UNITED STATES GOVERNMENT

Memorandum

TO : Eler R. Price, Director
Division of State and Licensee Relations

DATE: APR 2 2 1968

THRU: James R. Mason, Assistant Director, SLR

FROM: for Glenn O. Bidinger, Chief, State Agreements Branch
Division of State and Licensee Relations

SUBJECT: EVALUATION OF THE NEBRASKA RADIATION CONTROL PROGRAM

ERP 4/22/68

Attached is our staff evaluation of the Nebraska Radiation Control Program for the period September 28, 1967 to March 27, 1968.

Attachment:
Evaluation

cc: R. H. Engelken, CO:Hq, w/att
D. I. Walker, CO:IV, w/att

AEC STAFF EVALUATION OF THE
NEBRASKA RADIATION CONTROL PROGRAM
FOR THE PERIOD
SEPTEMBER 28, 1967 TO MARCH 27, 1968

The third review meeting was held with the State of Nebraska on March 26-27, 1968 in Lincoln. The AEC was represented by G. Wayne Kerr, Division of State and Licensee Relations. The State of Nebraska was represented by Heinz G. Wilms, Director, Division of Radiological Health, and at various times by Orlen Johnson (PHS Assignee) and Ellis Simmons, Radiological Health Specialist. A summary discussion of the meeting was held with Dr. Lynn Thompson, State Health Officer on March 27, 1968.

During the summary meeting Kerr expressed satisfaction over the current status of the agreement material program. He also indicated that the institution of an intensive radium inspection program, planned for fiscal 1969, was highly desirable. Although the State plans to begin revision of their regulations this year Kerr encouraged the State to do this periodically. Kerr stated that the Nebraska program has the potential for some serious problems; namely, the limited budget for the current fiscal biennium and the inability to replace Dr. Johnson, the PHS assignee, with a State employee. The lack of adequate funds has resulted in the delay of radium inspections until July 1, 1968, some minor cutbacks in the environmental surveillance program and the plan to conduct no followup of x-ray surveys in fiscal 1969. The State was encouraged to take the necessary steps to ensure that the State can provide a more balanced radiation control program. Dr. Thompson and Wilms were both aware of the potential problems discussed above. They both indicated that these problems can be overcome. Preliminary plans are being made to reorganize the Health Department in fiscal year 1969. This will apparently be done in such a manner that the Division of Radiological Health will not be funded separately by the legislature.

Conclusion

Based on the information obtained during this review meeting and the material received from the State under the exchange-of-information program, it is the staff's conclusion that the Nebraska program for regulation of agreement materials is adequate to protect health and safety and compatible with the Commission's program. This view is supported by the staff's evaluation of the State's personnel, and examination of the State's licensing and compliance activities, including a review of selected Nebraska license and inspection files. (See Appendix F). Our letter to the State Health Officer following this meeting indicated our concern about the current budget and personnel situation. We also expressed

concern about the effect on the total radiation control program since a radium survey program has not yet been initiated and no follow-up program on x-ray surveys will be conducted in fiscal year 1969. Appendix C is a list of questions and answers concerning the details of Nebraska's licensing, compliance and enforcement activities, and other selected phases of the State's program.

Organization, Personnel and Training

Wilms is Director of the Division of Radiological Health. He reports directly to Dr. Lynn Thompson, State Health Officer. Wilms' staff consists of Dr. Orlen Johnson (PHS assignee) and Ellis Simmons, Radiological Health Specialist II. Dr. Johnson will be reassigned in the summer of 1968 and it is unlikely that PHS will furnish a replacement. Further, the State cannot hire a replacement for him in fiscal year 1969. Wilms performs most of the licensing with some assistance from Johnson and Simmons. In recent months Johnson has been performing materials license inspections, registrations, educational activities and some environmental surveillance. Simmons has been performing x-ray inspections and a few teletherapy inspections and will be performing materials license inspections when Dr. Johnson leaves.

Simmons attended a one-week PHS course on Radium Hazards in November 1967. Johnson attended a two-day Dental Radiological Research Planning Session at the University of Illinois in February.

Members of the State's Radiation Advisory Council and Medical Advisory Committee are shown in Appendix D.

Regulations

Nebraska has not formally updated their regulations since the effective date of the agreement but they administratively adopt new AEC regulations. The State plans to draft revisions to their regulations in fiscal year 1969 but printing will be delayed to fiscal year 1970 due to limited funds. A cutoff date of approximately January 1, 1969, will be used for incorporation of changes.

Licensing

Wilms evaluates all license applications with some assistance from Johnson and Simmons. Wilms signs all licenses and the Health Officer co-signs the medical licenses.

There are currently about 68 agreement material licenses in Nebraska and 44 radium registrants. During the last six months 21 new licenses (including replacement of some AEC licenses) were issued and 17 amendments granted. Radium registrants are treated in a manner similar to licensing of other radioactive material users. One prelicensing visit was made in this period to Dale Electronics which wants to use Am 241 in surge arrestors. This has not yet been approved.

The State has not had any requests for non-routine use of isotopes in humans during this period. Wilms stated that Nebraska will perform inspections of Notifier Corp., which was licensed by Kansas to distribute fire detectors containing radium to exempt persons. The Notifier operation consists of repackaging, relabelling and distribution and does not involve manufacture or assembly.

Compliance

The State continues to follow a policy of inspecting all licensees annually. During the last six months the State made sixteen inspections. However, the bulk of the inspections are performed in the spring and summer months.

Wilms performed nearly all of the initial inspections. Johnson has been performing most of the reinspections. After Johnson's departure, Simmons will spend a considerable amount of time on licensee inspections.

There are very few overdue inspections at present. Wilms maintains a list of all licenses, date last inspected, and due date for reinspection. Reinspections are usually unannounced.

Only three radium users (out of 44) have been inspected on a request basis. The State plans to exert considerable effort on radium inspections during fiscal year 1969.

No incidents were reported to the State since the last meeting. However, Region IV informed the State that an employee of Omaha Testing Labs. had apparently exceeded the 1.25 rem limit for one quarter of 1967. The State determined that the employee received 1.743 rem in one quarter. Records were not available at the time which would have permitted him to receive up to 3 rem in one quarter. Such records were subsequently prepared.

Several inspection reports were reviewed and are summarized in Appendix B. These reports were well prepared and included sufficient information to substantiate items of noncompliance and determine the adequacy of the licensee's operation to protect health and safety. These reports prepared by Johnson, indicated a review by Wilms.

Enforcement

Enforcement action is accomplished by issuance of Form NRH-10 (similar to AEC 591) by the inspector for minor items of noncompliance. All other cases are handled by a letter from Wilms requiring a reply in 30 days. These letters are prepared by the inspectors. In a few cases involving an inspection of a teletherapy licensee in conjunction with an x-ray inspection the letter covered both phases and was signed by Simmons. All x-ray enforcement letters are signed by the individual inspector. There were no unusual enforcement actions in this period.

Emergency Capabilities

The State's radiological emergency plan is presently implemented through an informal structure. It will be formalized in fiscal year 1969. All responses to incidents are made by the Division personnel in Lincoln. The communications systems of the Fish and Game Department, Department of Roads, and Civil Defense are available. A State plane is also available.

Miscellaneous

The State has inspected all x-ray registrants except those in eight counties (Nebraska has 93 counties) in the western part of the State. These will be completed by May 31, 1968. Approximately 15% of those units surveyed were satisfactory at the time of the inspection. The State estimates 75% of the dental units and 50% of the meidcal units are now in compliance. However, this cannot be verified until follow-up inspections are performed which will not be done in the coming year unless a replacement for Dr. Johnson is obtained. The above figures include inspections of hospital x-ray units. The Division of Radiological Health deals directly with the hospitals without going through the State's Division of Hospitals. The hospital units are included in the State's registration data but do not receive a registration certificate.

The State has had to reduce its environmental surveillance program to some degree. No sampling points have been deleted but the frequency of sampling has been reduced. This work is divided between Wilms and Simmons.

The State's budget for the biennium from July 1967 through June 1969 is $64,355 with $36,800 being received from PHS. This budget does not include sufficient funds for the State to hire a replacement for Dr. Johnson.

LIST OF APPENDICES

TOPICS FOR NEBRASKA-AEC
REVIEW MEETING

1. Changes in organization, personnel, and personnel assignments since the last review meeting including additional training, if any, received by State personnel

2. Regulations:

   Discussion of changes to AEC regulations and petitions
   Discussion of changes to State regulations

3. Current State licensing activities including:

   Number of licensing actions (i.e., new licenses, amendments, renewals)
   Unusual license conditions
   Licenses of special interest including broad licenses
   Evaluation of new devices and sealed sources
   Unusual requests for medical uses

4. Current AEC licensing policies and practices:

   Non-medical
   Medical

5. Current State compliance and enforcement activities:

   Inspection workload
   Changes in priority system
   Incidents and overexposures
   Unusual enforcement actions

6. Current AEC compliance and enforcement activities

7. State experience in regulation of non-agreement materials and radiation-producing machines

8. Specific types of information or assistance needed from AEC

9. Review of several State license and inspection files

10. Summary of review meeting

APPENDIX A

STAFF REVIEW OF NEBRASKA
LICENSE AND INSPECTION FILES

The Nebraska licensing actions that were reviewed and discussed below were deemed to be well substantiated and adequate to support the license issuance. The minor discrepancies noted were discussed with the Nebraska staff. The inspection reports were also well prepared and covered the scope of each licensee's program, identified licensee representatives contacted, contained supporting information for items of noncompliance, contained a summary of discussion with licensee management, were sufficiently detailed to determine the adequacy of the licensee's operation to protect the health and safety and indicated a review of the report by Wilms (if prepared by another person).

The following files were examined:

1. Archbishop Bergen Mercy Hospital
   Omaha, Nebraska
   License No. 01-05-01

   This is a diagnostic and therapeutic medical license which replaced AEC license No. 26-9694-1. It was reissued on 12/8/66 and Amendment 1 was issued on 3/29/67 as a result of an application dated 2/2/67. The application contained adequate information to support the issuance of the amendment. The file contained a note regarding a comment we made on this license at the March 1967 meeting.

   The licensee was inspected by Wilms on 7/20/67 and a form NRH-10 issued with 3 items of noncompliance noted (1 related to radium). The form was acknowledged by a Dr. Zastera. The file contained a 1-1/2 page narrative inspection report. The report stated that this was a private practice of 5 or 6 doctors leasing space in the hospital. Kerr told Wilms that the license should probably be reissued to the doctors. (Case 2 below is a teletherapy license issued to the same doctors at the same location as a private practice license.)

   The inspection report discussed the persons contacted, storage of material, instruments and equipment, possession of material, records that were maintained, personnel monitoring and maximum recorded exposures, disposal of material, radiation levels as measured by the inspector, and licensee attitude and plans for corrective action.

2. Drs. Dowell, Kelly, Westera, Wilkie, Kenney and Kelly
Omaha, Nebraska
License No. 01-09-01

This license authorizes the use of 2 sources of 3300 Ci each of Co 60 (1 source for storage) in an AECL Theratron 80 teletherapy unit with a depleted uranium shield. The license was issued on April [illegible] 1967 in response to an application dated March 20, 1967. This license was issued for a new teletherapy installation.

The application referenced a previous AEC license for the training and experience of users. The evaluation of the installation was prepared by A. Mohiuddin, Radiation Physicist at the University of Nebraska College of Medicine. The application was quite well prepared and was adequate to support the issuance of the license.

The file contained a survey report dated 7/7/67 prepared by Mohiuddin. The report was quite complete and Wilms notified the licensee by letter dated 7/14/67 that it was acceptable.

The licensee was inspected on 7/20/67 by Wilms and Simmons. There were no items of noncompliance. The file contained a 1-1/2 page narrative inspection report with 3 pages of check list items for TT units and 1 page of survey results performed by Simmons. The report covered the persons contacted, discussed users, personnel monitoring program, records, posting, instrumentation, function of interlocks and use of beam limits. A clear letter was sent to the licensee on 7/21/67.

3. The Radiologic Center
Nebraska Methodist Hospital
Omaha, Nebraska
License No. 01-07-02

This is a large diagnostic and therapeutic medical license. It was issued on May 12, 1967 in response to an application dated May 3, 1967 and replaced an AEC license. By letter dated May 8, 1967 Wilms requested clarifying information on several items. This information was supplied on May 10.

By letter dated 5/15/67 the licensee requested authority for Mr. Mohiuddin (see 2 above) to open Co 60 cells and change the sources. This authority was granted by Amendment 1 on May 24, 1967. The licensee was inspected on 7/5/67 by Johnson and Wilms and a Form NRH-[illegible] showing no items of noncompliance.

The file contained a 2 page narrative inspection report dated 3/14/68. The report was reviewed by Wilms. The report covered the persons contacted, users of material, procurement procedures, inventory, transfers, storage, personnel monitoring records with maximum exposures noted, survey records, labelling and discussion with management.

4. Omaha Testing Labs. Inc.
Omaha, Nebraska
License No. 01-08-01

This is a radiography license authorizing use at temporary job sites. It was originally issued on 3/15/67 to replace an AEC license. Several amendments had been issued to change users and modify operating procedures. Each was adequately supported by the application. There was a memo in the file regarding a telecon with Region IV, Compliance regarding a possible overexposure. A copy of the film badge report was obtained showing an exposure of 1.743 rem to one employee in one quarter of 1967. The licensee determined that the employee had received no exposure prior to employment with Omaha Testing and was thus able to receive up to 3 rem per quarter. A letter to the licensee dated 2/28/68 instructed the licensee to maintain appropriate records on personnel exposures.

Johnson inspected the licensee on 3/8/68. The file contained a 2 page narrative inspection report. It reviewed the previous items of noncompliance, discussed the licensee organization, persons contacted, users, records of purchases and transfers, leak tests, storage, inventory records, utilization logs, personnel monitoring, calibration of instruments and results of discussion with management. There was one item of noncompliance regarding calibration of instruments at improper intervals.

Johnson and Simmons inspected a field operation of the licensee in Lincoln on 3/15/68. A one page report was prepared regarding this inspection and covered appropriate aspects of the licensee's operation. There were no items of noncompliance.

A letter dated 3/19/68 listing one item of noncompliance for the 3/8 inspection was sent to the licensee requesting a reply in 20 days. A reply dated 3/22/68 was acknowledged by Wilms on 3/26/68 as being acceptable. Since no NRC-10 was issued for the 3/15 inspection and it was not mentioned in Wilms letter of 3/26, Kerr suggested that it should have been referenced in the letter of 3/26 to the licensee.

5. State of Nebraska
Department of Roads
Lincoln, Nebraska
License No. 02-04-01

This license authorizes the use of a 500 mCi Co 60 source and 5 Ci Am 241 source for use in a Lane Wells road logging device at temporary job sites. It also authorizes use of a 100 mCi Am 241 source for use in a Troxler asphalt and moisture content gauge. The license was issued on November 30, 1966 with the road logging device having been previously licensed by AEC. The licensee requested the moisture gauge by letter dated November 22, 1966. A letter from Troxler dated 10/21/66 also furnished information on the device. The information submitted was adequate to support the license issuance.

The licensee was inspected by Johnson and Wilms on 3/30/67. A clear NRH-10 was issued. The file contained a 1-1/2 page narrative report. It discussed the individuals contacted, use, RSO, users training, personnel monitoring, leak testing, surveys, security of material and labelling.

6. Creighton University
Omaha, Nebraska
License No. 01-11-01

This license was issued on June 9, 1967, replacing 4 AEC licenses. It authorizes the use of millicurie quantities of several isotopes and an 80 gram Pu 239 source and a Packard gas chromatograph containing H3. The materials are used for research, development and educational instruction. Users are approved by an isotope committee.

This license was issued in response to an application dated 4/20/67. The application described responsibilities of the isotope committee and its members, method of evaluating users, procurement, inventory control, duties of RSO, instrumentation, personnel monitoring, facilities and equipment, storage, posting, burial ground and the radiation protection program. On 4/28/67 Wilms sent the licensee a 4 page deficiency letter. He asked for additional information on locations of use, replacement of AEC license, administrative control of the isotope committee, emergency procedures, survey instruments, facilities and equipment and waste disposal. The licensee sent additional information on May 16. As a result of a phone call he furnished more information on 6/5/67 and the license was issued on 6/9/67. The information submitted was adequate to support the [illegible]

The licensee was inspected on 3/7/68 by Johnson. The file contained a 3 page report. It covered the persons contacted, licensee organization, users, isotope committee (had not yet met), procurement, inventory, storage, burial site (not acceptable to the State), personnel monitoring and exposures, lack of survey records, discussion with users, and leak test records. The results of the inspection were discussed with the RSO and with a Vice President of the University. They discussed the absence of any isotope committee meetings and failure to maintain survey records. An enforcement letter was sent to the RSO with a carbon copy to the Vice President by Wilms on 3/19/68. In addition to the two items mentioned above it discussed the poor location of the burial site and suggested that a new one be found. A 30 day reply was requested but no reply was in the file.

In addition to the above the following items were discussed with Nebraska:

1. Colin F. Schaeb, M.D.
   Omaha, Nebraska
   License No. 01-15-01

   Condition 11 is the type normally used on an institutional license.

2. Drs. Greene and Snoog
   Omaha, Nebraska
   License No. 01-13-02

   Same as 1 above.

3. Dr. George J. Harlan
   North Platte, Nebraska
   License No. 15-01-01

   Same as 1 above.

   Kerr discussed the use of proper user conditions on medical licenses.

4. Drs. Dowell, Kelly, et al.
   Omaha, Nebraska
   License No. 01-09-02

   Since Abbott no longer supplies Co 60 Actaloy wire sources, Kerr asked where the licensee was obtaining his sources. Other manufacturers designate their sources as Coballoy. (The applicant had requested Actaloy again.)

5. Dr. Robert C. Mahosky
   Doane College
   Crete, Nebraska
   License No. 22-01-01

   This is an academic license which should have been issued to the College

6. Western Electric Company
Omaha, Nebraska
License No. 01-17-01

This license should have the color exemption for the gas chromatograph detector cell label.

QUESTIONS FOR REVIEW MEETINGS

A. Personnel and Training

1. Obtain a copy of the current organization chart. No change from formal submission except environmental surveillance now done by professional staff.
2. What persons are specifically assigned to licensing, compliance, laboratory, radiation machine inspections, etc., activities?
   Johnson and Simmons briefly review license applications but Wilms does critical review and issues licenses. In last few months Johnson has been doing materials inspection, registration program, educational activities and some environmental surveillance including lab analyses. Simmons has been performing x-ray inspections but will soon begin materials inspections when Dr. Johnson leaves.
3. Do you have any new personnel in the radiation control program? If so, obtain training and experience resumes for these persons. Do you have any vacancies in the Radiation Control Program?

   No new personnel.
   No vacancies.

4. Have any of your personnel received additional training since the last meeting? If so, specify the individual, the nature of the course and the duration of the course.
   Simmons attended a one-week PHS course on Radium Hazards in November 1967. Johnson attended a two-day Dental Radiological Research Planning Session at the University of Illinois in February.

5. Have there been any changes in assignment of personnel?

   See 2 above.

6. What are the salary ranges for personnel in the Radiation Control Program?

		Maximum on 7/1/68 to be
Director Rad. Health	$815 - 1055 per mo.	$1100
Specialist II Rad. Health	700 - 905	950
Specialist I Rad. Health	630 - 815	860
Tech. (No position available at present)	490 - 635	665

APPENDIX C

3. Licensing Activities

1. Who evaluates license applications and who approves the issuance of a license?

Wilms evaluates applications with some assistance from Johnson and Simmons. Wilms issues licenses and Health Officer co-signs medical licenses.

2. Do you have a licensing backlog? If so, how many and why?

No.

3. Are all known radium users licensed (or registered)? How many are there? Are your licensing procedures for radium the same as for agreement materials? Yes, 44. The registration procedure for radium users is almost the same as licensing other materials except that handling procedures are not required for radium users.

4. Do you conduct prelicensing visits? If so, how do you determine which applicants are visited? Approximately how many prelicensing visits have you made since the last meeting?

Primarily on new applicants. One such visit made in last six months.

5. Have you instituted any new procedures for evaluating license applications?

No.

6. What unusual specific exemptions from your regulations have been granted since the last meeting?

None.

7. What new or unusual uses of radioactive materials have been licensed? None. Will perform injections at Nutrifier Corp. who Kansas licensed for distribution of Radium fire detectors to exempt persons.

8. What is your system for notifying licensees of the impending expiration of their licenses?

A notice is sent 60 days before expiration of the license. Tickler system is maintained for follow-up.

9. Have you developed any licensing guides? If so, we would like to have copies. No.

10. Are your license files, including license applications, available for public inspection? Only licenses are in public file. Public can see application upon request if it is not proprietary.

11. What is the total number of registrants? Do you feel all radiation-producing machines have been registered?
Two thousand, two hundred units at 1460 facilities. All known ones registered.

C. Evaluation of Medical Uses

1. To what extent do you use your medical advisory committee in evaluating applications for medical uses of radioactive material? Obtain current list of members and their affiliations. Committee evaluates all non-routine applications. Drs. Frazer and Hunt, Radiologists, Dr. Papenfuss, Patholigist and Dr. Wegener, Dentist.

2. Do you use your medical advisory committee as a committee or do you consult with members individually? As a whole committee.

3. Do you require a research protocol similar to that required by the AEC in evaluating new or unusual medical uses? Are protocols distributed to the Medical Advisory Committee for their review and evaluation? Do you require reports of results of nonroutine uses?
Yes to all 3.

4. To what extent have you issued broad medical licenses? Do you examine the qualifications of members of the isotope committee and their procedures for approving new uses and users? Do you require such licensees to report new uses and results of these studies to you periodically? University of Nebraska Medical School is the only one. Qualifications of Committee members evaluated. Staff receives a copy of all isotope approvals by the University Committee. Have asked for a report of new uses but none yet received.

D. Compliance Activities

1. What is your inspection workload in terms of man-days per month or percentage of time spent on agreement material inspections?
Approximately 8 man hours per license inspected including travel, preparation and report writing. Sixteen inspections in last 6 months. This will be higher in the summer months.

2. Is your inspection workload current or are there overdue inspections? If there are overdue inspections, how many are there and what type?

A couple are overdue. State has a system for determining overdue inspections.

3. How do you determine inspection frequencies and need for reinspections?

General policy is to inspect each licensee annually. No changes anticipated in this policy at present.

4. What is your policy regarding announced vs. unannounced inspections?

All original inspections were announced. Reinspections are mostly unannounced but Drs. are announced on the same day.

5. Can you estimate the average length of time you spend inspecting a

typical radiographer - 1 hr.
private practitioner - 1 hr.
medical institution - 2 hrs.
university - up to 15 hrs.

Average 8 man hours per license total.

at licensee facility.

6. What type of instruments do your inspectors normally carry on inspection visits? What types of surveys do you make during an inspection?

G-M, Cutie Pie, and R meters. Take wipes when indicated, radiation levels and teletherapy outputs.

7. Do you write an internal report for all inspections? How are such reports processed including supervisory review?

Yes. Wilms reviews all reports prepared by other inspectors.

8. With what level of management do you orally discuss inspection results?

Highest inspector feels necessary.

9. Does the inspector make specific suggestions for corrective action to be taken by the licensee?

Yes.

10. Are inspection reports utilized in future licensing actions?

Licensee would still have to submit supporting information.

11. Have you noted any licensees who are in apparent noncompliance with AEC regulations? If so, we would appreciate your notifying our Regional Compliance office of such occasions.

No.

12. Do you inspect out-of-state firms licensed by you or working under reciprocity in your state? None since last meeting. Do inspect some of them.

13. Have all radium users in the state been inspected? What percent of these users are in compliance? Have done 3 on a request basis. Two of these are in compliance. Concerted Radium effort will begin about July 1, 1968.

14. What percentage of the registrants in the state have been inspected? What percent of the medical, dental and industrial users are in compliance? All have been inspected in all counties except 8 (Nebraska has 93 counties) in the Western part of the State. This includes hospital x-ray inspections. These 8 counties will be finished by May 31. Approximately 15% were satisfactory when surveyed. Estimate 75% of dental now in compliance and 50% of medical. This cannot be verified until follow ups are made and this will not likely be done in fiscal year 1969.

E. 1. Describe your compliance enforcement procedures. Do you follow a system similar to the AEC's 591, 592 formal report system?
Use form similar to 591. All others receive a letter.

2. Who signs letters going to licensees notifying them of inspection results and how do you determine to whom letters of noncompliance should be directed? Wilms normally. A few teletherapy were signed by inspector. Inspector prepares letter. Letter sent to person in management with whom inspection results were discussed.

3. How do you handle oral and written discussion of poor practices (safety items) which are not specifically violations of the regulations or a license condition? Examples are poor calibration procedures, poor ventilation systems and need for bioassays.
Discussed with management. Not written.

4. What has been the extent of enforcement actions taken against licensees?
None other than letter action.

E-5

5. Do you require a written response to letters of noncompliance within a specified time period? Do you have any problem in obtaining adequate responses to letters of noncompliance? Who determines whether the response is adequate? If the licensee's response is inadequate, what course of action do you follow?

Yes, 30 days. No problem on replies. Inspector and Wilma both review repl.

6. Have you found it necessary to deny any license application or revoke or modify any license?

No.

7. What action is taken when a licensee fails to renew his license or requests termination of his license?

Get status of material in writing.

F. Incidents and Investigations

1. Please describe any incidents and overexposures which have occurred since the last r. . What was the extent of the investigation conducted in those cases? Region IV informed Nebraska of possible over-exposure at Omaha Testing Labs. Inspection revealed one employee received 1,743 rem in one quarter of 1967. Records were then completed which would allow licensee to use 3 rem/quarter limit.

2. How do your techniques for investigations differ from your inspection techniques?

Not asked.

3. Do you have a policy on requiring licensees to make a press release when an incident has occurred?

Licensee would be encouraged to make one but Health Department would make one if necessary.

G. Laboratory Facilities and Services

1. Do you analyze radioactive samples, water samples, etc., which are collected during an inspection, in your Radiological Health organization or does some other division provide these services?
Division of Radiological Health does analyses.

2. What is the time delay in obtaining results of analyses of such samples?
None

3. Do you have any difficulty in obtaining "immediate results in emergency situations?
No.

4. Do you, or the persons providing laboratory services for you, have the capability for analyzing most types of samples which you might submit?
Cannot analyze low energy gammas or do wet chemistry.

5. If not, how would you arrange to have unusual type of samples analyzed?
Send to V. A. Hospital in Omaha or to PHS Labs.

6. Do you have facilities for calibrating all types of instruments which you possess and use? 20 mCi Co 60 source available, neutron source at V. A. Omaha. X-ray checks at University of Nebraska.

H. Emergency Capabilities

1. Do you have a formal plan for responding to emergencies?
Will finish next fiscal year. However, it is presently implemented through an informal structure.

2. What arrangements have been made for a statewide communications network for use in conjunction with radiation emergencies?
Fish and Game Department, Department of Roads and C. D. communication systems are all available. State plane is available.

3. Do you have emergency teams established to respond to emergency situations?
Only Division personnel at Lincoln.

I. Miscellaneous

1. What problems have you encountered in the reciprocal recognition of licenses?
None.

2. Have you evaluated any new sealed sources or devices of which we are not aware? We would like to receive a copy of evaluation sheets prepared for such items. No mfgs. in Nebraska except Nuclear. See question B.7 above.

3. How do you use your technical advisory committee (other than medical) in your program? Several subcommittees of Radiation Advisory Council used for various functions. Full council meets quarterly. See Appendix D for current members.

4. What is your budget for the current fiscal year? $64,355 for biennium (July 1967-thru June 1969).

5. Has there been an increase or decrease in budget allotted to the program? Decrease of $9,256 over last biennium.

6. Do you receive funds from PHS, Defense Dept. or other sources? $36,800 from PHS.

7. Do you plan to incorporate recent changes in AEC regulations in your regulations?

Administratively adopt our changes. Work on a revision will begin in fiscal year 1969 but will not be printed until FY 1970. Cut off date will probably be about January 1, 1969.

APPENDIX "D"

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