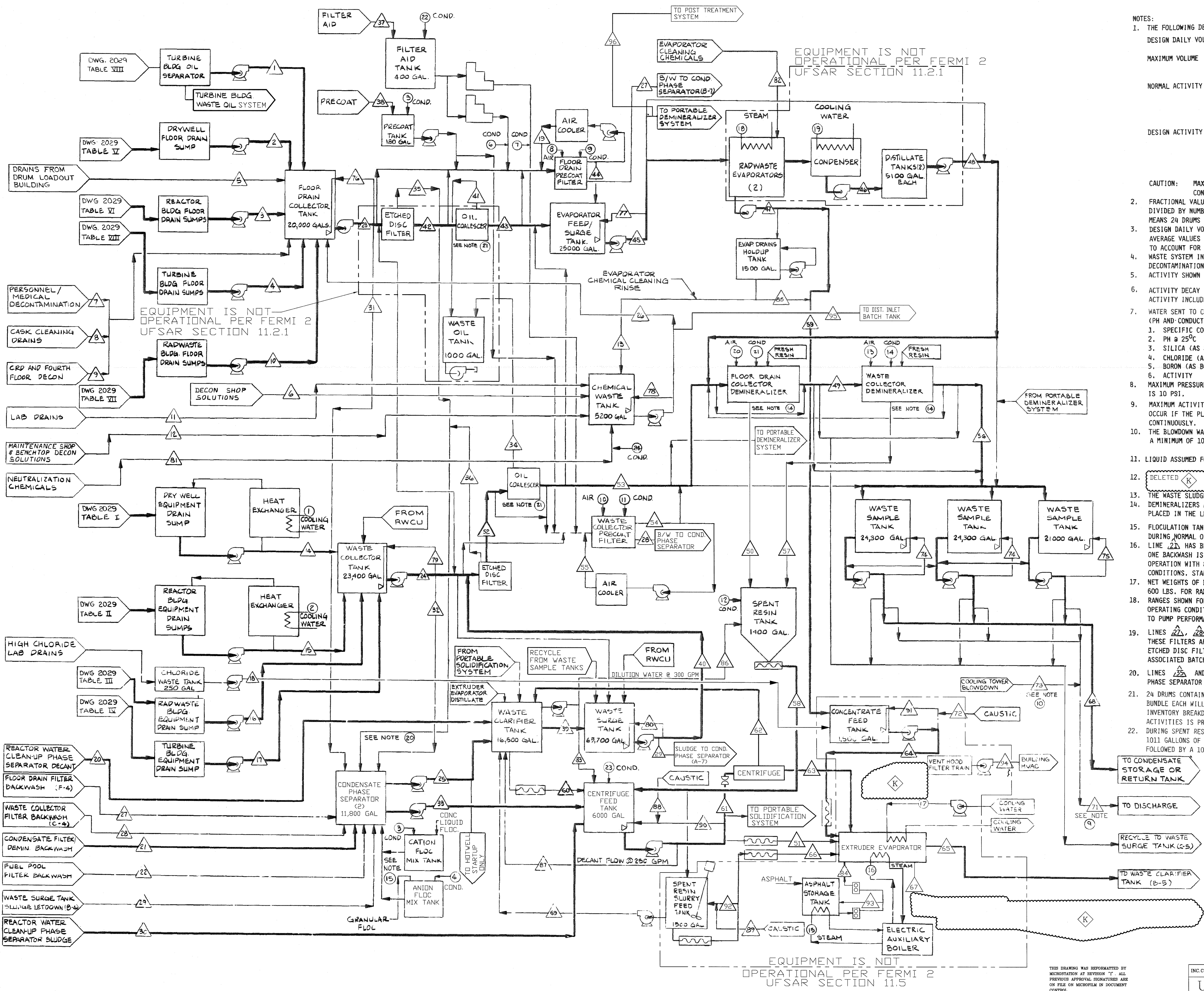


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- NOTES:
- THE FOLLOWING DEFINITIONS ARE USED ON THIS DIAGRAM:
 DESIGN DAILY VOLUME - EXPECTED VOLUME DURING STEADY STATE NORMAL OPERATION.
 MAXIMUM VOLUME - MAXIMUM EXPECTED VOLUME DURING UNSTEADY STATE OPERATION SUCH AS STARTUP, SHUTDOWN HIGH EQUIPMENT LEAKAGE, ETC.
 NORMAL ACTIVITY - ACTIVITY LEVEL EXPECTED DURING NORMAL OPERATION. REACTOR WATER ACTIVITY CONCENTRATION .66 μCi/ML. THE CORROSION PRODUCT REACTOR WATER ACTIVITY CONCENTRATION IS 0.1 μCi/ML.
 DESIGN ACTIVITY - ACTIVITY LEVEL EXPECTED DURING OPERATION WITH FUEL LEAKAGE. REACTOR WATER ACTIVITY CONCENTRATION IS 4.85 μCi/ML. THE CORROSION PRODUCT REACTOR WATER CONCENTRATION ACTIVITY IS 0.1 μCi/ML.
 - FRACTIONAL VALUES ON CHARTS DENOTE NUMBER OF ITEMS PER OCCURRENCE DIVIDED BY NUMBER OF DAYS BETWEEN EACH OCCURRENCE (I.E. 24/30 DRUMS/DAY MEANS 24 DRUMS ARE PROCESSED ONCE EVERY 30 DAYS)
 - DESIGN DAILY VOLUME AND NORMAL DAILY ACTIVITY ARE AVERAGE VALUES CALCULATED OVER A PERIOD OF A YEAR TO ACCOUNT FOR VARIATIONS DURING THAT PERIOD.
 - WASTE SYSTEM INPUT ACTIVITIES ARE BASED ON A REACTOR WATER-TO-STEAM DECONTAMINATION FACTOR OF 1000.
 - ACTIVITY SHOWN IS OF PLANT ORIGIN AND DOES NOT INCLUDE BACK-GROUND
 - ACTIVITY DECAY IS CONSIDERED IN THE CALCULATION OF EQUILIBRIUM ACTIVITY INCLUDED IN THE DIAGRAM.
 - WATER SENT TO CONDENSATE STORAGE MUST MEET THE FOLLOWING REQUIREMENTS (PH AND CONDUCTIVITY APPLY AFTER CORRECTION IS MADE FOR DISSOLVED CO₂):
 1. SPECIFIC CONDUCTIVITY @ 25°C < 1 μMHOS/CM
 2. PH @ 25°C NEUTRAL (6-8)
 3. SILICA (AS SiO₂) < 1.0 PPM
 4. CHLORIDE (AS Cl-) < 0.01 PPM
 5. BORON (AS BO₃) < 0.1 PPM
 6. ACTIVITY < 3 x 10⁻³ μCi/ML
 - MAXIMUM PRESSURE DROP ACROSS SERVICE SIDE OF ALL COOLING COILS IS 10 PSI.
 - MAXIMUM ACTIVITIES GIVEN FOR ITEM 21 ARE THOSE WHICH WOULD OCCUR IF THE PLANT DISCHARGED TO THE LIMIT OF 10⁻⁴ μCi/ML CONTINUOUSLY.
 - THE BLOWDOWN WATER FLOW RATE FOR ITEM 23 (CANAL FLOW RATE) IS A MINIMUM OF 10,000 GPM.
 - LIQUID ASSUMED FOR ITEM 24 IS 20% SODIUM HYDROXIDE SOLUTION.
 - DELETED
 - THE WASTE SLUDGE QUANTITIES ARE BASED ON NO BODY FEED ADDITIONS.
 - DEMINERALIZERS ARE NORMALLY OPERATED IN SERIES, EITHER BED MAY BE PLACED IN THE LEAD POSITION.
 - FLOCCULATION TANKS ARE IN PLACE BUT ARE NOT INTENDED FOR USE DURING NORMAL OPERATION.
 - LINE 21 HAS BEEN CALCULATED BASED ON AN AVERAGE DAILY BASIS. ONE BACKWASH IS EXPECTED TO OCCUR EVERY OTHER DAY DURING NORMAL OPERATION WITH 8 BACKWASHES PER DAY OCCURRING DURING STARTUP CONDITIONS. STARTUP HAS BEEN ASSUMED TO OCCUR 12 TIMES PER YEAR.
 - NET WEIGHTS OF DRUMS ARE 50 LBS. FOR RESIN MATERIAL AND 600 LBS. FOR RADSLATS. 50% OF NET WEIGHT IS ASPHALT.
 - RANGES SHOWN FOR PRESSURES AND FLOW RATES ARE FOR NORMAL OPERATING CONDITIONS. FOR SPECIFIC OPERATING CONDITIONS REFER TO PUMP PERFORMANCE CURVES.
 - LINE 27, 28, 44, AND 29 ARE FOR THE PRECOAT FILTERS. THESE FILTERS ARE FOR USE ONLY IN THE EVENT OF FAILURE OF BOTH ETCHED DISC FILTERS AND, CONSEQUENTLY, HAVE NO NORMAL FLOWS OR ASSOCIATED BATCH SOLIDS.
 - LINE 35 AND 36 ARE DIRECTED INTO CONDENSATE PHASE SEPARATOR (A ONLY).
 - 24 DRUMS CONTAINING ONE SPENT OIL COALESCER CARTRIDGE BUNDLE EACH WILL BE GENERATED PER YEAR. THE ANNUAL INVENTORY BREAKDOWN BASED ON NORMAL AND DESIGN BASIS ACTIVITIES IS PRESENTED ON DRAWING 6M721-2030.
 - DURING SPENT RESIN TANK VOLUME TRANSFER (LINE 28) 1011 GALLONS OF 25 WT% SLUDGE WILL BE TRANSFERRED FOLLOWED BY A 1011 GALLON RINSE.

NON-NUCLEAR SAFETY RELATED
 THIS IS A MICROSTATION PRODUCED DRAWING. CHANGES OR REVISIONS MUST BE BROUGHT TO THE ATTENTION OF THE PLANT ENGINEERING DESIGN GROUP TO ENSURE THAT CONFIGURATION CONTROL IS MAINTAINED.

6M721-2028
 LATEST REVISION K

EQUIPMENT IS NOT OPERATIONAL PER FERMI 2 UFSAR SECTION 11.5

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|------------------------------------|-------|--------------------------------------|--|---------|--|
| INC CODE | | Detroit Edison | | Fermi 2 | |
| U | TITLE | PROCESS FLOW DIAGRAM RADWASTE SYSTEM | | | |
| APPROVED AND TITLE | | PROC DIAG RADWASTE SYS | | | |
| PLANT IDENTIFICATION SYSTEM NUMBER | | G1100 | | | |
| DOCUMENT TYPE CODE | | DDDMC | | | |
| MUC OPS FILE NO | | 3-549 | | | |
| DRAWING NUMBER | | 6M721-2028 | | | |
| DATE | | 2-22-19 | | | |
| DATE | | 3/1/19 | | | |

DCD'S INCORPORATED:
 EDP 37719.8015, REV. #
 OTHER REVISIONS:
 REF LCR 10-204-UFS
 REF LCR 10-02-UFS, REV. # 2011
 PREPARED BY: W.J. ADLER
 DATE: 2/19/19
 CHECKED BY: [Signature]
 DATE: 2/22/19
 APPROVED BY: David Kalcovsk
 DATE: 3/1/19