

HANFORD ENVIRONMENTAL HEALTH FOUNDATIONMONTHLY REPORT, SEPTEMBER, 19671. GENERAL

- 1.1 The Foundation was notified by the AEC that they were pleased to learn that the Foundation will participate in the Richland Graduate Fellowship, AEC Postdoctorate Fellowship and Summer Student Trainee Programs. Our participation will allow the AEC to accommodate additional fellows and also to expand the Richland program into new areas of research.
- 1.2 The September issue of the Medical Journal Northwest Medicine contains a paper entitled "Asbestos - An Environmental Health Hazard" authored by W. D. Norwood, M.D., P. A. Fuqua, M.D. and F. Mancuso, M.D. The objective was to help alert Pacific Northwest physicians to the asbestos hazard.

2. VISITS

- 2.1 Onsite - Mr. Carl Welte, Health Physicist, Washington, AEC, visited the Environmental Health Sciences and the Radiosurgery on September 20, 1967.
- 2.2 ~~DELETED~~ of Madrid, Spain, visited the Foundation on September 9, 1967. He requested, and received, copies of three color photos and the floor plan of Radiosurgery.
- 2.3 Offsite - ~~DELETED~~ attended the AMA Rural Health Council in Chicago on September 7th and 8th, 1967; the Washington State Medical Association in Seattle, September 9th through 13th; and the Meeting of American Academy of General Practice, September 15th through 21st, 1967.
- 2.4 Dr. Crock, while on vacation, attended the International Meeting of General Practitioners in Salzburg, Austria.

3. OCCUPATIONAL MEDICINE

- 3.1 A total of 954 examinations were done, 176 of these were for preplacement, 214 periodic, 183 interim, 75 recheck and 306 termination. Proctosigmoidoscopic examinations were done on 13 employees and tonometry examinations on 91 employees.
- 3.2 Plans are being studied to increase our examination load. The new automatic audiometry is slower than the previously used machines with a capacity of approximately 34-38 tests per day. The addition of a second instrument would double the output and be handled by the same individual.
- 3.3 The Promethium Study is now in progress. The initial collection of urines for the creatinine determinations has been started and Promethium injections will be followed by bioassay determinations.

1103882

REPOSITORY Records Holding Area Richland WA  
 COLLECTION Promethium Study  
 BOX No. 030247  
 FOLDER N/A

4. OCCUPATIONAL NURSING

- 4.1 Five members of the Nursing Staff attended the meeting of WSNA, District #15, on September 6th.
- 4.2 The nurses meeting on September 27th was not held. A tour of the 200-E Area and the Purex Building was substituted.
- 4.3 The inventory of emergency medical supplies, located in operating area sites and at the relocation center, was completed on September 22nd, 1967.
- 4.4 The annual influenza immunization program was begun September 4. To reduce employee time loss, the nurse from 100-D gave immunizations at 100-F. Because the interval for booster doses has been increased, a reduced number is to be expected this year as compared to previous years. A summary of influenza immunizations, as tabulated at the nursing stations, is as follows:

	<u>September, 1967</u>	<u>September, 1966</u>
1st doses	261	683
2nd doses	1	0
Booster doses	<u>628</u>	<u>606</u>
Total	890	1289

5. RECORDS AND STATISTICS

- 5.1 One research project summer employee terminated to return to school and one employee who worked as a Youth Opportunity employee was reactivated as a full time employee.
- 5.2 The Technical Information Section of Battelle-Northwest held a briefing September 21st, designed to acquaint personnel with the amount of scientific and technical information available through the Defense Documentation Center, ~~DELETED~~ librarian for the Foundation, attended.
- 5.3 A file Improvement Workshop for secretaries and clerks was sponsored by the AEC, September 18, 19 and 20. GSA certificates of training were presented to those attending as follows: ~~DELETED~~ ~~DELETED~~ ~~DELETED~~  
~~DELETED~~ ~~DELETED~~
- 5.4 A GSA Records Management Workshop was sponsored by AEC, consisting of ten three-hour sessions and conducted by the National Archives and Records Service. Mrs. Marilyn Schooley attended for the Foundation and was presented with a GSA Certificate of Training for the course.
- 5.5 Medical approvals, transfers and record reviews

Approvals for in-plant transfers	- 3
Review of records	- 71
Record research from stored records	- 13
Medical clearance approval for inter-company transfers	- 12

Abstract and Correspondence

Medical abstracts	-	59
Record copies	-	81

5.6 Workmen's Compensation

Claims	-	12
Reports		
Battelle Northwest	-	58
Douglas United Nuclear	-	52
Computer Sciences	-	3
HEHF	-	2
Atlantic Richfield	-	26
ITT/FSS	-	17
Vitro	-	1
Construction	-	30
Other Construction Contractors	-	4

5.7 Medical Staff Assistance

Staff Physicians were given assistance through the performance of clerical and semi-technical services as follows:

Programming and scheduling resulted in completion of 80.6% for the month and 81.0% of the year's estimated quotas for medical examinations.

Pre-placement examinations	-	176
Exit examinations	-	306
Audiometric hearing testing	-	505
Ortho-rater visual tests	-	486
Visual field screen tests	-	<u>381</u>

Total 1854

5.8 Offering of and handling of appointments for special examinations

Gynecological	-	19
Sigmoidoscopic	-	13
Executive	-	5
Pre-retirement physicals	-	2
Achillometer	-	10
Ocular tension	-	91
Pulmonary function	-	29
Tetanus immunizations	-	3
Whole body counts	-	<u>401</u>

Total 573

5.9 Medical stenographic services

Preparation and distribution of employee letters of examination results and/or recommendations	-	427
Notice of impairments	-	248
Notices pertaining to work limitation (21 new, 19 continuation, 9 discontinued)	-	<u>49</u>
Total		297

5.10 Procurement of reference materials and research assistance was provided  
as follows:

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New texts	-	5
Journal routings	-	87
Texts loaned	-	4
Reference research	-	2
Reproductions ordered	-	14
New Journal subscriptions	-	1
Journal subscription renewals	-	8
From Univ. of Oregon Medical School	-	1
Other library requests	-	2

6. OCCUPATIONAL PSYCHOLOGY

6.1 **DELETED** left to pursue graduate studies in psychology at Michigan State University.

6.2 58 individuals consulted in 80 visits on a variety of personal problems, including work clearances and pre-employment screening. Of the individuals, 52% were new, not previously seen.

Of the visits (averaging 1.38 per person), 55% were for functioning problems (job conflicts, interpersonal conflicts, marriage or family problems, etc.) and 24% were for Health Control counseling (control of smoking, weight, or feelings).

Of 39 individuals seen for problems, 87% either continued at work on the same job, transferred, or were cleared for a return to work. Of these, 20% also were referred to outside sources for further counseling, 5% of the group were either hospitalized or on medical leave.

Of the 15 new individuals seen for functioning problems, 47% were referred from Occupational Medicine and 40% were self-referrals. For this new group, 94% were classified as Situational Stresses (moderate anxiety, specific problems).

Of the 95 pre-employments, 36% were assessed in detail because of elevated screening scores. Of this latter group, 6% were interviewed, 50% will be followed up but all were ultimately accepted for hiring.

6.3 Some monthly comparisons are as follows:

	<u>Present</u> <u>Month</u>	<u>Year To</u> <u>Date</u>
Total individual cases	58	542
Total new cases	30	321
Total employee visits	80	737
Functioning problems	44	311
Work clearance exams	7	40
Health control counsel.	19	227
Problem drinking	6	27
Pre-Employment exam.	2	22
Other assessment prog.	2	85
Mean Contact/Person	1.38	1.36
Managers consulting	12	139
Management consultations	26	177
Physician consultations	13	-
Other consultations	11	-
Off-site talks	2	11
On-site talks	1	16

7. ENVIRONMENTAL HYGIENE

- 7.1 Five shipments totalling 214 filters were received and tested. One of the shipments contained 29 rejects (about 14%) due primarily to gaskets. Seventy-two filters are on hand for testing and 200 scheduled for arrival.
- 7.2 A fire protection survey of the 747 Building was made by a representative of H & S, RLO. The major item was that it was recommended that the large DOP filter tester be equipped with a CO<sub>2</sub> protection system. Steps are being taken to carry this out.
- 7.3 The program for the testing of high efficiency mask cartridges is under way. The EHS Filter Testing Station will be testing all new cartridges as received from the vendors and on an interim basis EHS is also testing used cartridges. The latter phase is to be taken over by the Mask Cleaning Station, ITT/FSS, when they receive their Q-127 tester.
- 7.4 Of 2000 new Acme mask cartridges ordered, 628 were received and tested. Of These 61 did not meet specifications. Scheduled for receipt are 2000 MSA cartridges.
- 7.5 Respirator fitting tests were made on three ARHCO employees experiencing mask fit difficulties. One of the three was obtaining a protection of only 92% with a small size assault mask.
- 7.6 Fifty uranine samples were analyzed for the program of evaluating the ARHCO Adhesion-Exit protection suit. To date 15 entries into the uranine test chamber have been made. Protection factors in the breathing zone have been greater than 10,000.

- 7.7 A talk was presented by ~~DELETED~~ on respiratory protective devices to the ARHCO radiation monitors at their monthly safety meeting.
- 7.8 Initial steps of resuming the Gasket Study as related to HEPA filters have been undertaken. When the facility has been set up and new gaskets procured, tests will be commenced.
- 7.9 Progress continued on EHS's phase of the AEC Mortality Study by resurrection of the old Hanford contractor organization code numbers. These are being compiled from many sources and correlated with work activities. Completion of this is mandatory before EHS's field studies can commence.
- 7.10 A presentation of the objectives and procedures to be used in EHS's portion of the AEC Mortality Study was presented at the Contractors' Health & Safety Meeting by ~~DELETED~~ and ~~DELETED~~.
- 7.11 The study of asbestos exposures at Hanford was initiated. Preliminary efforts are being directed toward identifying the materials and locations of use to assist in determining appropriate sampling methods.
- 7.12 Air samples were collected and analyzed gravimetrically for Fission Products Processing, ARHCO, to assist in assessing the dust loading of the 271-B HEPA filter bank.
- 7.13 A conference with BNW was attended to discuss EHS's progress in evaluating their 300 Area stack emissions in connection with the requirements of Presidential Executive Order 11282. Data relative to the discharge of toxic chemicals was given.
- 7.14 A meeting was attended with representatives of ARHCO and Atmospheric Physics, BNW, to assist ARHCO Engineering in their efforts to reduce NO<sub>x</sub> emissions. Items of principal concern were a clarification of TLV's and meteorological considerations.
- 7.15 Preliminary planning was undertaken with respect to a trailer size air surveillance facility. Specifications on layout requirements were submitted to ITT/FSS for review.
- 7.16 Twenty samples of Columbia River water and eight Project well samples were collected and analyzed for chromium and nitrate ion, as appropriate. There was no demonstrable change in concentrations since previous tests; all samples being below the established limits for drinking water standards.
- 7.17 Work is continuing by Hanford Engineering Services of development of a project proposal for an addition to 747 Building. Retention of the existing rail spur to the building is currently being questioned.

7.18 Reports issued by Environmental Health Sciences are as follows:

- 10-5-67      SPRING WATER SUPPLY - TOP OF RATTLESNAKE MOUNTAIN  
                 D. E. Anderson
- 10-12-67     MERCURY SURVEY - 313 BUILDING  
                 R. J. Uhle
- 10-9-67      DUST CONCENTRATION IN 271-B VENTILATION  
                 R. J. Uhle
- 10-13-67     PAINT GRADE TALC  
                 D. E. Anderson
- 10-18-67     MERCURY SURVEY - 325 BUILDING  
                 D. E. Anderson

8. RELATIONS AND SERVICES

- 8.1 Three employees were added to the roll, **DELETED**, Hygienist;  
**DELETED**, Laboratory Technician; and **DELETED** Clerk.  
The latter was rehired after working this summer as a YOP.
- DELETED** was transferred from Research to General (Financial).
- 8.2 There were no security violations or infractions reported. There were no security meetings. Two Security Orientations were given - **DELETED** and **DELETED** AEC Security made its annual appraisal.
- 8.3 Two medical treatment injuries were reported. AEC made its annual Safety and Fire Appraisal.
- 8.4 A meeting of contractor personnel representatives was attended at which plans were laid for a "Plans for Progress" meeting to be held a week later. It was agreed that a list of Tri-City business leaders should be prepared and that invitations be issued to those listed. At the meeting on September 13, the Foundation was represented by the Medical Director and the Relations and Services Representative. About forty people attended. The consensus was in favor of establishing some kind of a merit employment counsel in the Tri-Cities. Principal speakers were Fletcher Puckett of General Dynamics and Art Fletcher, DUN.
- 8.41 **DELETED**, Richland Laundry visited to confer on the problem of items apparently lost by the laundry. He agreed to replace them but indicated that cost of counting would have to be factored into the next bid.
- 8.5 The Relations and Services Representative attended a briefing on the Value Engineering course to be given by ITT/FSS in October. An employee of the Foundation will enroll.

- 8.6 Battery meters were installed in the ambulances to help avoid vehicle failures from this cause. The meters record battery condition.
- 8.7 Four employee suggestions were acted upon by the suggestion committee. Two were accepted, two rejected.

9. CONTRACT ADMINISTRATION AND FINANCE

9.1 Changes in Force

Total on roll August 31, 1967	70
Additions:	
<del>DELETED</del> - Hygienist	
Adm. Clerk (Rehire)	
<del>DELETED</del> • - Technician	3
Removals:	
Summer Employee	
<del>DELETED</del> - Summer Employee	<u>(2)</u>
Total on roll September 30, 1967	<u>71</u>

- 9.2 Absenteeism in September (four week period) totaled 137 hours, or 1.2% of available hours. Absenteeism for the first quarter of FY 1968 was also 1.2% and compares favorable with the 1.8% incurred in FY 1967 during the same period.
- 9.3 Overtime during the first quarter of FY 1968 amounted to 284 hours, a decrease of nearly 100 hours when compared to the same period last year.
- 9.4 Approval letter ATH17 regarding exempt salary changes was transmitted to the AEC for approval. Approval letter ATH18 containing a request for funds for Training and Professional meetings was also transmitted to the Commission.
- 9.5 The lease agreement for space in the Medical-Dental Building has been completed and all parties involved have approved the lease which will expire on June 30, 1968. The contract for laboratory services with Kadlec Methodist Hospital is being prepared.
- 9.6 Gross operating costs during September amounted to \$92,000, which was also the amount budgeted. At the end of the first quarter gross costs exceeded the budget by nearly \$3,500, however, revenue of \$5,000 was sufficient to result in a net underrun of \$800. Nearly all categories of expense were higher than budgeted and only the underrun in the salary accounts prevented a substantial budget overrun.

Following are summaries of operating costs:

Total Operating Costs

	<u>August</u>	<u>September</u>	<u>To Date</u>	<u>Budget</u>	<u>R%</u>
Operating Costs	\$78 305	\$77 278	\$228 667	\$246 480	107.8
Research	17 083	12 200	45 818	28 800	62.9
Total Costs	95 388	89 478	274 485	275 280	100.3

<u>Cost by Type</u>	<u>August</u>	<u>September</u>	<u>To Date</u>	<u>% of Total</u>
Salaries & Emp. Benefits	\$57 021	\$ 54 676	\$167 168	60.9
Mtls. & Supplies	4 910	1 528	9 457	3.5
Other Direct Costs	13 551	14 103	39 360	14.3
Charges by Other Companies	22 014	21 730	63 485	23.1
Less: Revenue	<u>(2 108)</u>	<u>(2 559)</u>	<u>(4 985)</u>	<u>(1.8)</u>
Total Cost	<u>\$95 388</u>	<u>\$ 89 478</u>	<u>\$274 485</u>	<u>100.0</u>

Cost by Organization

General Administration	9 628	11 686	31 992	11.7
Finance	3 485	3 503	10 214	3.7
Psychology	3 505	3 117	9 566	3.5
Records & Statistics	12 274	11 327	34 046	12.4
Nursing	26 478	25 467	77 819	28.3
Medicine	13 957	17 534	46 931	17.1
Environmental Sciences	13 534	8 437	30 733	11.2
Research (Excl. Env. Sc.)	<u>12 527</u>	<u>8 407</u>	<u>33 184</u>	<u>12.1</u>
Total Cost	<u>\$95 388</u>	<u>\$89 478</u>	<u>\$274 485</u>	<u>100.0</u>

P. A. Fuqua, M.D.  
Medical Director

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