



Battelle

... Putting Technology To Work

Project No. _____

Internal Distribution

Date February 24, 2000
To CL Caldwell
From GA Stoetzel *D. C. Stoetzel*
Subject 2000 Safety and Health Self-Assessment of the
Pacific Northwest National Laboratory (PNNL)
Respiratory Protection Program

JL Allen
DL Carroll
SD Dossett
PJ Gaither
AA Kovach
RD Mitchell
ME Pease
MJ Pueschner
RD Sharp
Self-Assessment File
File/LB

The attached report contains the results of the Year 2000 Safety and Health Self-Assessment of the PNNL Respiratory Protection Program. The self-assessment was conducted by the Safety and Health Department during December 1999-January 2000.

The report identified 19 deficiencies. All the deficiencies have been entered into the Assessment Tracking System as individual conditions under assessment 3170. Those responsible for individual actions will be given until March 31, 2000 to develop an action plan for addressing deficiencies.

Please let me know if you have any questions about this report.

GAS:jlc

attachment

**2000 Safety and Health Self-Assessment of the
PNNL Respiratory Protection Functional Element**

Assessment Period: December 6, 1999 to January 12, 2000

Report Date: February 22, 2000

Assessed by: GA Stoetzel 2/22/00
GA Stoetzel, Safety & Health Technical Support

Safety and Health Department

Pacific Northwest National Laboratory

SUMMARY

This report documents the 2000 self-assessment of the Pacific Northwest National Laboratory (PNNL) Respiratory Protection functional element. This functional element is one of 13 elements of the Radiological Control Program identified in the PNNL 10 CFR 835 Implementation Plan (Radiation Protection Program). Per 10 CFR 835, self-assessments of each functional element shall be conducted no less frequently than every 36 months. The last self-assessment performed, which covered the entire respiratory protection program (radiological and non-radiological), was conducted in September 1995. A self-assessment of the radiological portion of the respiratory protection program was conducted in September 1996. This self-assessment covers both aspects of the PNNL respiratory protection program.

Per internal procedures, PNNL will also perform an annual review of respiratory protection program performance to comply with the 29 CFR 1910.134 requirement for regularly evaluating the effectiveness of the program. The annual reviews were initiated in December 1999.

The overall status of PNNL's respiratory protection program is good. Combining the radiological and non-radiological portions of the program into one subject area has strengthened the overall program. The need for combining both elements into one program was identified in the September 1995 self-assessment. One past concern was that the Respiratory Protection Program Administrator did not have enough knowledge of respirator use patterns across PNNL to target critical changes in the program to impacted staff. The development of respirator issue stations and respiratory protection equipment custodians per the new subject area has provided the program administrator with additional information on respirator use at PNNL.

Several concerns noted in the previous self-assessments still exist although improvement has been made in some areas. The 1995 assessment noted that there was no formally documented procedure or mechanism to ensure that unusual medical evaluations of respirator users are brought to the attention of the Respiratory Protection Program Administrator. This still appears to be a concern as there is not a direct line of communication between the program administrator and HEHF. The 1995 assessment also noted a lack of coordination between the Respiratory Protection Program Administrator and the Safety and Health Representatives in identifying and documenting if respiratory protection is required for a given job. Specifically, hazard assessment information was not being entered onto a Workplace Exposure Assessment Form and subsequently was not available for the Respiratory Protection Program Administrator to review. Although currently Safety and Health Representatives do not always document respiratory protection equipment needs for a job on a Workplace Exposure Assessment Form, they do document their evaluation elsewhere such as in an e-mail to the Work Control Specialist or manager requesting the evaluation.

This self-assessment was performed in accordance with SHP-3.02 (*Safety and Health Self-Assessments*) found in PNL-MA-858. Attachment 1 is the self-assessment plan used in conduct of this self-assessment. Exhibits 1-3 of the attachment contain specific details of the items reviewed and deficiencies identified. Exhibit 4 provides a list of site personnel contacted during the self-assessment. Per the rating scale in SHP-3.02, the PNNL Respiratory Protection Program is given a rating of 2.5 on a scale of 0-4 with 4 being the highest rating.

The following definitions of deficiencies were used in this self-assessment:

Finding: A direct and significant departure from a requirement that could result in significant safety consequences. Findings should be promptly investigated. Corrective actions, if appropriate, should be administered as soon as practicable. For Safety and Health self-assessments, noncompliances with regulatory requirements or PNNL procedures are considered to be findings.

Observation: A poor practice or weakness that, in the judgement of the assessor, does not pose the potential for significant safety or compliance consequences, but if not corrected could result in a finding. Observations should be investigated as soon as practical. Corrective actions, if appropriate, should be administered as soon as practicable.

This self-assessment identified 19 deficiencies - 8 findings and 11 observations. Of the 8 findings, two involved failure to comply with requirements of 29 CFR Part 1910.134 and the remaining six involved failure to comply with PNNL procedures or subject areas. The more significant findings involved inadequate documentation of basis for selection of respiratory protection equipment, inadequate training of respiratory protection equipment custodians, and inadequate control of respirators at issue stations. Of the 11 observations, eight involved procedural improvement items and three involved improvements in the training area.

The following is a listing of the deficiencies. Each deficiency has been entered into the Assessment Tracking System as a condition, along with a condition owner. The condition owner is responsible for providing an action plan in the Assessment Tracking System. The action plan should identify what will be done to correct the condition and identify who has the action along with when it will be completed. This listing below identifies the condition numbers and condition owners.

1. **Finding 00RPP.001:** Procedures PNNL-IH-INST-15 (*Hazardous Chemical and Physical Agent Exposure Monitoring Determination*) and PNNL-IH-INST-16 (*Respiratory Protection Selection*) found in PNL-MA-430 have not been reviewed in the past two years per SHP-1.01. (see p. 11) **ATS Condition Number 3170.1 Condition Owner:** CL Caldwell
2. **Finding 00RPP.002:** Safety and Health Representatives do not consistently follow the method of documenting job hazards and subsequent need for respiratory protection equipment by completing the *Workplace Exposure Assessment Form* per PNL-MA-430 procedures. (see p. 16) **ATS Condition Number 3170.2 Condition Owner:** ME Pease
3. **Finding 00RPP.003:** PNNL does not provide the information designated in 29 CFR Part 1910.134 (e)(5)(i) to the medical contractor (i.e., HEHF). (see p. 21) **ATS Condition Number 3170.3 Condition Owner:** ME Pease
4. **Finding 00RPP.004:** PNNL has not provided the medical contractor (i.e., HEHF) with a copy of the respiratory protection program as specified in 29 CFR Part 1910.134 (e)(5)(iii). (see p. 21) **ATS Condition Number 3170.4 Condition Owner:** CL Caldwell
5. **Finding 00RPP.005:** Training received by the Respiratory Protection Equipment Custodians is not adequate to implement the Respiratory Protection subject area. (see p. 39)

ATS Condition Number 3170.5 Condition Owner: CL Caldwell

6. **Finding 00RPP.006:** Several PNNL respirator issue stations did not maintain positive control over respirator issue, use, and return as specified in the Hanford Site Radiological Control Manual Article 531.4. Specifically, the several stations were deficient in controlling used respirators, maintaining key accountability for the issue station, and posting a list of key holders at the station for emergency contact. (see p. 41) **ATS Condition Number 3170.6 Condition Owner: CL Caldwell**
7. **Finding 00RPP.007:** Management has not formally notified the Respiratory Protection Program Administrator in writing of the names of respiratory protection equipment custodians per the requirement in the *Respiratory Protection* subject area. (see p. 41) **ATS Condition Number 3170.7 Condition Owner: CL Caldwell**
8. **Finding 00RPP.008:** The *Respirator Issue Log* is not being completed by respirator users as specified in the *Respiratory Protection* subject area. (see p. 41) **ATS Condition Number 3170.8 Condition Owner: CL Caldwell**
9. **Observation 00RPP.001:** The *Respiratory Protection* subject area and associated training does not address proper handling of respirators used only for non-radiological hazards when exiting the work area. (see p. 12) **ATS Condition Number 3170.9 Condition Owner: CL Caldwell**
10. **Observation 00RPP.002:** Requirements for respiratory protection program self-assessments in SHP-3.02 conflict with those in the FY-2000/FY-2001 Self-Assessment Schedules. (see p. 13) **ATS Condition Number 3170.10 Condition Owner: CL Caldwell**
11. **Observation 00RPP.003:** Step 5.2 of the *Radiological Work Planning and ALARA Review Checklist* exhibit found in RCP-3.1.01 should reference RCP-5.5.26 (*Estimation of Airborne Radioactivity Levels*) instead of RCP-5.5.01 (*Air Monitoring*). (see p. 16) **ATS Condition Number 3170.11 Condition Owner: CL Caldwell**
12. **Observation 00RPP.004:** The *Respiratory Protection* subject area does not provide adequate guidance to Safety and Health Representatives in determining whether to upgrade respiratory protection based on a respirator users concern. (see p. 16) **ATS Condition Number 3170.12 Condition Owner: CL Caldwell**
13. **Observation 00RPP.005:** The *Respiratory Protection* subject area should provide guidance on whether it is acceptable to obtain respiratory protection equipment (facepieces) from a source other than INS and if so the correct method for ordering from an outside vendor. (see p. 19) **ATS Condition Number 3170.13 Condition Owner: CL Caldwell**
14. **Observation 00RPP.006:** Respirator users, their managers, and respiratory protection equipment custodians were not knowledgeable on the need to notify the PNNL Respiratory Protection Program Administrator of problems with respiratory protection equipment as specified in the *Respiratory Protection* subject area. (see p. 25) **ATS Condition Number 3170.14 Condition Owner: CL Caldwell**

15. **Observation 00RPP.007:** The PNNL Respiratory Protection Program Administrator should meet with the appropriate Fluor Daniel Hanford representative to review the qualification of the breathing air vendor on the Hanford site. (see p. 30) **ATS Condition Number 3170.15**
Condition Owner: CL Caldwell
16. **Observation 00RPP.008:** Training did not provide adequate guidance to respirator users on operation of the respirator issue stations, interfacing with the Respiratory Protection Equipment Custodian, and completion of the *Respirator Issue Log*. (see p. 32) **ATS Condition Number 3170.16**
Condition Owner: CL Caldwell
17. **Observation 00RPP.009:** The protection factor for the SCBA is RCP-3.2.02 should be modified to be consistent with that found in ANSI Z88.2 and the *Respiratory Protection* subject area. (see p. 38) **ATS Condition Number 3170.17**
Condition Owner: CL Caldwell
18. **Observation 00RPP.010:** Section 1 (Step 4) of the *Respiratory Protection* subject area does not specify the specific training course that managers are required to complete (i.e., Course #500). (see p. 39) **ATS Condition Number 3170.18**
Condition Owner: CL Caldwell
19. **Observation 00RPP.011:** PNNL radiological control procedures should include guidance on the limitations of half-face respirators for radiological work. (see p. 42) **ATS Condition Number 3170.19**
Condition Owner: CL Caldwell