

TITLE: REVIEW RELEASE PERMIT

K/A REFERENCE: 2.3.6 (3.1)
(NUREG-1122) 2.3.8 (3.2)
2.3.9 (3.4)

ALTERNATE PATH JPM _____ YES X NO

PERFORMANCE CHECKLIST:

SATISFACTORY - Properly performed critical step(s) and/or in sequence (if applicable)

UNSATISFACTORY - Improperly performed critical step(s) and/or out of sequence (if applicable)

X Procedure adequately addresses task elements.
Enter identifier here: OP-9C, Rev 47

_____ Other document adequately describes necessary task elements.
Enter identifier here: _____

X Task elements described as attached.

DESIRED MODE OF EVALUATION:

APPLICABLE EVALUATION SETTING:

SIMULATE/WALKTHROUGH X DISCUSSION _____ PERFORM _____ IN-PLANT _____ CONTROL ROOM X

VALIDATED TIME FOR COMPLETION: 12 MINUTES

TITLE: REVIEW RELEASE PERMIT

EXAMINEE _____ EVALUATOR _____

START TIME _____ FINISH TIME _____

PERFORMANCE SAT UNSAT

JOB TITLE: AOT COT SRO STA

TOOLS/EQUIPMENT/REFERENCES:

OP-9C, "Containment Venting and Purging". Rev 47
CAMP 030, "Manual Preparation of Batch Liquid and Gaseous Effluent Discharge Release Permits", Rev 1
Calculator

TASK STANDARDS:

Review release permit to determine whether containment forced vent can be continued in accordance with OP-9C.

SIMULATOR INFORMATION:

NOT APPLICABLE (JPM can be performed in Simulator)

NOTE: *If this JPM is performed on the simulator, the JPM administrator should only give cues that are not indicated on the simulator. If simulator indication is sufficient to indicate the completion of a step, the JPM administrator should not have to give a cue to the trainee to continue the evolution.*

NOTE: *Only this page needs to be retained in examinee's record if completed satisfactorily. If unsatisfactory performance is demonstrated, the entire JPM should be retained.*

READ AND PROVIDE TO THE EXAMINEE

THIS SECTION IS READ ONCE FOR THE ENTIRE PACKAGE OF JPMS. IT IS NOT REQUIRED TO REVIEW THIS SECTION FOR EVERY JPM BEING PERFORMED IN THE PACKAGE. THE INITIAL CONDITIONS AND INITIATING CUE(S)/TASKS TO BE PERFORMED SHOULD BE READ AND THEN PROVIDED TO THE EXAMINEE.

After I read you the initial conditions and initiating cue(s)/task to be performed for this JPM and provide you a copy of the same, you may review and begin. Once you have completed the task, indicate completion by handing back this form to the evaluator unless otherwise told.

You may use any approved reference materials normally available including logs. Make all written reports, oral reports, and log entries as if the evolution is actually being performed.

EOP Immediate Actions are required to be performed from memory. After completing immediate action steps without using the procedure, you may then use any approved reference materials.

For all two and three-way communications, make your report to me, the JPM evaluator. I will reply to your reports with the statement, "acknowledge." All actions in the plant are to be simulated and all actions in the simulator will be performed. Ensure you make it clear to me, the evaluator, of all actions you are taking so that credit may be given for completing each step of the task.

DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.

INITIAL CONDITIONS:

Both units @ 100 % power, no equipment OOS, no LCOs in effect.

Unit 1 started a containment forced vent yesterday (Sunday 10-15-00 at 1200)

The vent was interrupted this morning 10-16-00 at 0800 due to RP needing to perform filter changes.

INITIATING CUE(S) / TASK TO BE PERFORMED (SIMULATED):

You are the day shift OS today (10-16-00).

It is currently 1200 and RP has completed their filter changes.

All RMS monitors have been in service for the past hour .

The DSS has directed you to review the CAMP 030 Release Permit associated with the interrupted vent and OP-9C (both provided) prior to restarting the forced vent on Unit 1 containment at step 4.3.2 of OP-9C.

Additionally, the following data is provided:

RAD MONITOR	STEADY STATE READINGS	CHECK SOURCE READINGS
1RE-211 (Unit 1 Cont Air Part)	2.11 E-3	3.20 E-2
1RE-212 (Unit 1 Cont Gas)	7.45 E-6	2.80 E-4
1RE-305 (Unit 1 Low Range Gas)	1.40 E-7	1.38 E-4

START TIME _____ STEP/SEQUENCE/CRITICAL SAT _____
1 1 N UNSAT _____

ELEMENT: 1. Reviews OP-9C and CAMP-030 provided.

STANDARD: As Above.

CUE:

COMMENTS:

STEP/SEQUENCE/CRITICAL SAT _____
2 2 Y UNSAT _____

ELEMENT: Determines that the forced vent cannot be continued :
a. 1RE-212 current steady state value exceeds 125% of its initial value per step 4.3.2d of OP-9C.
(currently 129%)

STANDARD: Determines restart criteria (as above) is not met and that containment atmosphere will need to be re-sampled prior to further venting.

CUE:

COMMENTS:

STEP/SEQUENCE/CRITICAL SAT _____
2 3 N UNSAT _____

ELEMENT: Inform DSS of the problem identified above

STANDARD: As above.

CUE: This completes this JPM.

NOTE: If the examinee does not identify readings > 125%, he will:

- Start the forced vent blower
- Record the vent flow rate on the forced vent permit
- Direct the AO/RP to start the air sampler pump and record sampler flowrate on permit
- At this point the JPM can be terminated.

COMMENTS:

MANUAL PREPARATION OF BATCH LIQUID AND
 GASEOUS EFFLUENT DISCHARGE RELEASE PERMITS

Data Sheet 8 - PBNP Batch Release Gaseous Discharge Containment Vent Permit

Permit #: 00-000 XXX Unit: 1 or 2 (circle) Forced Vent or Manual Vent (circle one)

Sample Collection (Date/Time): 10-15-00 / 0800

Latest Discharge Start:

(12 hours from sample time, Date/Time) 10-15-00 / 2000

Equivalent Release Rate (mrem/year) 1.07 E⁻³

Ensure Equivalent Release Rate is less than 500 mrem/year

JRH
 CHEM
JRH
 CHEM

1. Sample Analyzed By:

RADIOCHEMICAL ANALYSIS:

Isotope	Concentration in Air (uCi/cc)	Tank Dose Equivalent (mrem)
<u>Ar-41</u>	<u>2.73 E⁻⁶</u>	<u>5.10 E⁻⁵</u>
<u>Xe-133</u>	<u>3.88 E⁻⁷</u>	<u>3.88 E⁻⁷</u>
<u>H-3</u>	<u>1.71 E⁻⁶</u>	<u>2.03 E⁻⁵</u>
<u>Br-82</u>	<u>1.73 E⁻¹⁰</u>	<u>4.34 E⁻⁷</u>
TOTAL	<u>4.83 E⁻⁶</u>	<u>7.21 E⁻⁵</u>

Quarterly Total (mrem)	Admin Quarterly Limit (mrem)	Annual Total (mrem)	Admin Annual Limit (mrem)
<u>2.80 E⁻⁴</u>	0.5	<u>2.78 E⁻³</u>	1.0

2. Sample results evaluated and acceptable for release including this discharge:

JRH
 CHEM

3. Approved by Chemistry Supervisor [Signature]

VENT INITIATION: Operations
 Containment Initial Pressure (psig) 1.30

Containment Initial Temperature (°F) 94.5

Vent Start Date/Time 10-15-00 / 1200

JRH
 OPS
JRH
 OPS
JRH
 OPS

NOTE: Forced vent flow rate and portable stack sampler rotameter flow rate shall be logged at the start of the vent and DAILY thereafter.

Log flow data in table below:

Date	Forced Vent Flow Rate (cfm)	Stack Sampler Flow Rate (Lpm)	OPS initials
<u>10-15-00</u>	<u>34</u>	<u>60</u>	<u>JRH</u>

MANUAL PREPARATION OF BATCH LIQUID AND
GASEOUS EFFLUENT DISCHARGE RELEASE PERMITS

Data Sheet 9 - Containment Vent Permit, Page 2

Permit #: 00-000XXX

Unit: (1) or 2 (circle)

VENT INTERRUPTION: Operations

NOTE: Forced vent may be interrupted for a maximum of eight hours without resampling containment atmosphere.

NOTE: RE-211 and RE-212 shall be in service prior to forced vent interruptions.

NOTE: When vent is interrupted for less than or equal to 20 minutes, vent interruptions section (below) does not have to be completed. N/A steps not performed through restoration as applicable.

Pre-interruption readings:

Vent Flow Rate (cfm): 33

Forced Vent Pump STOP (Date/Time) 10-16-00 / 0800

Purge Stack Sampler STOP (Date/Time) 10-16-00 / 0805

DSS
OPS
DSS
OPS
DSS
OPS

VENT RESTORATION: Operations

Vent Restoration readings:

Forced Vent Pump START (Date/Time) _____ / _____

Vent Flow Rate (CFM) _____ / _____

Purge Stack Sampler Start (Date/Time) _____ / _____

Purge Stack Sampler Flow Rate (Lpm) _____

OPS
OPS
OPS
OPS

VENT TERMINATION: Operations

Vent Secured (Date/Time) _____ / _____

Containment Final Pressure (psig) _____

Containment Final Temperature (°F) _____

OPS
OPS
OPS

NOTE: All Operations initial blanks and data spaces shall be filled in as applicable prior to completion and routing to Chemistry.

Duty Shift Supervisor Review _____

DSS

- Route to Chemistry Manager for completion

COMPLETION: Chemistry

Volume of air released (cc) _____

Chemistry Review (Chemistry Supervisor/Date) _____ / _____

OP 9C

CONTAINMENT VENTING AND PURGING



*Wisconsin
Electric
Power Company*

DOCUMENT TYPE: Technical

CLASSIFICATION: Safety Related

REVISION: 47

EFFECTIVE DATE: August 24, 2000

REVIEWER: Manager's Supervisor Staff

APPROVAL AUTHORITY: Department Manager

PROCEDURE OWNER (title): Group Head

OWNER GROUP: Operations

Verified Current Copy:


Signature

10/15/00
Date

0700
Time

List pages used for Partial Performance

1-11, 40-41

Controlling Work Document Numbers

CONTAINMENT VENTING AND PURGING

Unit 1

DISCUSSION

This procedure provides instruction for the operation of the Forced Vent Blower, Venting of the Containment with the Purge Exhaust Valves, Operation of the Containment Purge System, and system alignment and operation to support Radiation Protection Department testing.

The procedure is separated into four major sections for ease of use:

**NOTE: It is not necessary to complete all sections of this procedure.
Only the applicable section(s), as noted below, need to be completed.**

- Section A 30 cfm forced vent blower, P-707B, and vent interruption.
- Section B Venting Containment with the Purge Exhaust Valves.
- Section C Purge Exhaust Valves and Containment Purge Supply and Exhaust Fan Operation.
- Section D Forced Vent Operations While on Purge
- Section E Aligning Forced Vent for RMS Testing

Section A. 30 CFM FORCED VENT BLOWER

1.0 PURPOSE

To provide instruction for alignment, documentation, and notification for containment venting using the forced vent blower P-707B, and forced vent interruption. This Section is divided into three distinct parts for ease of use.

- Section 4.1 Starting a 30 cfm forced vent.
- Section 4.2 Securing a 30 cfm forced vent.
- Section 4.3 Forced vent interruption and restart.

2.0 PRECAUTIONS AND LIMITATIONS

2.1 For RMS testing using the following RP procedures, steps 2.1.1 through 2.1.5 apply.

- HPIP 7.51.4, Monthly Operational Test of the Radiation Monitoring System-Process Monitors,
- HPIP 7.51.6, Isolation of the Containment Ventilation System Using the RMS High Alarm Automatic Trip Functions,
- HPCAL 3.4, SPING Calibration Procedure, and,
- HPCAL 3.6, PNG Calibration Procedure,

2.1.1 Section 4.1, Starting a 30 CFM Forced Vent of Containment, of this procedure can be used a 'guide' to line up a forced vent for RMS trip tests.

2.1.2 Purge stack air samplers do not need to be set up / processed for trip testing the system while using the procedures noted above.

NOTE: The 20 minute restriction does not apply if a vent or purge is already active.

2.1.3 Containment air samples/discharge permits are not required when performing testing using the procedures as noted above. (Actual vent time, P-707B running, must be maintained to less than 20 minutes.)

2.1.4 Section 4.3, Forced Vent Interruption and Restart, of this procedure does not apply for RMS trip testing when using the procedures noted above.

2.1.5 Section 4.5, Containment Purge Interruption and Restart, of this procedure does not apply for RMS trip testing when using the procedures noted above.

2.2 Equipment necessary for release accountability monitoring is operating normal: Control Room CT and/or System Server (SS) and/or Technical Support Center PPCS, is operating and Control Room PPCS is generating daily logs.

2.3 Prior to and during the venting, samples must be taken as follows:

2.3.1 Tritium, noble gas, iodine, and particulate samples within a 12-hour period prior to starting the vent.

2.3.2 Iodine and particulate sample started at beginning of the vent and collected and analyzed at the end of the vent.

CONTAINMENT VENTING AND PURGING

INITIALS
Section A

- 2.4 If a rapid increase is noted in 1(2)RE-212 and/or RE-305 as compared to initial vent activity level, the venting should be secured until the cause has been evaluated. The Radiation Protection Manager or Radiation Protection Duty and Call Supervisor will normally perform the evaluation.
- 2.5 Based upon the isotopic content of containment atmosphere, a containment vent permit may have a time limited duration. To continue a forced vent evolution, resample the containment atmosphere and obtain a new containment vent permit.
- 2.6 When opening the personnel hatch inner door with the containment below atmospheric pressure, a personnel hazard exists. For this reason, forced venting of containment should be secured at 0 psig during at-power operation and at 1/2 psig during the week prior to a scheduled outage.

3.0 INITIAL CONDITIONS

3.1 RP and chemistry has been informed that Unit 1 containment pressure has or will soon increase to a value a which 30 cfm forced containment vent is desired, thereby needing containment atmosphere samples. (Holidays or weekends may dictate an earlier than normal start as assurance the required Chemistry and RP personnel are available.)

Date 10-15-00 Time 0700

3.2 **Permission to Perform Procedure**

The conditions required by this procedure are consistent with required plant conditions including equipment operability. Permission is granted to perform this procedure.

DSS [Signature] Time 0710 Date 10-15-00

[Signature]
OPS

4.0 PROCEDURE

NOTE: Operations must designate a unit in steps 4.1.1 and 4.1.3.

4.1 STARTING A 30 CFM FORCED VENT OF CONTAINMENT

4.1.1 Collect AP, charcoal, noble gas, and tritium samples from Unit 1 containment.
Date 10-15-00 Time 0800

[Signature]
RP

CONTAINMENT VENTING AND PURGING

INITIALS
Section A

- 4.1.2 Coordinate with Operations to set up, air sampler(s) with air particulate and charcoal filters at the selected exhaust fan(s).
Date 10-15-00 Time 0900
W-6A W-6B
- 4.1.3 Prepare a containment vent permit for Unit 1 containment with initial release data completed as required.
Date 10-15-00 Time 1000
- 4.1.4 Verify RE-211/212 Mode Selector Switch in 'CONT.' position.
- 4.1.5 Verify RE-211/212 Sample Exhaust Switch in 'AUTO' position.
- 4.1.6 Equipment necessary for release accountability monitoring is operating normal: Control Room CT and/or System Server (SS) and/or Technical Support Center PPCS is operating.
- 4.1.7 Verify in Control Room that the PPCS is generating daily logs.
- 4.1.8 Obtain **AND** record the source check readings for the selected RMS monitor(s) (RE-212 and/or RE-305) as follows (mark those that do not apply N/A):
- a. Note the CT and/or the SS data value:
- RE-212 5.95 E⁻⁶
and/or
 - RE-305 1.35 E⁻⁷
- b. Obtain **AND** record the source check reading(s):
- RE-212 2.78 E⁻⁴
and/or
 - RE-305 1.41 E⁻⁴

Z
RP

[Signature]
CHEM

[Signature]

[Signature]

[Signature]

[Signature]

[Signature]

[Signature]

CONTAINMENT VENTING AND PURGING

INITIALS
Section A

c. Determine that a positive increase in monitor response is indicated over the steady state readings when performing the source check.

A

d. Check the CT and/or SS data value has returned to normal to verify the source did not stick.

A

NOTE: If only RE-305 is operable then the interrupted vent can not be restarted.

4.1.9 Obtain AND record the steady state readings for the selected RMS monitors: (N/A those that do not apply)

a. RE-211 1.76 E⁻³

b. RE-212 5.77 E⁻⁶
and/or

c. RE-305) 1.22 E⁻⁷

A

4.1.10 Ensure air sampler(s) is operating at the selected exhaust fan(s) with air particulate and charcoal filters in place. (reference step 4.1.2.)

A

a. Ensure that the sampler start time AND sampler flow is recorded locally.

A

4.1.11 Obtain AND record on the Forced Vent Permit the containment pressure and temperature.

A

4.1.12 Break red lock AND open either:
RM-3200T [F-11B cont. purge to exhaust filter valve]

OR

RM-3200U [F-11A cont. purge to exhaust filter valve]
(N/A the fan not selected)

N/A A

A

4.1.13 Break red lock AND open RM-3200S blower discharge to purge exhaust fans.

A

4.1.14 Open valve RM-3200N, blower suction.

A

CONTAINMENT VENTING AND PURGING

INITIALS
Section A

4.1.15 Verify open RM-3200P, blower discharge valve.

A

4.1.16 Check blower, P-707B, for proper oil level.

A

NOTE: Samples are required to be taken within 12 hours of starting the vent.

4.1.17 Ensure that air particulate, iodine, noble gas, and tritium samples have been obtained within 12 hours of starting the Forced Vent.

b

CAUTION

See Tech Spec 15.3.6.B for containment pressure limits

NOTE: If release continues for more than 24 hours, then perform and record a daily vent flow rate and sample flow rate verification.

4.1.18 Start forced vent blower **AND** verify proper flow as indicated by FIT-3289 locally and on the PPCS.

A

4.1.19 Record the date and time the vent was started on the containment vent permit. Start Date 10-15-00
Time 1200

A

4.1.20 Record portable stack sampler rotometer flow rate at the start of the vent **AND** daily thereafter on the containment vent permit.

A

4.1.21 Notify RP Supervision that the vent is started

A

a. **IF** the vent is started in the first or last weeks of the month **THEN** have RP review the need for a monthly forced vent trip test.

N/A

CAUTION

When opening the personnel hatch inner door with the containment below atmospheric pressure, a personnel hazard exists. For this reason, forced venting of containment should be secured at 0 psig during at-power operation and at 1/2 psig during the week prior to a scheduled outage.

- 4.1.22 Continue the forced vent until containment pressure reaches the normal or pre-outage low operating limit.
(N/A the non-applicable limit)
- a. Normal Low Limit @ 0 psig
 - b. Pre-Outage Low Limit @ 1/2 psig

4.2 SECURE THE FORCED VENT:

CAUTION

When not on forced vent with RE-211 and RE-212 in operation the Forced Vent Blower must be isolated to maintain RE-211 and RE-212 Operable.

- 4.2.1 Stop the forced vent blower by placing the containment forced vent blower switch on C-20 to the "PULL OUT" position.
- 4.2.2 Shut AND red lock OR verify red locked SHUT manual valves, RM-3200T, and RM-3200U (F-11 containment purge to exhaust filter valve).
- 4.2.3 Shut AND red lock RM-3200S, blower discharge to purge exhaust fan.
- 4.2.4 Shut blower suction valve RM-3200N

IV

IV

CONTAINMENT VENTING AND PURGING

INITIALS
Section A

4.2.5 Record the date and time the vent was secured, on the forced vent permit.

4.2.6 Complete applicable portions of the "Containment Vent Permit" and route as indicated on the form.

4.2.7 Notify RP that the vent has been completed.

4.2.8 Collect AND process AP and charcoal filters from the applicable exhaust fan air sampler(s). (reference step 4.1.2.)
Date _____ Time _____

4.2.9 Samples received for analysis, forward results for release accountability.
Date _____ Time _____

4.2.10 Forward procedure to control.

RP

CHEM

CHEM

4.3 FORCED VENT INTERRUPTION AND RESTART

NOTE: RE-211 and RE-212 must be in service prior to a forced vent interruption. RE-305 is not representative of Containment atmosphere during the Forced Vent Interruption, therefore it may not be used in this section.

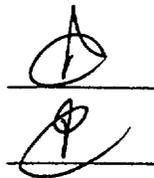
NOTE: If a forced vent is interrupted for less than a continuous 20 minute period, the actions in Section 4.3 are not required.

NOTE: A forced vent evolution may be interrupted for a maximum of eight hours without requiring resampling containment atmosphere. To interrupt a forced vent, document the following actions in the vent "interruption" section of the containment vent permit.

4.3.1 INTERRUPTION

a. Obtain AND record the readings required by the "Containment Vent Permit" for vent interruption.

b. Inform RP supervision that the vent is being interrupted.



CONTAINMENT VENTING AND PURGING

INITIALS
Section A

c. Place Forced Vent Blower P-707B in "PULLOUT."

A

d. Stop the air sampler pump(s) at the selected purge exhaust fan(s).

A

4.3.2 RESTART

a. Prior to restarting the vent, VERIFY that RE-211 and RE-212 have been in operation for a period of at least ten minutes.

b. Obtain AND record steady state readings for RE-211 and RE-212.

• RE-211 _____

• RE-212 _____

c. Obtain AND record check source readings for RE-211 and RE-212 (no limits apply).

• RE-211 _____

• RE-212 _____

d. Compare the RE-211 and RE-212 readings taken in Step 4.3.2.b with the initial readings for RE-211 and RE-212 from step 4.1.9.

If the new readings are less than or equal to 125% of the initial readings, proceed to Step 4.3.2.g.

If the less than or equal to 125% criteria is not met, the vent must be terminated.

Resampling of containment atmosphere will be required if further venting of containment is necessary when the less than or equal to 125% restart criteria is not met.

e. Start the forced vent blower AND record the forced vent flow rate on the forced vent permit.

f. Start the air sampler pump(s) at the selected purge exhaust fan(s), AND record sampler flow rate on the forced vent permit. (Refer to step 4.1.2.)

CONTAINMENT VENTING AND PURGING

INITIALS
Section A

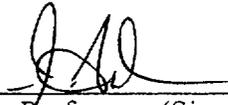
- g. Complete all remaining applicable sections of the "Containment Vent Permit." (Vent restoration section) _____
- h. Inform RP supervision that the vent has been restarted. _____

5.0 REFERENCES

- 5.1 IR 96-006, NRC Inspection Report; NRC Commitment for Operations procedures PMT/QC reviews.
- 5.2 HPIP 7.51.4, Monthly Operational Test of the Radiation Monitoring System-Process Monitors
- 5.3 HPIP 7.51.6, Isolation of the Containment Ventilation System Using the RMS High Alarm Automatic Trip Functions
- 5.4 HPCAL 3.4, SPING Calibration Procedure
- 5.5 HPCAL 3.6, PNG Calibration Procedure
- 5.6 Technical Specification 15.3.6.B, Containment System, Internal Pressure

CONTAINMENT VENTING AND PURGING

Performed By:

<u>Jan Fudus</u> Performer (Print)	 Performer (Sign)	<u>10/15/00</u> / <u>0700</u> Date Time	<u>JA</u> Initials
_____ Performer (Print)	_____ Performer (Sign)	_____ Date Time	_____ Initials
_____ Performer (Print)	_____ Performer (Sign)	_____ Date Time	_____ Initials
_____ Performer (Print)	_____ Performer (Sign)	_____ Date Time	_____ Initials
_____ Performer (Print)	_____ Performer (Sign)	_____ Date Time	_____ Initials
_____ Performer (Print)	_____ Performer (Sign)	_____ Date Time	_____ Initials
_____ Performer (Print)	_____ Performer (Sign)	_____ Date Time	_____ Initials
_____ Performer (Print)	_____ Performer (Sign)	_____ Date Time	_____ Initials
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_____ Performer (Print)	_____ Performer (Sign)	_____ Date Time	_____ Initials
_____ Performer (Print)	_____ Performer (Sign)	_____ Date Time	_____ Initials
_____ Performer (Print)	_____ Performer (Sign)	_____ Date Time	_____ Initials

Reviewed By:

_____ Shift Supervision (Print)	_____ Shift Supervision (Sign)	_____ Date Time	_____ Initials
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