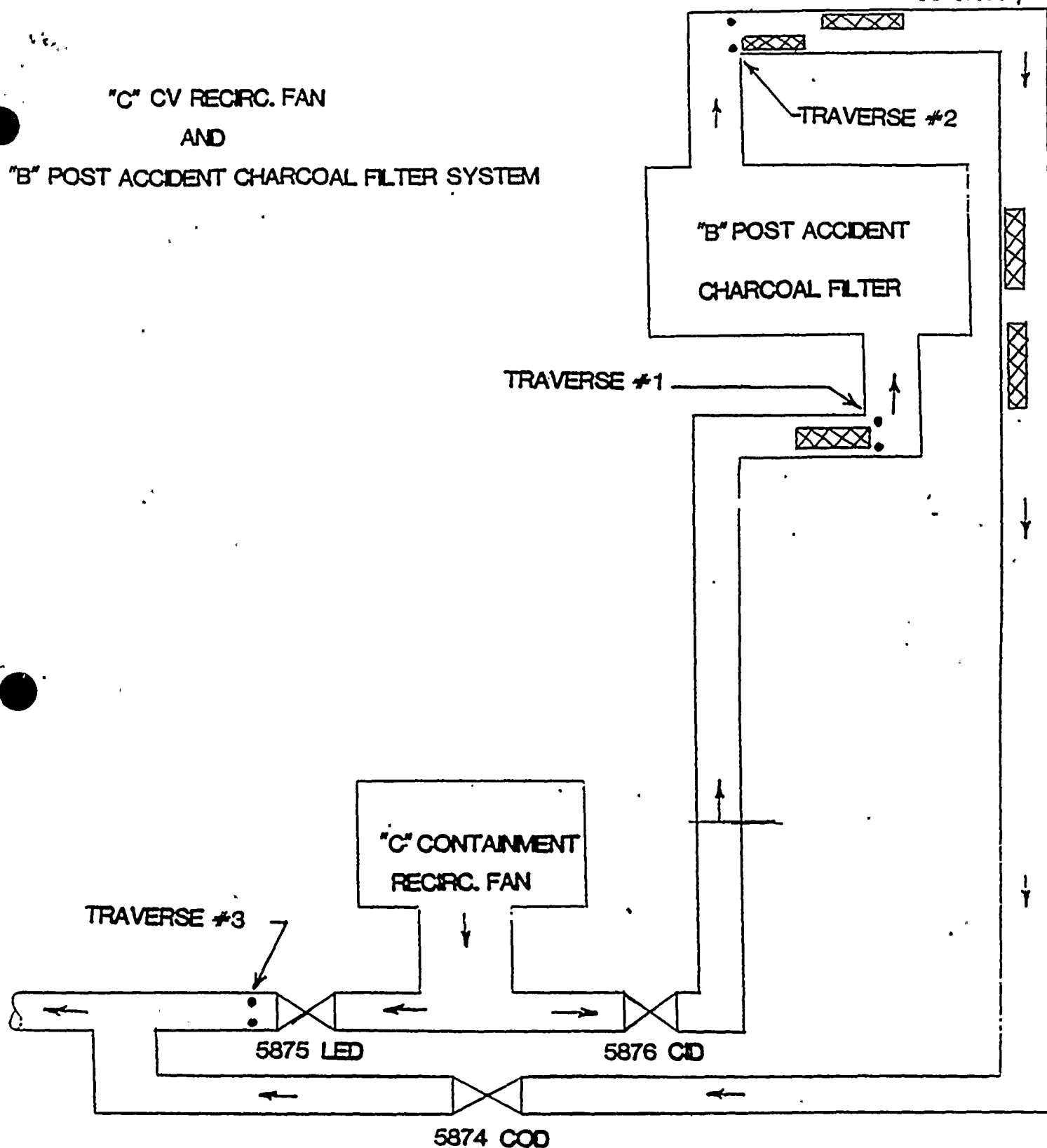


"C" CV RECIRC. FAN

AND

"B" POST ACCIDENT CHARCOAL FILTER SYSTEM



TRAVERSE #1- SAMPLE POINT FOR MASS AIR FLOW MEASUREMENT (POST ACCIDENT),
AND UPSTREAM H_2O ΔP MEASUREMENT.

TRAVERSE #2 - SAMPLE POINT FOR DOWNSTREAM H_2O ΔP MEASUREMENT.

TRAVERSE #3 - SAMPLE POINT FOR MASS AIR FLOW MEASUREMENT. (NORMAL)



ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER 21

PROCEDURE NO. PT-47.10

REV. NO. 10

SPENT FUEL PIT CHARCOAL FILTRATION SYSTEM

EFFICIENCY TEST

TECHNICAL REVIEW

PORC REVIEW DATE 4-5-95

Thomas A. Marlow
PLANT SUPERINTENDENT

4-8-95
EFFECTIVE DATE

CATEGORY 1.0

REVIEWED BY: _____

THIS PROCEDURE CONTAINS 10 PAGES

GINNA STATION	
START:	
DATE	_____
TIME	_____
COMPLETED:	
DATE	_____
TIME:	_____

PT-47.10SPENT FUEL PIT CHARCOAL FILTRATION SYSTEMEFFICIENCY TEST1.0 PURPOSE:

- 1.1 To provide test steps for surveillance halide leak testing of the installed "CHARCOAL" adsorber bank to ensure that there are no leaks greater than that allowed by system acceptance criteria.

2.0 TEST REQUIREMENTS:

- 2.1 This test shall be performed within 60 days prior to each major fuel handling, or following painting, fire, or chemical release, in the area communicating with the air handling unit and shall have the following conditions demonstrated:
- 2.1.1 In-place "HALIDE" (Freon) leak testing, under normal operating conditions, shall show \geq 99% removal efficiency.
- 2.2 After each replacement of a "CHARCOAL" adsorber cell or after any structural maintenance performed on the adsorber mounting frames of the unit, the efficiency specified in step 2.1.1, shall be demonstrated.
- 2.3 Within 60 days prior to fuel handling, a "CHARCOAL" sample shall be removed from an adsorber cell, randomly selected from those cells with the longest in-bank residence time or "TEST CANISTER(S)" shall be removed, and sent to a laboratory for an "IODINE REMOVAL EFFICIENCY TEST". The efficiency shall be at least 90% removal for iodine.
- 2.4 Visual inspection of "CHARCOAL" adsorber cell assemblies for damage and loss of charcoal shall be performed.
- 2.5 Completion of Independent Verification Check.

3.0 REFERENCES:

- 3.1 Plant Tech. Specs. - Section 4.11 inclusive.

- 3.2 ANSI/ASME N510-1980 (Testing of Nuclear Air Cleaning Systems).
- 3.3 NUCON - Vendor.
- 3.4 RG&E Ventilation System Flow Diagram #33013-1871.
- 3.5 Previously Procedure PT-24 (1987).
- 3.6 A-1102, Qualification of Test Personnel.
- 3.7 A-1603.1, Work Request/Trouble Report Initiation.
- 3.8 PT-38.1, Visual Inspection of Charcoal Filter Tray Assemblies.
- 3.9 A-1408, Independent Verification Procedure.
- 3.10 A-805, Control of Consumable Materials at Ginna Station Procedure.

4.0 INITIAL CONDITIONS:

NOTE: If preparatory work will be performed prior to vendor arrival, mark step 4.1 N/A.

- 4.1 Vendor documentation required by the applicable purchase order has been submitted to QC Dept. and found acceptable prior to start of work. QC _____
- 4.2 Plant may be in any phase of operation, except refueling. _____
- 4.3 RG&E test personnel are qualified in accordance with A-1102. _____
- 4.4 Notify Shift Supervisor and Head Control Operator at start and upon completion of test. _____
- 4.5 When mass air flow thru "CHARCOAL" bank has been determined, log on applicable vendor's "IN-TEST" data sheet. _____
- 4.6 This procedure is divided into the following sections. Initial which section(s) apply and mark remainder N/A.

NOTE: Sections 6.2 and 6.4 are test requirements. These sections can be marked N/A only if their applicable requirement has been met within the last 24 months.

4.6.1 Removal of "CHARCOAL" Adsorber Cell or Test Canister for Iodine Removal Efficiency Testing (Section 6.2). _____

4.6.2 Filter Bank Removal and Replacement (Section 6.3). _____

4.6.3 Charcoal Adsorber Bank Testing - Halide (Section 6.4). _____

4.7 Prepare Test Tags for the following:

	POSITION PRIOR TO TEST:	POSITION REQUIRED FOR TEST:
Aux. Bldg. "C" Exhaust		
Fan Switch:	_____	"As Required" _____

4.8 Notify HP Dept. that system will be shutdown to facilitate entry into unit for inspection and test preparation. _____

4.9 RWP/SWP has been issued. _____

4.10 If a discrepancy requiring maintenance is found, submit a WR/TR to correct the problem. _____

NOTE: If preparatory work will be performed prior to vendor arrival, mark step 4.11 N/A.

CAUTION: Applicable fire systems must be disconnected prior to Halide testing.

4.11 Notify Fire and Safety Coordinator prior to initiating test. Ensure the following fire system is disconnected in accordance with SC-3.16.2.4. _____

Z35 Spent Fuel Pit. _____

4.12 Ensure Decon Pit Damper is "CLOSED" and all inlets to filter bank are free from obstruction when Spent Fuel Pit System is in service. _____

4.13 Notify QC Dept. prior to start of test. _____

4.14 Independent verification of system restoration shall be performed by an individual knowledgeable in the system and not involved in the initial restoration, normally an Auxiliary or Licensed Operator (active or inactive).

4.14.1 The initial realignment steps may be performed at various points throughout the procedure, however, the Independent Verification Check shall be performed upon completion of testing each individual train, prior to proceeding to any other train.

4.15 Notify Chemical Control to ensure "Ginna Station Consumable Material Labels" are available to be posted on all chemical containers used for this test.

4.15.1 A Restricted Used Permit has been issued for the listed products:

PRODUCT:

PERMIT #:

GERETRON (HALIDE R-11):

90:188P

5.0 PRECAUTIONS:

5.1 Radiation protection practices will be observed at all times.

5.2 Normal company safety practices will be observed.

5.3 Proper sequential implementation of each process in this procedure, as approved, is necessary to ensure adherence to A-805, Control of Consumable Materials at Ginna Station.

6.0 INSTRUCTIONS:

6.1 Ensure associated fan is shutdown ("OFF" position) and test tag is hung on fan switch, before entering unit plenum.

Aux. Bldg. "C" Exh. Fan "OFF": _____

6.1.1 If not performing sections 6.2 or 6.3, perform PT-38.1. Otherwise mark this step N/A.

6.2 REMOVAL OF CHARCOAL ADSORBER CELL OR TEST CANISTER
FOR IODINE REMOVAL EFFICIENCY TESTING:

6.2.1 Remove charcoal adsorber cell with longest in bank residence time (as determined by Attachment 1) OR test canister from filter bank to obtain charcoal sample for laboratory testing.

6.2.2 Replace removed adsorber cells with approved same or cap as applicable.

6.2.3 Label newly installed charcoal cell faceplate using approved marker to reflect replacement date.

NOTE: When identifying cell or test canister location below, use coordinate system from Attachment 1. (Example: Cell A-1, B-3, etc.)

6.2.4 Adsorber cell location (N/A if test canisters installed).

Location: _____

6.2.5 Test canister location (N/A if adsorber cells were removed for sample)

Location: _____

6.2.6 Perform PT-38.1.

6.3 FILTER BANK REMOVAL AND REPLACEMENT:

6.3.1 Remove filter bank.

6.3.2 Number of filter cells removed:

(CHARCOAL) # _____

6.3.3 Replace filter cells removed with approved type.

6.3.4 Label newly installed charcoal filter faceplates using approved marker to reflect replacement dates.

6.3.5 Perform PT-38.1.

6.4 CHARCOAL ADSORBER BANK TESTING-HALIDE:

6.4.1 Establish air flow through system. _____

NOTE: If step 4.1 was performed, mark step 6.4.2
N/A.

6.4.2 Vendor documentation required by the applicable purchase order has been submitted to QC Dept. and found acceptable prior to start of vendor work.

QC _____

NOTE: If step 4.11 was performed, mark step 6.4.3
N/A.

6.4.3 Notify Fire and Safety Coordinator prior to initiating test. Ensure the following fire system is disconnected in accordance with SC-3.16.2.4.

Z-35 Spent Fuel Pit _____

6.4.4 Connect Halide Detector to power supply and allow approximately 15 minutes warm up time. _____

6.4.5 Connect sample lines to upstream and downstream sample ports. _____

6.4.6 Establish upstream and downstream sample flows and set upstream dilution air ratios if necessary, to produce an upstream concentration which is within the linear response range of the detector. _____

6.4.7 Take upstream and downstream background sample readings. _____

NOTE: If these readings show no background contaminants that might interfere with test results, continue with the test. If interference is indicated, purge system with air flow until interference is reduced to an acceptable level.

6.4.8 Start injection. _____

6.4.9 Monitor and record upstream and downstream tracer gas concentrations for five minutes using vendor's "Halide Test" data sheet. _____

NOTE: Halide concentrations are determined by averaging (4) stabilized readings previously recorded.

6.4.10 Calculate percent efficiency and transfer data to appropriate vendor's data sheet.

EFFICIENCY: _____ %

6.4.11 If efficiency obtain in Step 6.4.10 does not meet percent efficiency acceptance requirements, perform the following. Otherwise mark this step inclusive N/A.

6.4.11.1 Evaluate inspection/sample arrangement and re-orient as necessary.

6.4.11.2 Retest by reperforming steps 6.4.6 through 6.4.10.

RETEST EFFICIENCY: _____

6.4.11.3 If retest efficiency does not meet percent efficiency acceptance requirements, submit WR/TR. Otherwise mark N/A.

6.4.12 Removal all sample lines from ports.

6.4.13 Replace all pipe caps or fittings on unit.

6.5 RESTORATION:

6.5.1 Ensure Fire and Safety Coordinator has been notified that Fire System Z-35 can be restored to normal operating status.

6.5.2 Ensure all test tags have been removed and test tag log reflects so.

6.5.3 Notify Head Control Operator that system testing is completed and system may be restored to normal operating conditions.

COMMENTS:

COMPLETED BY (RG&E) : _____

DATE COMPLETED: _____

6.6 INDEPENDENT VERIFICATION CHECK

6.6.1 Ensure the following devices are returned to their
"Normal-As Found" position:

Aux Bldg "C" Exhaust Fan Switch:

"NORMAL MODE" _____

COMPLETED BY: _____

DATE COMPLETED: _____

HEAD CONTROL OPERATOR: _____

SHIFT SUPERVISOR: _____

RESULTS AND TEST REVIEW: _____ DATE: _____

INITIATE PERMANENT PCN OF ATTACHMENT 1 TO REFLECT INSTALLATION
DATES OF REPLACED CELLS.

(IF NONE REPLACED, MARK N/A)

PCN #: _____

ATTACHMENT 1SPENT FUEL PIT FILTERSSPECIFICATIONS:

- 33 CHARCOAL FILTERS
- TYPE 2
- 33"*28 3/4"*6 1/4"

LOCATION:

- AUX BLDG TOP FLOOR

REPLACEMENT DATES

	A	B	C	D	E	F	G	H	I	J	K
1	23 MAR 92	23 MAR 92	23 MAR 92	23 FEB 95	23 MAR 92	23 MAR 92	23 MAR 92	23 MAR 92	23 MAR 92	23 MAR 92	23 MAR 92
2	16 MAR 94	08 FEB 93	25 JAN 94	23 MAR 92	23 MAR 92	23 MAR 92	23 MAR 92	23 MAR 92	23 MAR 92	23 MAR 92	23 MAR 92
3	23 MAR 92	23 MAR 92	23 MAR 92	23 MAR 92	23 MAR 92	23 MAR 92	23 MAR 92	23 MAR 92	23 MAR 92	23 MAR 92	23 MAR 92

WEST <-----> EAST

NOTE: ABOVE VIEW IS FROM SPENT FUEL POOL AREA LOOKING NORTH.