Form AEC-591
(4-64)

UNITED STATES ATOMIC ENERGY COMMISSION
DIVISION OF COMPLIANCE

INSPECTION FINDINGS AND LICENSEE ACKNOWLEDGMENT

IEC(2), II Ce. #4

1. LICENSEE	2. REGIONAL OFFICE
Sinclair Research Inc. 400 East Sibley Boulevard Harvey, Illinois	REGION III, DIV. OF COMPLIANCE OAKBROOK PROFESSIONAL BLDG. OAK BROOK, ILLINOIS 60523
3. LICENSE NUMBER(S) 12-140-4	**4. DATE OF INSPECTION** 5-25-65

5. INSPECTION FINDINGS

- [X] A. No item of noncompliance was found.
- [ ] B. Rooms or areas were not properly posted to indicate the presence of a RADIATION AREA. 10 CFR 20.203(b) or 31.302
- [ ] C. Rooms or areas were not properly posted to indicate the presence of a HIGH RADIATION AREA. 10 CFR 20.203(c) (1) or 31.302
- [ ] D. Rooms or areas were not properly posted to indicate the presence of an AIRBORNE RADIOACTIVITY AREA. 10 CFR 20.203(d)
- [ ] E. Rooms or areas were not properly posted to indicate the presence of RADIOACTIVE MATERIAL. 10 CFR 20.203(e)
- [ ] F. Containers were not properly labeled to indicate the presence of RADIOACTIVE MATERIAL. 10 CFR 20.203(f) (1) or (f) (2)
- [ ] G. Storage containers were not properly labeled to show the quantity, date of measurement, or kind of radioactive material in the containers. 10 CFR 20.203(f) (4)
- [ ] H. A current copy of 10 CFR 20, a copy of the license, or a copy of the operating procedures was not properly posted or made available. 10 CFR 20.206(b)
- [ ] I. Form AEC-3 was not properly posted. 10 CFR 20.206(c)
- [ ] J. Records of the radiation exposure of individuals were not properly maintained. 10 CFR 20.401(a) or 31.203(b)
- [ ] K. Records of surveys or disposals were not properly maintained. 10 CFR 20.401(b) or 31.303(d)
- [ ] L. Records of receipt, transfer, disposal, export or inventory of licensed material were not properly maintained. 10 CFR 30.41, 40.61 or 70.51
- [ ] M. Records of leak tests were not maintained as prescribed in your license, or 10 CFR 31.105(c).
- [ ] N. Records of inventories were not maintained. 10 CFR 31.106
- [ ] O. Utilization logs were not maintained. 10 CFR 31.107

Loren J. Hueter
(AEC Compliance Inspector)

6. LICENSEE'S ACKNOWLEDGMENT

The AEC Compliance Inspector has explained and I understand the items of noncompliance listed above. The items of noncompliance will be corrected within the next 30 days.

(Date) (Licensee Representative – Title or Position)

COPIES: [ ] LICENSEE; [✓] COMPLIANCE REGION; [ ] DIV. OF ST. & LIC. REL.; [ ] DIV. OF COMPLIANCE

Mailed: 6-10-65

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REPORT COMPILED SHEET

Identifying Information Type report (circle) 591 592

1. Licensee Sinclair Research, Inc.
2. Address 400 E. Sibley Boulevard
   Harvey, Illinois
3. License No(s) 12-140-4
4. Date of Inspection May 25, 1965
5. Inspector Loren J. Heuter
6. Status of Compliance Compliance

Items of Noncompliance

7. Section of Regulation or License Condition / Details Paragraph

A	A
B	B
C	C
D	D
E	E
F	F
G	G

Classified Information

8. This report contains classified or business confidential information. Yes (No)

Loren J. Heuter 6-18-65
Inspector Date

S. Jue 6-22-65
Reviewer Date

HEALTH PHYSICS ANALYSIS

This licensed program covers a broad license under which byproduct materials are used on a relatively small scale for research and development purposes. The licensee has a gas chromatograph at the present time which utilizes a 200 millicurie tritium foil which has a temperature limiting device. The licensee also uses tritium, Carbon-14, and Krypton-85 on occasion at the refinery facilities for making studies on the effectiveness of the refinery system which involves the distribution of trace amounts of these materials in ~~in~~ products which are distributed to the public. However, the licensee maintains the concentrations within limits authorized in the ~~xxxxxx~~ license conditions.

The licensee also does some work in connection with wear studies by using irradiated piston rings in special motors which generates radioactive waste in small quantities in a form of the oil used in the motors.

All uses of radioactive materials are under the ~~is~~ supervision of Dr. Snow, the Radiological Safety Officer. The majority of all uses of license materials are within the radiation division itself, which is composed of three individuals, of which Dr. Snow is Director. Dr. Snow impressed the AEC inspector as ~~an~~ being very competent in supervising the use of byproduct material and/in the evalution of safety problems. The items of noncompliance noted during the last previous inspection had all been corrected by the licensee, and no items of noncompliance were observed during this inspection.

Dr. Snow appeared to be very cooperative and desirous ~~evaluable~~ of operating in compliance with the AEC requirements. The AEC inspector is of the opinion that the facilities, equipment, procedures, and supervision of this program are satisfactory and that the program is being conducted with proper regard for the health and radiation safety of all individuals concerned.

Sinclair Research, Inc.
Harvey, Illinois
License No. 12-140-4
May 25, 1965

591 EXPANDED NOTES

GENERAL INFORMATION

9. This inspection was conducted on an announced basis, Dr. Adolf I. Snow, Chairman of the local Isotope Committee, having been contacted on May 21, 1965, concerning the plans for this inspection.

10. Mr. Gary Harman, a representative for the Health Organization of Cook County, was contacted on May 24, 1965, concerning the plans for this inspection. Mr. Harman stated that Mr. Benn Leland was on vacation and would not be available until some time in June and that due to the heavy work load, a representative would not accompany the AEC representative.

11. The following individuals were interviewed and furnished the information set forth in this report:

    Dr. Adolf I. Snow, RSO and Chairman of the Radioisotope Committee
    Mr. Lloyd Baillie, Research Chemist
    Mr. George Uhl, Research Chemical Engineer
    Mr. Hugh Skonecke, General Engineer in charge of Engine Laboratory

INSPECTION HISTORY

12. The initial inspection of this licensed program was conducted on July 17, 1958, and reinspection number 1 was conducted on March 18, 1960, no items of noncompliance being observed in either of these inspections. Reinspection number two was conducted on November 8, 1961, with three items of noncompliance being observed all pertaining to posting and labelling. Reinspection number three was the last previous inspection and revealed three items of noncompliance dealing with over-possession, leak test records and frequency of conducting leak tests.

13. Reinspection number four is the subject of this report. This inspection revealed no items of noncompliance.

CORRECTION OF PREVIOUS ITEMS OF NONCOMPLIANCE

14. The licensee was found to be in noncompliance with License Condition No. 8(b) in that the licensee possessed at the time of the last inspection 2.02 curies of Krypton-85 whereas the license permitted a maximum possession limit of one curie of this isotope at that time. This item of noncompliance has been corrected by the issuance of Amendment No. 8 to the license on November 5, 1963, authorizing a maximum possession limit of 20 curies of Krypton-85.

15. At the last previous inspection, the licensee was found to be in noncompliance with License Condition No. 14 in that leak test records maintained of the leak tests conducted on the 10-millicurie Strontium-90 source contained in the Cenco Beta Ray H/C Meter did not have the results of the leak tests recorded in units of microcuries. The licensee has corrected this item of noncompliance in that all leak tests records ~~of this source maintained~~ maintained for leak tests conducted since the last previous inspection have been m~~aintained~~ in units of microcuries as required.

16. The licensee had also been found in noncompliance with License Condition No. 14 in that leak tests had not been conducted within the required six month intervals in all cases on the 10-millicurie Strontium-90 source which had been maintained in storage by the licensee. The licensee had corrected this item of noncompliance in that the 10-millicurie Strontium-90 source in question had been leak tested since the time of the last previous inspection within the required six month interval in all cases.

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PROGRAM

17. The program under this license is essentially unchanged from that reported in previous inspection reports. The licensee's primary use of radioisotopes is for the conducting of research and development using primarily Carbon-14, tritium, and Krypton-85 for refinery tracer studies. The tracer studies are conducted periodically on an "as needed" basis. The licensee also uses irradiated piston rings periodically for purposes of wear studies.

18. The licensee has made only six procurements of radioactive material throughout all of 1964. In general, materials are procured on an "as needed" basis. Dr. Snow and Mr. Baillie estimated the following isotopes and quantities on hand at the time of this inspection, which is the result of procurement of byproduct materials which have not been used or disposed of:

Isotope	Quantity
Carbon-14	32.34 millicuries
Tritium	32.63 curies
Krypton-85	1.8 curies
Cesium-137	0.6 curies (300 millicuries as sealed source and 10 millicuries as sealed source fabricated by the licensee since last inspection and 290 millicuries as tracer)
Nickel-63	21 millicuries
Strontium-90	30 millicuries (contained as 3 10-millicuries sealed sources and one 3.5-microcuries sealed source in the Jordan monitor)
Cobalt-60	3 millicuries
Silver-110	1 millicurie
Cerium-144	1 millicurie
Chlorine-36	50 microcuries
Irradiated piston rings (Iron-55 and -59)	25 rings total on hand each originally containing from 2 to 12.5 millicuries per ring
High speed steel cutting tool (Cobalt-60)	15 tools on hand containing 14 millicuries per tool as of May 1961, the time of receipt

19. All of the above isotopes are used as tracers in compounds unless stated otherwise. All of the above uses, isotopes, amounts are in accordance with this license.

ORGANIZATION AND ADMINISTRATIVE CONTROL

20. Dr. Snow is the Chairman of the Radioisotope Committee and is the Radiological Safety Officer and stated that he is responsible for all uses of licensed materials at Sinclair Research. This responsibility extends to other refineries and locations other than Harvey whenever Sinclair Research is involved in tracer programs being conducted at these other refineries.

21. The organization and administrative control is identical to that as reported in paragraph 24 through 27 in the last previous inspection report.

FACILITIES

22. The facilities are the same as previously reported. The N Building is the major facility and is occupied by the Radiation Division only. The N Building houses a high level Cobalt gamma facility which is authorized under another license issued to the licensee. This building also houses the Radiation Division's isotope laboratory. Photographs of the floor plans of the isotope laboratory may be found in the Region III license correspondence file. The Radiation Division is composed of three individuals, and the entire

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22. (Cont'd) N Building is kept locked at all times unless at least one of the three individuals is present.

23. Radioactive materials are routinely used at only one other area at the Harvey complex, that being the engine laboratory, which is located in a separate building. The engine laboratory facility consists of a storage vault where irradiated piston rings may be stored prior to use and after use and also houses specially constructed engines in which piston rings can be mounted for wear studies. The only contamination that is involved in the piston ring program is in the oil used in the engines, which becomes contaminated with the worn off particles of the piston rings, the oil being kept in a closed system, and routinely monitored as a part of the program. At the time of the inspection, the licensee had a total of eleven piston rings being utilized in three separate, ~~holders~~ motors with the remaining fourteen rings being stored in the storage vault along with the fifteen high speed/steel cutting tools containing the Cobalt-60 as previously mentioned.

24. In the isotope laboratory, gamma emitters used under this licensed program are stored in a special fume hood designated as the gamma hood for tracer isotopes. Beta emitters are stored in a separate hood and cabinet arrangement designated as the beta hood for tracer isotopes. A special exhaust had been connected to the cabinet of the beta hood arrangement as an added precaution which puts a negative pressure on the cabinet at all times.

25. In the engine wear lab, the storage vault used for housing the irradiated piston rings and the irradiated cutting tools is maintained in a closet designated as E-9. The storage wells, ~~into~~ on the concrete floor. The storage area is kept locked with Mr. Skonecke, Head of the engine wear lab project, having the only key. Mr. Skonecke stated that he personally maintains all receipts and transfers of the irradiated piston rings and personally handles them with handling tongs, etc., when placing the rings on and off of the pistons. The licensee has two waste storage facilities. The first is a 3,000 gallon capacity retention tank which is connected to a hot sink in the isotope laboratory in the Radiation Division N Building. This retention tank is used only for aqueous radioactive waste, and Dr. Snow stated that the tank is less than half full and has never been full or emptied since its installation. Non-aqueous waste such as contaminated oil, contaminated rags, and other solid waste is collected and placed in 55-gallon drums and placed in the drum storage area which is an open area located out of doors near the west boundary of the Sinclair property. The low level waste is collected and placed in these drums and stored in this area pending collection of a sufficient quantity to warrant disposal by way of a licensed commercial concern.

26. Various instrumentation for radiation monitoring and measuring is possessed by the licensee. The licensee possessed three portable survey meters of the Nuclear Chicago Model 26-12 type which is a GM type instrument having a range of 0 to 20 mr/hr. The licensee also has a "cutie pie" (in the engine test laboratory) which has a range from 0 to 1.5 r/hr and a low range Juno ionization chamber type survey meter having a range from 0 to 5 r/hr and a high range Juno with a range of 0 to 25 r/hr. The licensee also has a single ~~chamber~~ channel pulse height analyzer, a well counter, ultra-scaler, a new automatic Packard Tri-Carb scintillation spectrometer for use in the tritium tracer studies and a Tracerlab scintillation counter in the counting room ~~of~~ adjacent the engine laboratory facility. The licensee does its own instrument calibration using a 6-millicurie radium source which was calibrated by R. S. Landauer, Sr. Dr. Snow stated that minor maintenance is performed on the instruments by Sinclair but that major repairs are done by the instrument supplier.

27. The licensee stated a Mines safety appliance ~~"fixedflow~~ "fixt-flow" air sampling unit is available and can be used for air samples, although the licensee has no routine air monitoring program.

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PERSONNEL MONITORING AND EXPOSURE DETERMINATION

28. The licensee has film badge service for 43 people furnished by Landauer and Company. The licensee makes use of two films, back to back, one film being used on bi-weekly basis and the other on a quarterly basis. Film badge records were inspected in detail from January 6, 1964, through January 3, 1965, and revealed that the highest quarterly exposure during this period was 100 mr with most quarterly exposures being minimal. The licensee also maintains a Form AEC-5 with the appropriate information.

29. The licensee has several dosimeters with a range of 0 to 200 mr which are used on occasion for special applications but are not used routinely and the licensee does not maintain records of these dosimeter readings when they are used.

RADIATION SURVEYS

30. Mr. Skonecke stated that the engine lab personnel have their own survey instruments and provide their own radiation monitoring and that each shipment of irradiated piston rings are personally monitored by him as they are transferred from the shipping container into the storage vault or from the storage vault into the test engine and vice versa. These surveys indicate that the irradiated piston rings are generally in the vicinity of approximately 10 mr/hr at one meter. The entire transfer from the vault to the test engine usually takes less than half a minute and use of tongs whenever possible is required to reduce the exposure to the hands to a minimum.

31. According to Dr. Snow, all incoming shipments of radioactive material are ~~was~~ surveyed both for radiation levels and contamination as a routine check and are not necessarily recorded. The wipe consists of the use of a paper towel and the monitoring of this wipe is performed with a portable survey meter. No smear surveys of floors or horizontal working surfaces, etc., are performed by the licensee on a routine basis. The licensee also performs no routine air sampling.

POSTING AND LABELLING

32. Form AEC-3,"Notice to Employees", was observed to be posted on the bulletin board in the N Building (Radiation Division).

33. Signs bearing the radiation caution symbol in appropriate colors and stating the words "Caution, Radioactive Material" were observed to be posted at the entrance to the isotope laboratory in the N Building and at the entrance to the storage facility at the engine wear studies building and at the entrance to the individual rooms housing the engines containing the irradiated piston rings and at the drum storage area.

34. It was also noted that the other large containers such as the beta hood and the gamma hood were labelled to indicate the presence of radioactive material and also that each individual container housing licensed materials was labelled with the conventional radiation caution symbol and stating the words "Caution, Radioactive Material" and was also labelled as to kind, quantity, and date of assay.

35. The only "radiation area" as defined in Part 20, that existed at the licensee's facility due to licensed byproduct material under this program, was at the waste storage facility where a reading of 50 mr/hr at approximately 18" from one of the barrels of solid waste containing approximately 2 millicuries of Cobalt-60 existed. The contact reading of this barrel was 150 mr/hr. The barrel storage area was properly posted with a sign bearing the radiation caution symbol in appropriate colors and stating the words "Caution, Radiation Area". No "high radiation areas" existed as a result of byproduct material under this program at the time of this inspection.

36. The licensee has a F and M Model 810 gas chromatograph with an electron capture detector which houses a 200 millicurie tritiated foil. This unit was properly labelled on the outside with a sign bearing the radiation caution symbol in appropriate colors and stating the words "Caution, Radioactive Material". This unit was purchased in June of 1964 and has a 225 degrees ~~spontaneous~~ Centigrade temperature thermal switch to limit the temperature of the

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36. (Cont'd) tritium foil. Although the cell housing the foil was not observed due to its confinement within the unit, it was stated by Dr. Snow that the cell itself was properly labelled to indicate the presence of radioactive material, the isotope, quantity, and date of assay.

TRANSPORTATION

37. Dr. Snow stated that the transportation of tracer materials to and from field sites, under this licensed program is performed directly by himself or one of the other two members of the Radiation Division.

LEAK TESTING

38. The following is a list of the sealed sources in the possession of the licensee at the time of the inspection which are subject to the leak testing requirements, and the corresponding leak test data for each of these sources since the last previous inspection:

a. Stontium-90 (10-millicuries) contained in a Cenco beta ray H/C meter. January 3, 1964; June 2, 1964; December 3, 1964.

b. Stontium-90 (9.4 millicuries) as a foil formerly contained in a gas chromatograph, the foil now contained in its cell and stored within the beta hood in the isotope laboratory. February 10, 1964; July 28, 1964; and January 22, 1965.

c. Stontium-90 (10-millicuries) in storage. February 10, 1964; July 28, 1964; and December 11, 1964.

d. Stontium-90 (3.5 microcuries) contained in a Jordan remote area monitor (RAM). February 10, 1964; July 28, 1964; and December 11, 1964.

e. Cesium-137 (300 millicuries) received from Texas Refinery during summer of 1963. February 10, 1964; July 28, 1964; and December 11, 1964.

f. Cesium-137 (10-millicuries) fabricated by the licensee in August of 1963. February 10, 1964; July 28, 1964; and December 11, 1964.

39. All leak tests have been conducted within the required six month intervals and were recorded in units of microcuries indicating that all such tests revealed the presence of less than 0.005 microcuries of removable contamination.

WASTE DISPOSAL

40. Several different methods are used by the licensee in handling radioactive waste. Aqueous waste from the isotope laboratory in the N Building is collected by means of a hot sink and stored in a 3,000 gallon retention tank. As of the date of this inspection, no disposals from this tank have been made. The licensee has also in the past disposed of some radioactive materials by incineration, namely, the incineration of oil containing trace quantities of byproduct material. Dr. Snow stated that there has been no incineration of radioactive waste since the last previous inspection. The license authorized limited incineration of several isotopes.

41. Solid radioactive waste is collected and stored in 55-gallon drums in the drum storage area. When sufficient quantities were accumulated to make the disposal worthwhile, the disposals were made by shipment to a national laboratory. The licensee has made only two such shipments to date; one being in 1957 to Argonne and the other made during the summer of 1963 to Oak Ridge. No such disposals have been made since the last previous inspection. At the time of the inspection, the licensee had on hand approximately 35 barrels of contaminated oil and 3 smaller barrels of solid waste all stored in the radioactive waste barrel storage area. All barrels were appropriately labelled indicating the presence of radioactive material, the isotope, date, and amount.

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42. The licensee disposes of no material by burial.

43. The licensee is authorized to transfer possession and control of the following byproduct materials in the following concentrations and forms as products containing exempt concentrations of byproduct material and is to report such transfers to the director, Division of Licensing and Regulation, at the end of each calendar year in accordance with Section 30.24(h)(2) of 10 CFR 30:

a. Krypton-85 as hydrocarbon gases in concentrations not to exceed 3×10^{-6} microcuries per milli-~~leader~~ liter.

b. Carbon-14 as gasoline at a concentration not to exceed 3.3×10^{-7} microcuries per milli-~~leader~~ liter.

c. Hydrogen-3 as gasoline at a concentration not to be in excess of 8×10^{-5} microcuries per milli-~~leader~~ liter.

The licensee has been sending reports of such transfers to the Division of Licensing and Regulation in July of each year, having sent such reports on July 6, 1962; July 15, 1963, (these two reports having been covered in the last previous report) and July 24, 1964. This latter report indicates that tritium was introduced into gasoline at the East Chicago, Indiana, Refinery on July 5, 1963; July 24, 1963; and October 16, 1963; with a total of approximately 0.312 curies on each date at a concentration of 5×10^{-5} microcuries per milli-liter ~~leader~~ when mixed with the gasoline. It also indicates that Krypton-85 was introduced into hydrocarbon gases on June 16, 1964, at East Chicago, Indiana facility using a total of 0.170 curies, ~~at a concentration of 3.3 x 10^-7 microcuries per milli-liter of product~~.

The concentration of the Krypton-85 in the hydrocarbon gases as the ~~an in~~ product was 3.3×10^{-7} microcuries per milli-liter ~~leader~~. Records of the licensee indicate that since that reporting period, tritium has been introduced into gasoline at the East Chicago, Indiana, Plant on September 14, 1964, with a total of 300 millicuries being used and a concentration of 5.0×10^{-5} microcuries per milli-liter ~~leader~~ in the end ~~an~~ product. Byproduct material has also been used in the form of tritium twice on November 11, 1964, 100-millicuries being used in each test giving an end ~~in~~ product with a concentration of 8.0×10^{-5} microcuries per milli-liter ~~leader~~, both of these tests being at the Wood River, Illinois, Refinery.

44. The licensee also introduces byproduct material into products (distributed to the public) in Texas, which is an agreement State. Dr. Snow stated that Sinclair has a license with the State of Texas for conducting these tests within that state and that the licensee sends a similar yearly statement to the State of Texas indicating the isotope used, the total quantity of byproduct material introduced into the product, the product involved and the concentration in microcuries per milli-liter ~~leader~~.

INCIDENTS OR UNUSUAL OCCURRENCES

45. Dr. Snow stated that there have been no incidents such as overexposures, or theft or loss of byproduct material, excessive levels or concentrations connected with the byproduct material used in connection with this program.

INDEPENDENT MEASUREMENTS

46. Independent measurements of the radiation levels were made at various locations in the licensee's facilities by the inspector with an Eberline model E-500B portable GM type survey meter. The back wall of the gamma hood facility in the radioisotope laboratory has an equivalent of 7 feet of concrete, shielding it from the ~~any~~ adjoining area. A maximum reading of seven mr/hr was obtained at contact with the gamma hood and a maximum reading of 3 mr/hr at 18" from the hood and at 14" from the floor. The smear taken on the front of the base of the gamma hood and analyzed for Region III by ANL indicated that 1100 disintegrations ~~disintegrations~~ per minute of removable contamination was evident on the smear which is detectable but not really significant.

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47. Smears were also taken on the front of the base of the beta hood, on the floor in front of the beta hood, and on the stainless steel lab top in the center of the isotope laboratory room housing the gamma and beta hoods. These three smears were analyzed by Argonne National Lab for beta activity with Nickel-63 being the suspected contaminant and the highest smear indicated 1,000 disintegrations per minute on the sample which was the one on the stainless steel laboratory top and again is not a very significant quantity of radiation. Dr. A. Snow was called concerning these low levels of contamination existing within this facility to make the licensee aware of the levels and to guard against contamination reaching significant levels.

48. At the barrel waste storage facility, the 35 barrels of oil had no significant radiation level associated with them. Two of the three small barrels containing solid waste did have significant radiation levels associated with them, one barrel indicating a reading of 250 mr at contact with a tag indicating that it contained approximately 1 millicurie of Cobalt-60, Carbon-14, and Cesium-137. This level reduced to approximately 5 mr/hr at 18". The other small barrel containing significant quantities of byproduct material was labelled to indicate that it contain~~ing~~s 2 millicuries of Cobalt-60 and also had a reading of 250 mr/hr at contact and a reading of approximately 50 mr/hr at 18" as indicated by the AEC inspector's survey meter as previously described. A maximum reading of 2 mr/hr at contact over the well covers of the vault storage area in the engine test laboratory was obtained and a reading of 0.7 mr/hr maximum at 18" above the well covers was obtained.

49. A waste container was contained in a room of the engine test laboratory which houses Tracerlab scintillation counter. This container is used for the storage of paper towels and other solid wastes. This container had a reading of less than 0.2 mr/hr at contact. This container is eventually dumped into the solid waste barrels at the barrel storage facility used for storage of radioactive materials.

LICENSE CONDITIONS

50. Each license condition was discussed in detail with Dr. Adolf Snow, (some of this has been discussed previously in the report) and it was determined that the licensee is operating in compliance with all the license conditions and requirements.

MANAGEMENT DISCUSSION

51. At the conclusion of the inspection, the inspection findings were discussed with Dr. Adolf I. Snow, the Chairman of the Radioisotope Committee and the Radiological Safety Officer for this licensed program. Dr. Snow was informed that no items of noncompliance had been observed or otherwise noted during the course of the inspection. Dr. Snow was also informed that it had been observed that all previous items of noncompliance observed during the course of the last previous inspection had been appropriately corrected by the licensee. A Form AEC-591 indicating no items of noncompliance was issued to the licensee at that time.