CRITIQUE MINUTES - NONNUCLEAR

COVERSHEET

		CCN (OBTAIN FROM CODE 1:6.2) CCN# 20-225-88	
SHIP/PROJECT Bldg 225		DATE OF INCIDENT 17 Feb 88	TIME OF INCIDENT approx 1000 hours
CRITIQUE DIRECTOR S. Case	SHOP/CODE 951N	DATE OF CRITIQUE 19 Feb 88	TIME OF CRITIQUE 0900 Hours

NOTE: If Critique Minutes are classified, stamp [redacted] NOFORN at the top and bottom of each page.

MINS 4730/210 (Rev 7-8

CRITIQUE MINUTES - NONNUCLEAR

SHIP/PROJECT: Bldg 225		CCN (OBTAIN NUMBER FROM CODE 136.2): CCN # 20-225-88	(4)
CRITIQUE DIRECTOR: J. Case	SHOP/CODE: 951N	DATE OF INCIDENT: 17 Feb 88	TIME OF INCIDENT: approx 1000 hours
		DATE OF CRITIQUE: 19 Feb 88	TIME OF CRITIQUE: 0900 hours

SYSTEM/COMPONENT CONCERNED

Bldg 225 (Plating Shop) chrome ventilation scrubber system.

BRIEF DESCRIPTION OF INCIDENT

Release of contamiwated fluid (chrome contamiwation) from Bldg 225 chrome ventilation scrubber fan.

INCIDENT TYPE

- ___(02) COMPONENT FAILURE/DAMAGE
- ___(10) MATERIAL/PARTS INCORRECT
- ___(13) PARTS NOT INSTALLED CORRECTLY
- [X](23) FLUID ~~SPILL/FLOODING~~ release
- ___(24) WORK PERMIT/WORK CONTROL VIOLATION
- ___(25) TAGOUT/LINEUP PROCEDURE VIOLATION/ PROBLEM
- [X](26) INADEQUATE PLANNING/CORRECTION OF PROBLEM
- ___(27) PROCEDURE/INSPECTION INCORRECT/ NOT ADEQUATE/NOT FOLLOWED
- ___(28) SHIP SAFETY ITEM VIOLATION/PROBLEM
- ___(29) CERTIFICATION VIOLATION
- ___(32) CLEANLINESS
- ___(90) FIRE
- ___(91) INJURY
- [X]OTHER LACK OF PREVENTIVE MAINTENANCE

REPAIR OFFICER/DEPARTMENT HEAD ACTION

[ ] NO ADDITIONAL ACTION IS REQUIRED

TROUBLE REPORT REQUIRED
[ ] YES
[ ] NO

CODE _____ PREPARE TROUBLE REPORT IN ACCORDANCE WITH NAVSHIPYDMAREINST 4730.12A VOL. VII, CHAP, 10. SUBMIT COMPLETED REPORT WITH ALL REQUIRED SIGNATURES TO CODE 136.2 BY:

[ ] ADDITIONAL ACTION/INVESTIGATION REQUIRED BY CODE _____ AS FOLLOWS:

REPORT COMPLETION OF ACTION TO CODE 136.2 AND CODE _____

REPAIR OFFICER/DEPARTMENT HEAD SIGNATURE	CODE	DATE

FINAL DISTRIBUTIO

1. RETAIN COPY
2. FORWARD ORIGINAL CODE 136.2

1. RETAIN COPY
2. ORIGINAL TO ACTIO CODE
3. COPY TO CODE 136. 130, 200, 300 AND 336.

1. RETAIN COPY
2. ORIGINAL TO ACTIC CODE (COPY UP TROUBLE REPORT IS REQUIRED)
3. COPY TO CODES 13(130, 200, 300 AN 336

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Bldg 225

CRITIQUE DIRECTOR	SHOP/CODE	DATE OF CRITIQUE	TIME OF CRITIQUE
J. Case	951N	19 Feb 88	0900 hours

17 Feb 88 — approx 1000 hours

SYSTEM/COMPONENT CONCERNED

Bldg 225 (Plating Shop) chrome ventilation scrubber system.

BRIEF DESCRIPTION OF INCIDENT

Release of contaminated fluid (chrome contamination) from Bldg 225 chrome ventilation scrubber fan.

INCIDENT TYPE

- ___(02) COMPONENT FAILURE/DAMAGE
- ___(10) MATERIAL/PARTS INCORRECT
- ___(13) PARTS NOT INSTALLED CORRECTLY
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TROUBLE REPORT REQUIRED

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[ ] NO

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3. COPY TO CODES 13 130, 200, 300 AN 336

REPAIR OFFICER/DEPARTMENT HEAD SIGNATURE	CODE	DATE

MINS 4730/210 (Rev 7-86)

CRITIQUE GUIDELINES

A. PURPOSE

The purpose of a critique is to find out the details of what happened. In m instances, only after the detailed facts are gathered can an accurate evaluation be m and proper corrective action be taken to prevent recurrence of incidents. The critique not a court set up to establish blame. It is to establish facts.

B. CRITIQUE DIRECTOR ASSIGNMENTS

Normally, the senior Shipyard representative who has cognizance over the w involved (organization that appears responsible for the incident) shall be assigned conduct the critique. In the Production Department critiques which are the responsibil of the shops shall be conducted by senior shop supervisors, General Foremen or above. weekends and backshifts, critiques will be directed by the senior supervisor on du Incidents which appear to be entirely the responsibility of the Ship's Force may assigned to the ship for conduct of the critique upon agreement of the ship's Command Officer.

C. CONDUCT OF CRITIQUE

The assigned critique director shall take prompt action to obtain and rec factual data from all individuals involved in the following manner:

1. Promptly assemble all individuals involved in the incident, includ observers who may be able to contribute facts. Cognizant Shipyard Managers and S Supervisors shall be informed of the time and location of the critique so they may atte Shop Superintendents shall normally attend all critiques being directed by their s during day shift, and on back shifts when the nature of the incident warrants th presence. Group Superintendents shall periodically attend critiques for the purpose monitoring the effectiveness of the critique direction.

2. Conduct the critique to determine the details of what happened and rec minutes of the critique. Opinions shall not be included in the official minutes of meeting.

3. Take attendance and attach to the critique minutes.

4. Attendees under the direction of the critique director will arrive at a cou of immediate/temporary corrective action (if necessary) and permanent corrective acti Action and their action codes will be assigned and target completion dates establish Note that the meeting may be reconvened if necessary.

5. Solicit comments from attendees and record as part of the minutes.

6. Read the minutes aloud prior to adjourning the critique.

D. DISPOSITION OF CRITIQUE MINUTES

1. Copies of the minutes of the critique will be issued by the critique direc within 4 hours of the close of the critique. A copy will be sent to each organizat represented at the meeting, all action codes/shops, Codes 136.2 and 336. Critique minu shall not be issued for shop-conducted critiques prior to the Shop Superintendents' rev and approval.

2. The original of the critique minutes will be hand carried by the criti director to the Department/Office Head (Repair Officer for Production Department critiq for review and determination of additional action, and need for a Trouble Report.

NONNUCLEAR CRITIQUE MINUTES

~~Ship:~~ Bldg 225 CCN: 20-225-88
Cognizance Control No.

The Director of the Critique (senior designated representative of the responsible code) will obtain the following information during the critique:

1. Assemble all persons actually involved so the facts can be determined but do not delay convening the critique. Statements should be obtained only as necessary (e.g., where an individual cannot attend) to determine the facts. Keep attendance at a minimum. Use a separate sheet to record attendance. Notify Code 2340, NRRO, and BRMO for all nuclear interface critiques.

2. Establish and include a description of the problem at the beginning of the critique minutes. State at the beginning of the critique that the objective is to obtain facts, determine the cause of the problem and adjourn within one hour. Therefore, only one conversation at a time is to be allowed and personnel must remain focused on the pertinent facts.

3. Name of Director of Critique: J. Case Code/Shop 9511

4. Name of Critique Recorder: D. OISON Code/Shop 950.3

5. (a) Date and time of problem 17 Feb 88 approx 1000 hours

(b) Date and time problem was discovered 17 Feb 88 approx 1000 hours

6. Date and time of critique 19 Feb 88 0900 hours

7. Record the pertinent facts. Statements of all people involved is not necessary nor is a discussion of how the job should have been done unless it is necessary to understand what was actually done. Copies of statements, logs, documents, and deficiencies obtained as part of the critique investigation should normally be summarized and/or pertinent portions quoted in the critique minutes in lieu of attaching as part of the critique minutes. The Critique Director should retain such statements/documents as desired to support the critique minutes entries and conclusions.

a. Identify components or systems concerned:

Bldg 225 (Plating Shop) chrome ventilation scrubber system

b. Description of the problem. Develop methodically, asking the penetrating questions necessary to get to the heart of the problem. Once the problem is understood well enough to focus on the pertinent facts, record below the facts in sufficient detail to adequately describe how the problem occurred. Verbatim quotes, etc. are not required, only the substance of pertinent statements. If additional information is needed to fully understand how the problem occurred, indicate this in paragraph 7g.

On 17 Feb 1988 Ship 51 plating shop personnel found that chrome contaminated fluid was being blown from the output (exhaust) of the chrome ventilation scrubber blower. The fluid had wetted a portion of the alleyway between Buildings 225 and 101. The cognizant General Foreman (Shop 51) and Code 461 (Environmental Engineer) were immediately notified of the problem. The spill team was also notified.

During the critique of this problem it was determined that the most likely cause(s) of the problem were:

a). Lack of Preventive Maintenance on the scrubber packing resulted in the buildup of chemicals in the scrubber packing which partially plugged them and reduced their ability to pass fluids. This resulted in an excessive liquid carryover through the scrubber fan.

b). Possible saturation of the mist eliminators with fluid which resulted in the fluid being sucked through the mist eliminator and blown out through the scrubber fan exhaust.

(Simplified scrubber drawing shown on attached)

c. Condition of plant at time problem occurred (nuclear interface only):

N/A

d. Status of system or component concerned:

Chrome ventilation scrubber system was in operation but malfunctioning. No chrome plating was being accomplished.

e. Identify procedures applicable to problem:

(1) Preventive Maintenance Procedure # 420-PM-25 (Scrubber maintenance)

(2)

(3)

f. Immediate actions taken (and results, if available):

Deficiency Report No. (if applicable): N/A

(1) Action assigned:

Results: Code 460 was notified, the spill team was notified. The system was then pumped down and the fluids were transported to the waste water treatment facility. (The system was pumped down to eliminate the possibility of an overflow).

7f (Continued)

(2) Action assigned: _____

Results: _____

(3) Action assigned: _____

Results: _____

Continue on extra sheets if required.

g. Record any questions which require further action to completely describe or understand how the problem occurred. Include responsible code(s) and completion dates. _____

None

8. Identify holds (by whom and action needed to release): Code 951 has placed a hold on all chrome plating work in Bldg 225 pending assurance that chrome plating operations are safe to continue

9. Conclusion

a. Apparent cause (indicate category and provide short summary)

Design _____ Material _____ Personnel X Procedure _____

Preventive Maintenance procedure (420-PM-25, Scrubber maintenance) was not issued to Shop 07 (by Code 421). There is no formal schedule for preventive maintenance on this scrubber.

9. b. Contributing factors (list and explain): 1) No formal schedule for PM on this scrubber; 2) once PM is performed there is no followup operational checks on the system to ensure proper operation; 3) production schedules are allowed to take precedence over and/or delay preventive maintenance Sche

10. Critique Director read aloud the critique minutes to ensure pertinent facts were not omitted. Personnel not involved in determining corrective action/course of action responsibilities should then be dismissed.

11. Identify responsibility for course of action (COA) for permanent corrective action:

ITEM* Issue COA memo CODE: 951 COA DUE DATE: 24 Feb '88

ITEM* (Will include All Responsible Shop/Code actions) CODE: _____ COA DUE DATE: _____

ITEM* _____ CODE: _____ COA DUE DATE: _____

*Item from paragraph 9a or 9b, as applicable, or briefly identify area/problem to be addressed.

12. Critique Director Signature: J. Lan Date: 2/19/88 Time 1245

Copies may be handwritten and should be distributed within four hours following the critique.

13. The Shop Superintendent/Division Head of the Critique Director will review the recorded facts to ensure the recorded information is complete enough to allow a senior person not present to understand exactly what happened and why.

Shop Superintendent/Division Head review accomplished. Critique minutes considered to be satisfactory.

Signature E. J. Mullen Date: 2/19/88

14. Provide a copy to the originating code, each organization represented at the critique, all action shops/codes, Codes 136.2 and 336. Additional distribution for nuclear interface critiques will be Code 1300, 2340, 2302.1, BRMO and NRRO (two copies). The original minutes will be hand carried to the Department/Office Head/Repair Officer for review.

Copy to: 106, 136.2, 336, 380, 440, 442, 450, 457, 460, 461, 950.3, 951, 970.4, 134

ADDENDUM

DECLARATION OF NEED FOR INCIDENT REPORT
(NUCLEAR INTERFACE CRITIQUES ONLY)

CCN: _____

Ship: _____ Date and time of problem _____

Description of problem _____

_____

_____

Brief basis for decision to prepare (or not to prepare) incident report: _____

_____

_____

_____

_____

N/A

Incident Report is _____ is not _____ required.

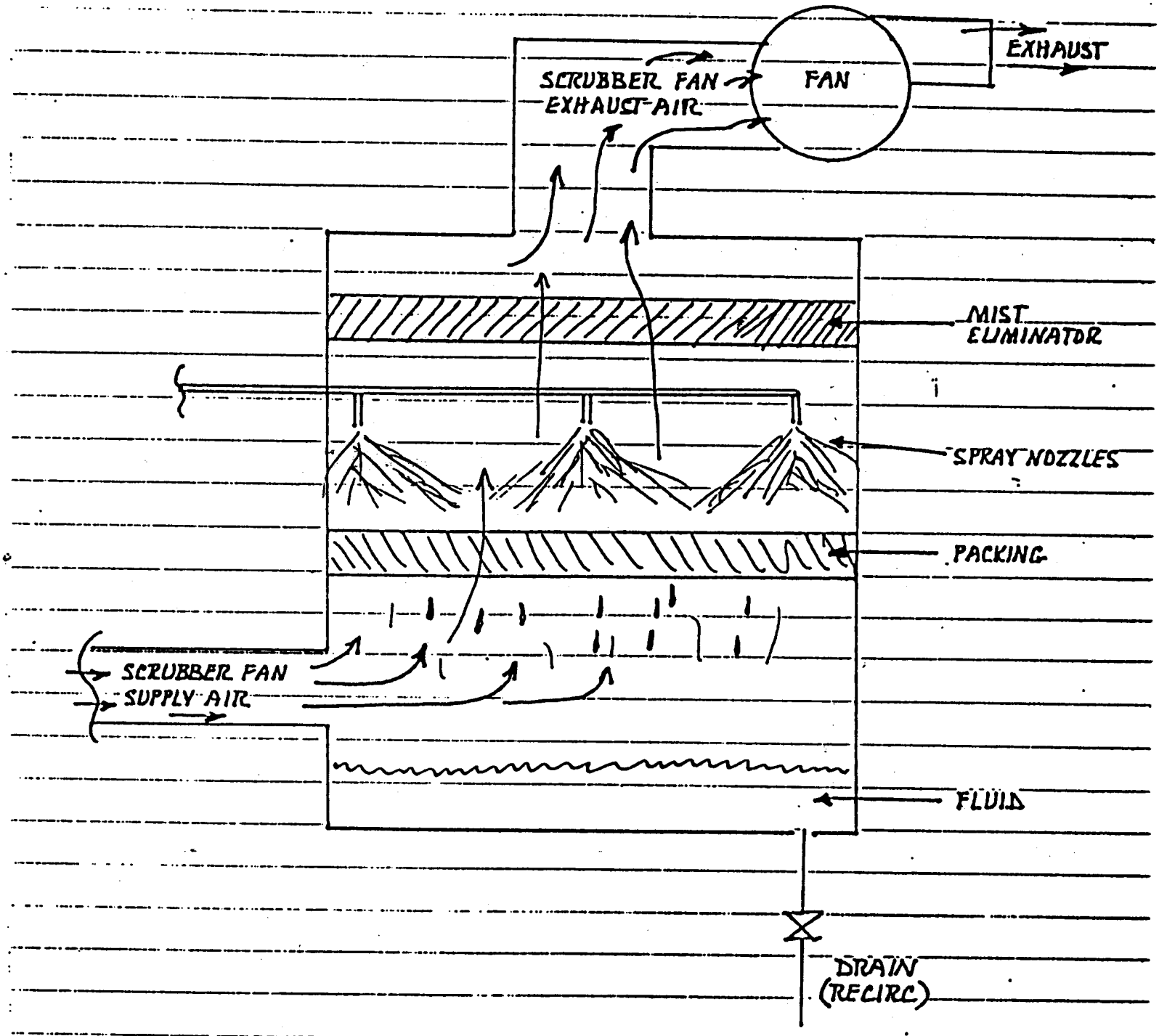
Responsible activity to issue the incident report: _____

Due Date: _____

Signed _____ Date _____
(Critique Director) (must be issued within one working day of the critique)

Concurrence: _____ Date _____
(Nuclear Engineering Manager)

Distribution:
Same as critique minutes



SIMPLIFIED SCRUBBER

To. Mr Dudley
Fm. James F. Shuck, Jr. - 813879
SUBJ: SCRUBBER System For Chrome Room - BLD-225.

These are a sequal of events to the best of my recollection and knowledge on 02-15-88. All times are approximate unless otherwise noted.

02-17-88

0700 - Checked pumps and Alarms, Everything looked good and seemed normal.

0900 - Checked system again. Again, Looked fine.

(1000) - I noticed chrome on the deck in alleyway between the southend of BLD 22 and the northend of Bld 101. Checked pump, water level in lower tank, and noticed chrome flowing out the top of the Skimmer.

1005 - Asked Sandoval to call Mr Dudley and tell him. He said he would call John Brock C/M.

(1012) - I called John Brock and he said he would be right out

1215 - Went out to Check pump and found Stanley from ROS tightening a flange on the pump, as it was leaking.

1230 - John Brock arrived with another person. I do not know who he was.

1230 to about 1315 - We were discussing what we should do and generally talking about the system.

1315 - We turned the pump off, and noticed that the water was rising in the

lower tank from the upper tanks. There are no shut-off valves in the system to stop the water flow from the upper tanks.

1325- We turned the pump back on to keep the system cycling, and to keep the lower tank from overflowing. C/461 pulled a sample of waste water from the lower tank, and send it out to waste water treatment to see what the ppm rate was. John later told me that the waste water treatment plant could not take the water as it was between 500 and 700 ppm. We are not allowed to dump anymore than 50 ppm.

1400 to 1500 - X07 repaired broken nipple off of valve on lower tank. That valve when open releases waste water into the Chrome Room, which in turn goes to the waste water treatment plant.

1400 to 1545 - Mr. Lindley, Mr Hoffman, Mr Brock and myself, after discussing the system and seeing what happened when the pump was turned off, decided it was in everyone's best interest, to get the waste water out of the upper tanks. It should be noted, that at that time we had no way of knowing how much waste water was in the upper tanks. Mr Brock made some phone calls, and with the help of the spill

team, got everything taken care of after I had went home.

02-18-88

0700- Checked the system, pump was running, blowers were running, the lower tank had about 1½ feet of water in it, and there was no chrome waste blowing into the air.

0800- John Broex told me that they filled two 1,000 gallon tanks, and sent them out to waste water treatment the evening before.

1350- Per John Broex e/461, and Arlen Sieit e/106, they secured the blowers and Joe Sandoval, John Lowery, and myself covered the pit tank, #4, Decorative and anodize tanks in the chrome room with herculite and wood.

James L Shueck J
ACTING FOR
MAX HENDERSON