–	89-100	125	150	500-1000	–	150	1-100	5000	5000	250-1000	250-1000	11000			NA	NA								
TOTAL PER BATCH-COLD TEST: POWDERS (LBS)	2640	VARIES					–							–												
LIQUID/SLURRY(GALS.)		–	1000	TBD		4200	175-900	300	115					–												
TEMP., NOMINAL, (°F)	AMB	AMB	AMB	TBD	AMB	AMB	AMB	AMB	AMB	115	115	190	190	AMB	TBD		TBD	180	275	275	275	275	330	275	267	267
RANGE(°F)	AMB	AMB	AMB-338	80-190	60-85	60-85	60-85	AMB	AMB	77-140	77-140	150-190	150-190	AMB-85	TBD		TBD	170-190					300-360			
PRESSURE, NOMINAL(PSIA)	NA	NA	26	28	30	TBD	37	34	34	48.7	48.7	VARIES	VARIES	90	TBD		TBD	14.4	45	45	45	45	115	45	40	40
RANGE (PSIA)	NA	NA	23-30	23-30	25-35	40-50	37-80	34-80	34-80	42-49	42-49	10-80	10-65	90-110	TBD		TBD	14.4-14.6	–	–	–	–	100-125	–	35-45	35-45
STEAM (LBS/HR)			340-409	340-409														78	200	200	200	200	400	1880		
STEAM (LBS TOTAL)				TBD															1200	300	300	3000				
HEATING/COOLING REQUIREMENTS(BTU/HR)	N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A						TBD			TBD		200K	200K	200K	200K	500-900	1800K		
SPECIFIC GRAVITY	0.3-4.55	0.3-4.55	.0035-1.4	TBD	1.0	1.0	1.0	1.3	1.5	1.3-1.6	1.3-1.6	1.0-1.3	1.0-1.3	1.0-1.6			1.0-1.1									
DESIGN FLOW RATES: (LBS/HR) /(GPM)	6000/NA	3000/NA	14000/20	14000/20	25000/50	50000/100		5200/8	3900/5.2	80000/100	80000/100	13000/20	32500/50	80000/100	TBD		TBD	130 ACFM								
GALLONS /BATCH			1700	150	150-250	100-4500	100-900	500	150	5000	5000	250-1000	250-1000	11000	–											
PERCENT TOTAL SOLIDS		–	VARIES	VARIES	0	0	0			15-60	15-60	VARIES	VARIES	0-5	–				0	0	0	0	0	0	0	0

STREAM NUMBERS	20C	20D	20E	21	22A	22B	22C	22D	22E	22F	22G	23A	23B	23C	23D	23E	23F	23G	24	25	26	27	28	29	30	31
PARAMETERS	CONDEN. FROM D-09	CONDEN. FROM 65-D-01	CONDEN. FROM AREA HEATERS	UTILITY AIR TO USERS	COOLING WATER TO SLURRY HOLD TANK	COOLING WATER TO MAIN SLURRY MIX TANK	COOLING WATER TO SHIM TANK	COOLING WATER TO D-07	COOLING WATER TO D-08 & D-09	COOLING WATER TO SCRUB SOLN TANK	COOLING WATER TO 65-D-01	COOLING WATER FROM SLURRY HOLD TANK	COOLING WATER FROM SLURRY MIX TANK	COOLING WATER FROM SHIM TANK	COOLING WATER FROM D-07	COOLING WATER FROM D-08 & D-09	COOLING WATER FROM SCRUB SOLN TANK	COOLING WATER FROM 65-D-01	NOT USED	NOT USED	NOT USED	NaOH FILL TO 65-D-06	NITRIC ACID FILL TO 65-D-05			
OPERATING FLOW RATE: POWDERS(LBS/HR)																										
LIQUIDS/SLURRY(GPM)	0-0.4		3.75		60	60	25	75	25	TBD		60	60	25	75	25	TBD	25				10	20			
TOTAL PER BATCH-HOT OPS: POWDERS(LBS)																										
(NOMINAL) LIQUIDS/SLURRY(GALS.)																										
TOTAL PER BATCH COLD TEST: POWDERS(LBS)																										
LIQUID/SLURRY(GALS.)																										
TEMP., NOMINAL, (°F)	267	267	267	TBD	85	85	85	85	85	85	85	95	95	95	95	95	TBD	AMB				77	85			
RANGE(°F)	240-260	240-260			50-85	50-85	50-85	50-85	50-85	50-85	50-85	80-120	90-120	90-120	60-120	60-120	TBD	80-120				60-90	90-110			
PRESSURE, NOMINAL(PSIA)	40	40	40	100	60	60	60	60	60	60	60	50	50	50	50	50	50	50				60	60			
RANGE(PSIA)	35-45	35-45	35-45	80-100	55-65	55-65	55-65	55-65	55-65	55-65	55-65	45-55	45-55	45-55	45-55	45-55	45-55	45-55				55-65	5[illegible]			
STEAM (LBS/HR)																										
STEAM (LBS TOTAL)																										
AIR USAGE ACFM				TBD																						
HEATING/COOLING REQUIREMENTS: BTU/HR	200K	200K			200K	200K	125K	TBD	TBD	TBD	TBD	200K	200K	125K	TBD	TBD	TBD	TBD								
SPECIFIC GRAVITY	1.0	1.0			1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0				1.5	1.3			
DESIGN FLOW RATES: (LBS/HR) /(GPM)	200/0.4	200/0.4	1880/3.75		50000/100	50000/100	17500/35	40000/80	17500/35	–		50000/100	50000/100	17500/35	40000/80			12500/25				7500/10	13000/20			
PERCENT TOTAL SOLIDS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								

NOTES:

1. WORK THIS DRAWING WITH 905-D-013.
2. DURING COLD TESTING:
   MAIN SLURRY MIX TANK, 65-D-03, WILL BE USED FOR GLASS FORMER SLURRY MAKE-UP. THE TOTAL SOLIDS MAY RANGE FROM 5000 lbs. TO 9613 lbs. DEPENDING ON THE REQUIRED PERCENT SOLIDS CONCENTRATION. THE TARGET SOLIDS WT. PERCENTAGE IS 60.
   SLURRY HOLD TANK, 65-D-02, WILL BE USED FOR MAKING UP NON-RADIOACTIVE WASTE SIMULANTS. THE SIMULANTS WT. % SOLIDS WILL BE 15 WT.%. AT 15 WT.% THE TOTAL SOLIDS REQUIRED IS 2640 LBS. PER BATCH.
3. DURING HOT OPERATIONS:
   MAIN SLURRY MIX TANK, 65-D-03, WILL BE USED FOR GLASS FORMER SLURRY MAKE-UP AS IN NOTE 2.
   SLURRY HOLD TANK, 65-D-02, WILL BE USED AS A SLURRY HOLD RESERVE AND RECEIPT ADJUSTMENT TANK.

WVNS APPROVAL
COG. MGR.
COG. ENGR.
DRFT. SUPR.
Q.A. MGR.
R & S MGR.
PROJ. MGR.

FOR DRAWING INDEX SEE DRAWING NO. _____

APPRVD WVNS CO.		EBASCO SERVICES INCORPORATED A/E O.F.S. NO. 2389 TASK ORDER 009
PROJECT MGR M. D. WEINGART	03-06-87	FOR WEST VALLEY NUCLEAR SERVICES COMPANY, INC WEST VALLEY, NEW YORK
ENGINEER SUPV A. J. DIFILIPPO	03-06-87	
LEAD DISC ENGR F. TULIPANO	03-06-87	WEST VALLEY DEMONSTRATION PROJECT
DESIGN R. J. LEWKO	03-06-87	PROCESS FLOW DIAGRAM COLD CHEMICAL PREPARATION AND FEED SYSTEM
CHECKED T. J. PIAZZA	03-06-87	
DRAWN R. J. LEWKO	DATE 03-06-87	

DE-AC07-81NE44139 PROJECT NO.	SIZE D	INDEX CODE NUMBER AREA / DR. TYP / CL / ORIG	DRAWING NO. 905D-014	REV. 0
19-CWV-02275 SUBCONTRACT NO.				
ISSUED FOR CONSTRUCTION	SCALE NONE	SPEC. CODES	A/E SHEET NO. 905-D-014	C

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