



RESPONSE TO FREEDOM OF INFORMATION ACT (FOIA) / PRIVACY ACT (PA) REQUEST

2000-0041

5

RESPONSE TYPE FINAL PARTIAL

REQUESTER

Monica Gambino/Joseph Pohl

DATE

JUL 27 2000

PART I. -- INFORMATION RELEASED

- No additional agency records subject to the request have been located.
- Requested records are available through another public distribution program. See Comments section.
- APPENDICES Agency records subject to the request that are identified in the listed appendices are already available for public inspection and copying at the NRC Public Document Room.
- APPENDICES **E** Agency records subject to the request that are identified in the listed appendices are being made available for public inspection and copying at the NRC Public Document Room.
- Enclosed is information on how you may obtain access to and the charges for copying records located at the NRC Public Document Room, 2120 L Street, NW, Washington, DC.
- APPENDICES **E** Agency records subject to the request are enclosed.
- Records subject to the request that contain information originated by or of interest to another Federal agency have been referred to that agency (see comments section) for a disclosure determination and direct response to you.
- We are continuing to process your request.
- See Comments.

PART I.A -- FEES

- AMOUNT * You will be billed by NRC for the amount listed. None. Minimum fee threshold not met.
- \$ You will receive a refund for the amount listed. Fees waived.

* See comments for details

PART I.B -- INFORMATION NOT LOCATED OR WITHHELD FROM DISCLOSURE

- No agency records subject to the request have been located.
- Certain information in the requested records is being withheld from disclosure pursuant to the exemptions described in and for the reasons stated in Part II.
- This determination may be appealed within 30 days by writing to the FOIA/PA Officer, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001. Clearly state on the envelope and in the letter that it is a "FOIA/PA Appeal."

PART I.C COMMENTS (Use attached Comments continuation page if required)

SIGNATURE - FREEDOM OF INFORMATION ACT AND PRIVACY ACT OFFICER

Carol Ann Reed

**APPENDIX E
RECORDS RELEASED IN THEIR ENTIRETY**

| <u>NO.</u> | <u>DATE</u> | <u>DESCRIPTION/(PAGE COUNT)</u> |
|------------|-------------|---|
| 1. | 1/30/61 | Letter to Westinghouse Electric Corp from J Delaney (2 pages) |
| 2. | 9/9/60 | Letter to Westinghouse Electric Corp from J Delaney (1 page) |
| 3. | 8/19/60 | Letter to AEC from G Goodrow, Westinghouse (2 pages) |
| 4. | 3/22/60 | Letter to AEC from R Funk, Westinghouse (8 pages) |
| 5. | 3/14/60 | Letter to W Trigg from L Cooper (1 page) |
| 6. | 10/19/59 | Special Nuclear Material License, Westinghouse Electric Corporation, Blairsville, SNM-37 (1 page) |
| 7. | 10/20/59 | Letter to Westinghouse from J Delaney (1 page) |
| 8. | 7/17/59 | Letter to AEC from G Goodrow, Westinghouse (2 pages) |
| 9. | 3/20/59 | Letter to Westinghouse from L Johnson (1 page) |
| 10. | 4/9/59 | Letter to Westinghouse from J Delaney (1 page) |
| 11. | 2/24/59 | Letter to Westinghouse from G Goodrow, Westinghouse (14 pages) |
| 12. | 6/30/58 | Letter to H Price from R Tschiegg (1 page) |
| 13. | Undated | TWX Incoming (1 page) |
| 14. | 9/11/57 | Special Nuclear Material License, Westinghouse Electric Corp, Blairsville, SNM-37 (1 page) |
| 15. | 9/11/57 | Letter to Westinghouse Electric Corp from E Fleury (1 page) |
| 16. | 4/18/5 | Letter to L Johnson from W Trigg, Westinghouse (2 pages) |
| 17. | 3/15/57 | Letter to Westinghouse from L Johnson (1 page) |
| 18. | 11/19/56 | Letter to Westinghouse Electric Corp from L Johnson (2 pages) |
| 19. | Undated | Letter to Westinghouse Electric Corp from L Johnson (1 page) |

20. 3/19/59 Notice to Public Document Room (1 page)
21. 9/12/56 Letter to L Johnson from J McClure (1 page)
22. 8/23/56 Letter to Westinghouse from L Johnson (2 pages)
23. 8/3/56 Special Nuclear Material License (1 page)
24. 8/3/56 Letter to Westinghouse from L Johnson (1 page)
25. 3/13/56 Letter to Westinghouse Electric Corp from L Johnson (1 page)
26. 2/20/56 Letter to Westinghouse Electric Corp from J McClure (8 pages)
27. Undated Letter to Westinghouse Electric Corp from J Delaney (1 page)
28. 5/5/61 Letter to Westinghouse Electric Corp from E Price (1 page)
29. 4/17/61 Memorandum to R Barker from J Delaney (1 page)
30. 5/9/60 Memorandum to H Price from M Mann (1 page)
31. 3/28/60 Memorandum to M Mann from R Kirkman (3 pages)
32. 1/30/61 Letter to Westinghouse Electric Corp from J Delaney (2 pages)
33. Undated To Files from F Lee (3 pages)
34. Undated Expert System License Evaluation, Evaluation Report for License SNM-0037 (2 pages)
35. Undated Drawing, Nuclear Fuel Area (1 page)
36. 12/6/56 Letter to B Mattison from F Pittman (1 page)
37. 12/9/57 Letter to B Mattison from L Johnson (1 page)
38. 8/17/56 Letter to F Pitman from A Welsh (1 page)
39. 8/13/56 Letter to A Welsh from F Pittman (1 page)
40. Undated ORNL Sites - Summary (1 page)
41. 9/26/56 Memorandum to C Beck from L Johnson (1 page)
42. 3/28/62 Letter to Westinghouse Electric Corp from E Price (1 page)
43. 7/13/61 Certification of Status of Special Nuclear Material Program Under US AEC License, SNM-37 (1 page)

44. 3/17/59 Memorandum to E Fleury from M Nash (1 page)
45. 3/4/59 Memorandum to W Strauser from E Fleury (1 page)
46. 2/27/59 Letter to C Beck from L Johnson (1 page)
47. 9/10/57 Memorandum to Files from J Delaney (1 page)
48. 12/17/5 Memorandum to Files from C Edwards (2 pages)
49. 11/1/56 Memorandum to Files from C Edwards (3 pages)
50. 10/24/56 Memorandum to L Johnson from C Beck (1 page)
51. 10/1/56 Memorandum to Files from C Edwards (2 pages)
52. 9/26/56 Memorandum to C Beck from L Johnson (1 page)
53. 7/26/56 Memorandum to L Johnson from C Beck (1 page)
54. 7/17/56 Memorandum to C Beck from L Johnson (1 page)
55. 7/13/56 Memorandum to Files from C Edwards (2 pages)
56. 7/12/56 Memorandum to Files from J Delaney (1 page)
57. 6/6/56 Memorandum to L Johnson from W Campbell (1 page)
58. 3/26/56 Memorandum to Files from L Johnson (1 page)
59. 3/19/59 Memorandum to W Strauser from E Fleury (1 page)
60. 3/19/59 Memorandum to W Strauser from E Fleury (1 page)
61. 8/26/60 Memorandum to C Beck from L Johnson (1 page)
62. 7/1/60 Draft Letter to Westinghouse Electric Corp from J Delaney (1 page)
63. 6/30/60 Memorandum to C Beck from L Johnson (1 page)
64. 6/30/60 Memorandum to L Johnson from C Beck (1 page)
65. 6/29/60 Memorandum to L Johnson from L Roger (1 page)
66. 5/6/60 Memorandum to L Rogers from L Johnson (1 page)
67. 10/15/59 Memorandum to Files from C McCallum (1 page)
68. 10/12/59 Memorandum to L Johnson from C Beck (1 page)

69. 7/23/59 Memorandum to C Beck from E Fleury (1 page)
70. 4/6/59 Memorandum to L Johnson from C Beck (1 page)
71. 8/14/61 Memorandum to L Dubinski from D Nussbaumer (1 page)
72. 4/17/61 Memorandum to R Barker from J Delaney (1 page)
73. 9/12/60 Memorandum to L Johnson from L Rogers (1 page)
74. 9/8/60 Memorandum to Files from J Lane (1 page)
75. Undated Memorandum to L Johnson from C Beck (1 page)
76. 8/26/60 Memorandum to L Rogers from L Johnson (1 page)
77. Undated Exhibit C (1 page)
78. Undated Material Status Report (1 page)
79. 2/7/62 Compliance Inspection Report (5 pages)
80. 2/13/62 Memorandum to L Dubinski from R Kirkman (1 page)
81. 2/15/62 Memorandum to E Price from L Dubinski (1 page)
82. 12/19/95 Letter to NRC from A Nardi (8 pages)
83. 12/13/56 Letter to L Johnson from W Trigg (1 page)
84. 12/21/56 Letter to L Johnson from W Trigg (1 page)
85. 1/6/57 Letter to Westinghouse Electric Corp from L Johnson (1 page)
86. 1/6/57 Letter to Westinghouse Electric Corp from L Johnson (1 page)
87. 12/11/58 Letter to J Delaney from R Rowley (4 pages)
88. 11/29/60 Letter to AEC from G Goodrow (5 pages)
89. 11/12/58 Letter to Westinghouse Electric Corp from J Delaney (1 page)
90. 12/18/59 Letter to AEC from G Goodrow (1 page)
91. 1/4/60 Letter to Westinghouse Electric Corp from J Delaney (1 page)
92. 12/28/59 Application for AEC License, Westinghouse Electric Corp (2 pages)
93. 12/5/61 Source Material License, Westinghouse Electric, Blairsville, SUC-509 (1 page)

94. 12/1/61 Application for AEC License, Westinghouse Electric, Blairsville (2 pages)
95. 11/26/61 Mail Control Form, Westinghouse Electric Corp (1 page)
96. 2/7/62 Compliance Inspection Report (5 pages)
97. 8/14/61 Memorandum to L Dubinski from D Nussbaumer (1 page)
98. 12/9/60 Letter to Westinghouse Electric Corp from J Delaney (1 page)
99. 1/4/60 Letter to Westinghouse Electric Corp from J Delaney (1 page)
100. 2/15/62 Memorandum to E Price from L Dubinski (1 page)
101. 2/13/62 Memorandum to L Dubinski from R Kirkman (1 page)
102. Undated Exhibit A Nuclear Fuel Area (1 page)
103. Undated Material Status Report (1 page)
104. 3/28/62 Letter to Westinghouse Electric Corp from E Price (1 page)
105. 1/11/65 Mail Control Form to Westinghouse Electric Corp (1 page)
106. Undated Expert System License Evaluation Report for License C-04971 (11 pages)
107. 12/20/94 Telephone Conversation Record (2 pages)
108. 1/4/95 Telephone Conversation Record (1 page)
109. 12/28/94 Letter to M Roberts from A Nardi (1 page)
110. 12/16/94 Letter to M Roberts from A Nardi (1 page)
111. Undated_ Map (1 page)
112. 10/20/94 ORNL Sites - Summary (1 page)
113. Undated ORNL Sites - Summary (1 page)
114. 12/20/94 Telephone Conversation Record (1 page)
115. 2/8/95 Letter to A Nardi from J Kinneman (8 pages)
116. 4/25/56 Letter to AEC from W Trigg (11 pages)
117. 9/6/56 Letter to AEC from W Trigg (4 pages)
118. 7/13/56

JAN 30 1961

MAIL ROOM
70-27

Hastingsham Electric Corporation
Metals Plant
Hatsessville, Pennsylvania

Attention: Mr. G. W. Goodrow
Security officer

Question:

This refers to the inspection conducted on March 15 and 16, 1960, of your activities authorized under AWS Special Nuclear Material License No. SNM-57.

It appears that certain of your activities were not conducted in full compliance with the requirements of the AWM's "Standards for Protection Against Radiation," Part 20, and "Special Nuclear Material," Part 70, Title 10, Code of Federal Regulations, in that:

1. Activities involving handling requirements of "very low activity" nuclear material during performance of "work operations at the 'adjusting table' and 'track out hood' were not performed as required by Section 20.201(b); "barveys."
2. Licensed workers had been instructed without specific authorization as required by Section 20.205, "Treatment of 'Highly' or 'Intermediate'."
3. Evacuation drills had not been conducted as required by Section 70.24(X), "Additional requirements."

With respect to Item 2, we note that by letters dated March 23 and August 10, 1960, you requested an amendment to License No. SNM-57 to authorize the installation of licensed waste materials and the request was granted on September 9, 1960. With respect to Items 1 and 3,

REGISTERED MAIL
RETURN RECEIPT REQUESTED

E/1
1960
Internal
Inspection

ITEM # 361

Westinghouse Electric
Corporation

- 2 -

JAN 30 1961

pursuant to the provisions of Section 2.201(a), "Notices of violation," of the AEC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, you are requested to notify this office, within thirty days of your receipt of this notice, of the steps taken or to be instituted to achieve correction of the alleged violations and the date when such correction has been or will be achieved.

There is some question as to the validity of the method by which the two waste liquid holdup tanks are sampled for radioactive content. We note that although the 100 milliliter sample is drawn two feet from the bottom of the tank, there is no agitation to mix the tank contents prior to sampling. In your reply to this letter, please describe the steps that you have taken or will take to ensure that each sample drawn is reasonably representative of the total contents of each tank.

We also note that your survey records indicated that occasionally concentrations of licensed radioactive material exceeded with unlicensed radioactive material in stack exhaust air exceeded the permissible limits for unrestricted areas in 10 CFR 20, Appendix B, Table II, Column 1. We are enclosing our air survey guide for uranium mills, entitled, "An Acceptable Basis for Surveying to Determine Concentrations of Radioactive Material Discharged as Air Effluents from Uranium Mills," which you may find useful in determining compliance with Section 20.211(a). When conducting the surveys to determine these limits, in your reply to this letter, please describe how you have determined or will determine compliance with respect to permissible concentrations of radioactive materials in atmospheric effluents.

During the inspection, it was observed that you possessed a 20.5 millicurie Cobalt 60 sealed source without a byproduct license authorizing such possession. However, we note that you were issued a byproduct material license on June 1, 1960, to cover possession of the Cobalt 60 source.

Very truly yours,

J. C. Belansky, Chief
Nuclear Materials Branch
Division of Licensing
and Regulation

Enclosures:

1. 10 CFR 20
2. 10 CFR 70
3. 10 CFR 21

L&R:JL
70-26

SEP 9 1960

Westinghouse Electric Corporation
P. O. Box 128
Blairsville, Pennsylvania

Attention: Mr. R. Funk
Manager, Industrial Relations

Gentlemen:

Enclosed is Special Nuclear Material License SNM-37, as amended, authorizing the disposal of low level radioactive material by the incineration method as submitted in your application dated March 22, 1960, and supplemented August 19, 1960.

Very truly yours,

J. C. Delaney
Chief, Nuclear Materials Section
Licensing Branch
Division of Licensing and Regulation

Enclosure:
SNM-37, as amended

Distribution:

Doc. Rm., w/encl.
Formal, w/encl
Compl., w/encl.
S/Health, Lic. only
Suppl., w/encl.
LRL - I&R Rdgs.
L. D. MacKay, FIN - OROO, w/encl.
D. George, NMM, w/encl.
H. Steele, I&R, w/encl.

S. R. Gustavson, I&R, w/encl.
J. C. Delaney, I&R, Lic. only
J. J. Lane, I&R, w/encl.

CBW
E/2

| | | | | | |
|-----------|----------------------------|--------------|----------------------|--------|------------|
| OFFICE ▶ | I&R | FIN | I&R | | |
| SURNAME ▶ | <i>JL</i> Lane: je, sjs | X | <i>J. C. Delaney</i> | ITEM # | <u>362</u> |
| DATE ▶ | 9/8/60 | 9/1/60 | 9/9/60 | | |

DOCKET NO. 70-26

File Cy.

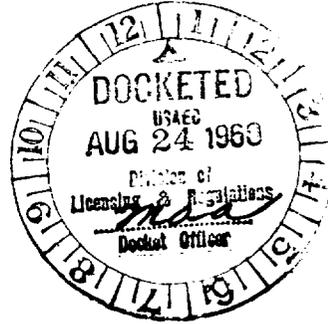
Westinghouse

ELECTRIC CORPORATION



August 19, 1960

P.O. BOX 128
BLAIRSVILLE, PA.



U. S. Atomic Energy Commission
Division of Licensing and Regulation
Washington 25, D. C.

Subject: Licensing of Incinerator

Gentlemen:

In reply to a request by your Mr. Joseph DeLaney, the following supplemental information is submitted regarding our Application of Disposal of Low Level Radioactive Material by Incineration dated March 22, 1960.

The discharge stack for the incinerator has been equipped with a .105" stainless steel #4 wire mesh screen secured horizontally to the stack opening. This appears to be adequate to prevent the escape of fly ash, for the design and operating characteristics of the incinerator are such that residue and ash are deposited along the inner walls of the incinerator by the vortex motion of the incoming air. Air filter tests reveal no detectible fly ash deposits even when taken from the exhaust stream.

The possibility of creating a nuclear safety hazard during the operation of the incinerator and the subsequent handling and storage of residue ashes has been investigated and no apparent problem exists. During operation, only small quantities of fissionable material are contained in the waste combustibles collected from the uranium processing areas as shown from analysis of residual ashes.

Based upon the chemical analysis of the residues and the net weight of material, each 55-gallon drum of ashes contains an estimate 700-800 grams of uranium. With the overall enrichment of 4.7% U-235 (isotopic analysis results), the U-235 content is approximately 30-40 grams of U-235 per drum which represents several days of operation.

From Table I, TID-7016, "Nuclear Safety Guide," 350 grams of U-235 is a nuclearly safe mass of material which, when under ideal conditions of moderation and reflection, contains a safety factor in excess of two.

*Cy this appl. sent
Compliance 8/26/60*

~~4563~~
E/3
ITEM # 363

YOU CAN BE SURE ... IF IT'S Westinghouse

2

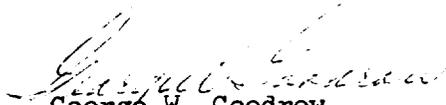
U. S. Atomic Energy Commission -2-

August 19, 1960

Therefore the quantity of material contained in the combustibles presents no criticality problem and in practice the safety factor is a minimum of approximately twenty.

Kindly call upon us if we can provide any additional information which would assist you in making a determination for our license application.

Very truly yours,


George W. Goodrow
Staff Supv. - Industrial Relations

BLAIRSVILLE METALS PLANT

GWG:gc

DOCKET NO. 70-26

File 4

Westinghouse

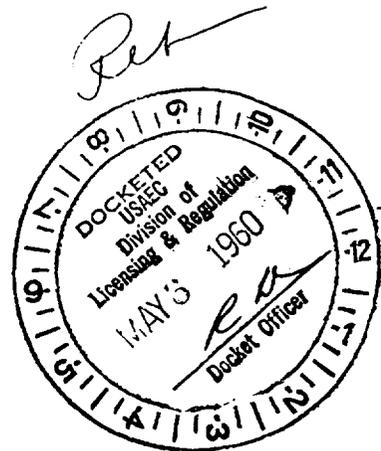
ELECTRIC CORPORATION



1581

March 22, 1960

P.O. BOX 128
BLAIRSVILLE, PA.



U. S. Atomic Energy Commission
Division of Licensing and Regulation
Washington 25, D. C.

Subject: Licensing of Incinerator

Gentlemen:

Enclosed herewith is information and drawings presented for your approval, relative to the Westinghouse Metals Plant incinerator located in Derry Township, Westmoreland County, Pennsylvania.

Thank you very much for your assistance in this matter.

Very truly yours,

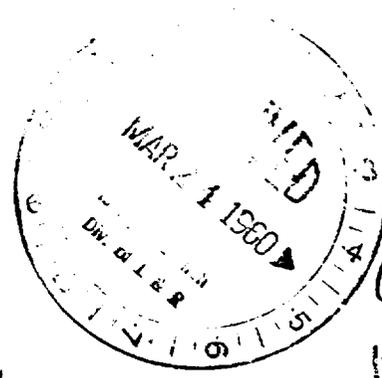
R. Funk
R. Funk
Manager, Industrial Relations

BLAIRSVILLE METALS PLANT

/gc

Enclosures

*at this request
sent inspection
5-6-60*



*document needed
to file with...
will get a check
12/2/60*

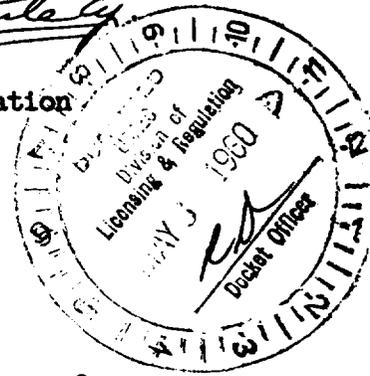
ITEM # 364

YOU CAN BE SURE... IF IT'S Westinghouse

70-26
File

APPLICATION
for
Disposal of Low Level Radioactive Waste Material by Incineration

Westinghouse Electric Corporation
Metals Plant
Blairsville, Pennsylvania



EQUIPMENT LOCATION & ENVIRONMENT

The Westinghouse Electric Corporation Metals Plant, consisting of 580 acres, is located in a rural farming section approximately 4 miles northwest of the borough of Blairsville, Pennsylvania. The plant property is bordered on the northern side by the Pennsylvania Railroad (Conemaugh Branch), by several small farms on the southern and western sides, and on the eastern side by a little-used public road which is also the main access route into the plant site. The land east of this road leads directly to the Conemaugh River (approximately 300 feet) and is mostly owned by the Federal Government, Department of the Army, Corps of Engineers, for flood control purposes. Several small, unused parcels of land lying southeast and boarding the road are private owned lands. The main plant, consisting of one large and several smaller out buildings, is located in the northeast corner of the property, 150 yards from the railroad and 200 yards from the public access road.

The disposal area, in which the subject incinerator is located, is completely enclosed by an 8' high chain-link fence (90' x 90' sq.), and lies 570' south of the main plant building. It was established for the purposes of storing and preparing for shipment, low level radioactive materials generated in the uranium processing areas. Access to the fenced enclosure is necessarily controlled by disposal area personnel due to the nature of the material being stored. When unattended, access is denied by a road block (locked chain across the road leading to the area), and by locking the gate located within the fenced enclosure. The area is also subjected to hourly security guard patrols.

The incinerator is installed along the southern side of the disposal area, adjacent to the disposal area building, within the fenced enclosure.

In relation to the incinerator site, plant property extends 150 yards to the road on the east and greater than $\frac{1}{4}$ mile to the north, south, and west. The immediate vicinity around the incinerator site, with the exceptions of the public road and a road from the plant to the fenced enclosure, is uncleared and unused property, covered with small shrubs and trees.

Natural water drainage for the 30-40 inches annual rainfall is provided by the surface contour surrounding the incinerator site. Approximately 100 yards north and 200 yards south are land depressions which slope downward to the east $\frac{1}{4}$ - $\frac{1}{2}$ mile, affording natural drainage via a ditch and unnamed creek, to the Conemaugh River. The land contour slopes gently upward to the west.

There is no immediate use made of the ground surface waters in or about the plant site, including the incinerator, as these waters are drained to the Conemaugh River. However, further downstream where the Conemaugh River empties into the Kiskiminetas River (approximately 10 miles) the town of Saltsburg, Pennsylvania, uses river water for human consumption.

The prevailing wind is in a northeasterly direction carrying any particulate matter and effluent gases, originating at the incinerator site, toward the Conemaugh River. The nearest inhabited land or buildings in this direction are on a farm across the river, and greater than $\frac{1}{2}$ mile distant. With the exclusion of the main plant building, all nearby inhabited buildings are located greater than $\frac{1}{2}$ mile from the incinerator site.

EQUIPMENT DESIGN & OPERATION

The design of the incinerator presently in use at this facility, is based upon work performed by the United States Bureau of Mines under Atomic Energy Commission Contract Number AT-(36-1)-4. This contract is for the design of an incinerator for burning solid combustible wastes contaminated with low level radioactivity. In the present incinerator all disposal is restricted to uranium contaminated materials, and no other radioactive materials will be disposed of in this manner. Details of construction and installation are given on drawings 749D803 and 749D815, included as attachments.

The general principle of operation is to supply all of the combustion air above the burning charge through two tangential air ports located on opposite sides of the burning chamber. The combustion products are discharged through an axially located duct at the top of the burning chamber. In this manner the gases assume a vortex motion within the combustion chamber which results in a relatively high motion between the gases and the surface of the burning charge, thereby promoting better mixing of air with the gaseous combustibles arising from the charge. The primary advantage of the vortex motion is the better retention and combustion of entrained solids for a given upward linear velocity of gases. The secondary advantage is the preheating of incoming air resulting from a downward component of flow close to the inside wall of the combustion chamber.

Combustion gases are forced from the burning chamber by a 2000 cfm exhauster located on the outlet duct. By forced exhaust in this manner, the incinerator is constantly operating under a negative pressure preventing accidental loss of particulate matter to the surroundings via door, air ports, etc. Use of the exhauster also insures a very high air velocity entering through the tangential air ports giving the desired circular air motion within the burning vessel.

Residue from burning is collected at the bottom of the vessel in a standard 55-gallon drum, which is joined directly to the lower part of the burning chamber. This drum is easily removed and replaced, and is used as the final container for disposal, eliminating the necessity of transferring the residue to another receptacle.

DESCRIPTION OF COMBUSTIBLE MATERIALS

The volume of combustible materials to be incinerated will be proportional to the rate of processing the uranium and may vary considerably over an extended period; however, under the present operating conditions the average daily rate is 200-250 pounds resulting in 20 pounds of residue after combustion. With increased production this daily rate may rise to 2 or 3 times this present volume.

Wet chemical analysis of the residual ashes indicates an average uranium content of 0.5% by weight with an overall enrichment of 4.70% U-235 as determined by spectographic analysis. The total uranium in the combustibles, as estimated from the present incinerator loading and chemical analysis of the residue, is 40-50 grams per day.

The major portion of the uranium contained in the waste material arises from paper, wood, fabrics, plastic, rubber, etc., used in the uranium production areas; e.g. blotter paper, used to protect floors and tables in the oxide pellet process, will be contaminated with UO₂ material of low enrichment (<5% U-235) being processed in connection with commercial core contracts, whereas similar material from the fuel plate area, for work on the naval core program, will be contaminated with a fully enriched uranium-zirconium alloy. The remaining combustibles to be handled are from the offices, chemical laboratory, metallographic laboratory, and lunch rooms, which are used by personnel connected with the uranium operations, and results in a very small, if any, increase in the daily uranium loading to the incinerator.

SAMPLING RESULTS

Air samples of effluent gases have been taken with a Staplex Hi-Volume air sampler, using TFA #41 filter paper, during the combustion of contaminated wastes. Some of the results listed below are as determined by the Industrial Hygiene Department of Westinghouse, East Pittsburgh, and the remaining have been evaluated at Blairsville using a Nuclear Measurement Corporation gas proportional counter.

| <u>Date</u> | <u>Alpha D. P. M. / cu.m.</u> | <u>Location</u> |
|-------------|-------------------------------|------------------------------------|
| 7-16-59 | 390 | 1 foot from stack outlet |
| | 4.3 | 2 feet " " " |
| | 1.9 | 8 " " " " |
| | 2.0 | 20 " " " " |
| | 0.9 | 40 " " " " |
| | 1.3 | 45 " " " " |
| | 3.4 | 60 " " " " |
| | None detectable | Center of disposal area yard |
| | 0.9 | Southeast corner of evaporator pad |
| 10-26-59 | 0.2 | 1½ feet from stack outlet |
| 10-28-59 | 9.7 | 1½ feet from stack outlet |
| | Not detectable | 4 " " " " |

7.2 MF U-235 air @ 110 d/m/meter³

| | | |
|----------|------|---------------------------|
| 10-29-59 | 9.5 | 1½ feet from stack outlet |
| | 4.2 | 1½ " " " " |
| 11-9-59 | 7.8 | 1½ feet from stack outlet |
| | 10.3 | 1½ " " " " |
| | 6.0 | 1½ " " " " |
| 11-10-59 | 39.8 | 1½ feet from stack outlet |
| | 13.3 | 1½ " " " " |
| | 5.0 | 1½ " " " " |

Each of the above samples were taken directly from the exhausted smoke stream on the downwind side of the point of outlet to the atmosphere, thereby representing the extreme conditions surrounding the exhaust stack during the burning operation. As evidenced by the first group of samples, diffusion of the effluent gas is very rapid after leaving the stack.

Periodic soil samples have been taken and evaluated during the past four years by the Industrial Hygiene Department. These soil samples were taken in the general plant area and around the waste disposal area.

| <u>Date</u> | <u>Location</u> | <u>α dpm/gm soil</u> | <u>α,β,γ dpm/gm soil</u> |
|-------------|-----------------------------------|----------------------|--------------------------|
| 8-3-56 | S.E. corner, 50' from incinerator | --- | 52.8 |
| | N.E. corner, 50' " " | --- | 46.4 |
| | S.W. corner, 50' " " | --- | 37.4 |
| 10-14-57 | Plant Pond | --- | 11.0 |
| | Back of plant | --- | 11.0 |
| | 400' north of incinerator | --- | 7.6 |
| | 600' N.E. of incinerator | --- | 5.0 |
| | Salary Parking lot | --- | 8.8 |
| 8-58 | S.E. corner, 50' from incinerator | 6.4 | 27.7 |
| | N.E. corner, 50' " " | 3.8 | 18.5 |
| | S.W. corner, 50' " " | 3.7 | 16.0 |
| | Plant pond | 1.4 | 12.6 |
| | Back of plant | 1.9 | 12.6 |
| | 400' north of incinerator | 1.4 | 9.9 |
| | 600' N.E. of incinerator | 1.0 | 9.4 |
| | Salary parking lot | 2.3 | 13.96 |
| | North of plant | --- | 12.6 |
| 7-29-59 | S.E. corner, 50' from incinerator | 3.8 | 55.6 |
| | N.E. corner, 50' " " | 6.0 | 67.2 |
| | S.W. corner, 50' " " | 3.2 | 48.4 |
| | Plant pond | 1.8 | 98.0 |
| | Back of plant | 1.4 | 55.2 |
| | 400' north of incinerator | 2.4 | 36.8 |
| | 600' N.E. of incinerator | 1.8 | 31.8 |
| | Salary parking lot | 1.2 | 50.0 |
| | North of plant | 1.6 | 32.2 |

Alpha activity was not evaluated for the samples taken in 1956 and 1957, however, on the basis of the remaining two groups of samples the alpha activity of the soil has not changed. In the opinion of the Industrial Hygiene Department the increased beta and gamma activity, in all probability, is due to fallout from bomb testing.

Water samples have been taken monthly from the Conemaugh River by the Department of Health, Harrisburg, Pennsylvania, at points above and below the plant outfall.

To date the results of the river water samples as reported by the Pennsylvania Department of Health are as follows:

| <u>Inspection & Collection Date</u> | <u>Location</u> | <u>Gross Alpha Activity Microcuries/ml</u> | <u>Gross β-γ Activity Microcuries/ml</u> |
|---|-----------------|--|---|
| 9-22-58 | C.R.A.P.O. | 9.10×10^{-9} | 1.13×10^{-8} |
| 10-9-58 | C.R.A.P.O. | 8.35×10^{-9} | N.D.A.A.B.* |
| 10-9-58 | C.R.B.P.O. | 1.60×10^{-8} | N.D.A.A.B. |
| 11-24-58 | C.R.B.O.O. | 1.3×10^{-8} | 1.31×10^{-7} |
| 11-24-58 | C.R.A.P.O. | 3.78×10^{-8} | 1.64×10^{-8} |
| 12-30-58 | C.R.B.P.O. | 6.85×10^{-9} | N.D.A.A.B. |
| 12-30-58 | C.R.A.P.O. | 2.46×10^{-8} | 6.96×10^{-8} |
| 12-30-58 | B.L.C.A.P.O. | N.D.A.A.B. | 9.33×10^{-8} |
| 1-13-59 | C.R.A.P.O. | 2.05×10^{-11} | N.D.A.A.B. |
| 2-13-59 | C.R.B.P.O. | N.D.A.A.B. | N.D.A.A.B. |
| 2-13-59 | B.L.C.A.P.O. | 4.55×10^{-9} | 9.8×10^{-8} |
| 2-13-59 | C.R.A.P.O. | 1.23×10^{-8} | N.D.A.A.B. |
| 3-6-59 | B.L.C.A.P.O. | 1.62×10^{-8} | N.D.A.A.B. |
| 3-6-59 | C.R.B.P.O. | 1.85×10^{-8} | 6.32×10^{-6} |
| 3-6-59 | C.R.A.P.O. | 8.46×10^{-9} | N.D.A.A.B. |

* No Detectable Activity Above Background

C.R.A.P.O. - Conemaugh River Above Plant Outfall

C.R.B.P.O. - Conemaugh River Below Plant Outfall

B.L.C.A.P.O. - Black lick Creek Above Plant Outfall

RESIDUE DISPOSAL

To date all residue resulting from the combustion of the radioactive wastes have been accumulated in containers and stored within the fenced contaminated waste disposal area to await disposition.

Final disposition will depend upon the feasibility of recovering the uranium; however, three different sources of disposal are available.

1. Shipment of the residue to the U. S. Atomic Energy Commission for recovery. (This method has been accepted by the USAEC, FNROO for the residue presently in our custody and generated to date.)
2. Shipment of the residue to an outside contractor for recovery of the uranium.

3. Ocean burial of the material through one of the many authorized and licensed firms performing this service.

Any of the above possibilities will be a satisfactory method of final disposal of the remaining ashes.

INCINERATOR MONITORING PROGRAM

All monitoring of equipment, material, and personnel, etc., is performed on the site by the Health Physics section at this facility. Additional monitoring is performed by the office of Mr. H. W. Speicher, Industrial Hygienist, Industrial Hygiene Department, Westinghouse Electric Corporation, who also has overall corporate responsibility for nuclear safety and health physics programs.

The two individuals involved in the operation of the disposal area, including the operation of the incinerator, are required to wear a complete change of protective clothing, laundered as contaminated clothing at the plant. Operators are required to use the shower facilities provided for personnel in the uranium processing areas.

Criticality

After investigating the conditions there is no apparent criticality problem in containing or storing the incinerator residue in the 55-gallon steel drums. The total uranium loading per 55-gallon drum is estimated at 400-500 grams based upon the residue analysis of 0.5% by weight and a loading of 200 pounds of residue per drum. With the overall enrichment at 4.70% U-235, the U-235 content is less than 25 grams per drum which is much lower than the permissible 350 grams per individual container.

Soil

Soil samples will be continued on a yearly basis around the incinerator site and the plant in general, and are to be evaluated for α , β , and γ activity by the Industrial Hygiene Department. These samples will provide a long range monitoring device for detecting any slow increase in activity which may result from operation of the incinerator.

Air

Monthly air samples will be taken in the immediate vicinity of the incinerator by the Health Physics Group using a Staplex High Volume air sampler with TFA #41 filter paper, and evaluated by direct alpha counting in a Nuclear Measurement Corporation gas proportional counter.

Smear Tests

Weekly smear monitoring of the waste disposal area at the incinerator, performed by the Health Physics Group, will detect any major material losses occurring during residue removal which might occur due to improper operation, leaks, etc.

The creation of a potentially hazardous environment can be avoided by utilizing these three monitoring techniques for detecting conditions, followed by immediate correction of the condition.

EVALUATION OF OPERATING CHARACTERISTICS

Air samples taken directly in the discharged smoke stream, though slightly higher than the recommended $4 \alpha \text{dpm/m}^3$ *, are considered quite satisfactory considering the point of discharge is not at a readily accessible location 25 feet above ground level and the alpha activity drops below $4 \alpha \text{dpm/m}^3$ a few feet from the point of discharge.

No apparent increase in the alpha activity of soil samples has been experienced in the plant area or near the incinerator site indicating no appreciable particulate matter is being exhausted from the incinerator stack or being lost during residue recovery.

Water samples taken above and below plant outfall in the Conemaugh River also indicates no harmful quantities of radioactive materials are being carried to the river via surface waters, airborne particulate matter, or by the liquid waste disposal system (Industrial Waste Permit #1830 issued by the Pennsylvania Department of Health, Sanitary Water Board, Harrisburg, Pennsylvania, authorizing the discharge of liquid radioactive waste materials to the Conemaugh River).

As indicated by the preceding summary of the results of the monitoring techniques, we feel the operation of the installed incinerator, as used for uranium contaminated combustibles, is creating no health or safety hazard detrimental to the community or nearby personnel.

* COO-212 Health & Safety Considerations for Uranium Fuel Fabrication Facilities

TSC:JCC

NY 100
I Delivery
PK over this
on file in
my files
W.P.

March 14, 1960

W. M. TRIGS
Manager
Materials Manufacturing Department
Blairsville Metals Plant
Washington Electric Corporation
Blairsville, Pennsylvania

Dear Mr. Trigs:

The following documents have been declassified without
~~exception~~

1. Your letter to U. S. AEC, Division of Licensing, dated April 25, 1956, 11 pages, formerly C-RD.
2. Your letter to U. S. AEC, Division of Licensing, dated September 6, 1956, 4 pages, originally C-RD (later upgraded in an unknown manner to S-RD).

You may use this letter as your authority to declassify all copies of these documents.

Very truly yours,

Lewis C. Cooper
Classification Officer

cc: P. B. Flewin, ID, RTCO
W. L. Nash, CB, Headquarters
H. F. Carroll, ID, CRG, Oak Ridge
Lyall E. Johnson, Div. Lia. & Reg., Headquarters

E/S

AWMS

TSC

ITEM # 365

Cooper:dm
3/14/60

Rec'd 10
over 3-18-60
W.P.
copy of this sent to
Mr. Trigs & copy
typed & only
copy of original
sent to Mr. Trigs

UNITED STATES
ATOMIC ENERGY COMMISSION

SPECIAL NUCLEAR MATERIAL LICENSE

Pursuant to the Atomic Energy Act of 1954 and Title 10, Code of Federal Regulations, Chapter 1, Part 70, "Special Nuclear Material Regulations," a license is hereby issued authorizing the licensee to receive and possess the special nuclear material designated below; to use such special nuclear material for the purpose(s) and at the place(s) designated below; and to transfer such material to persons authorized to receive it in accordance with the regulations in said Part. This license shall be deemed to contain the conditions specified in Section 70.32(a) of said regulations, and is subject to all applicable rules, regulations, and orders of the Atomic Energy Commission now or hereafter in effect and to any conditions specified below.

| | | |
|--|--|--------------------------|
| Licensee | | 3. License No. |
| 1. Name | Westinghouse Electric Corporation | SM-37, as amended |
| 2. Address | Blairsville, Pennsylvania | 4. Expiration Date |
| | | July 1, 1961 |
| | | 5. Docket No. |
| | | 70-26 |
| 6. Special Nuclear Material | 7. Maximum quantity of special nuclear material which licensee may possess at any one time under this license | |
| Uranium enriched in the U-235 isotope | is limited to that which may be used in accordance with procedures outlined in licensee's applications set forth in Item 8 of this license. | |
| 8. Authorized use | | |
| For use in accordance with the procedures described in the licensee's applications of February 13 and 20, April 25 and September 6, 1956; April 18, 1957 and February 24 and July 17, 1959. | | |
| 9. Quantity of special nuclear material allocated to licensee pursuant to Section 70.31(b) of said part | | |
| None | | |

CONDITIONS

10. Unless otherwise specified, the authorized place of use is the licensee's address stated in Item 2 above.

ITEM # 366 ^{E/6}

For the U. S. ATOMIC ENERGY COMMISSION

Date of issuance

OCT 20 1959

J. C. Delaney

Division of Licensing and Regulation

LRL:CFM
Docket No. 70-26

OCT 20 1959

Westinghouse Electric Corporation
P. O. Box 128
Blairsville, Pennsylvania

Attention: Mr. G. W. Goodrow
Security Officer
Westinghouse Metals Plant

Gentlemen:

Enclosed is Special Nuclear Material License No.

SNM-37, as amended.

DISTRIBUTION

Very truly yours,

L. D. MacKay, OROO - FIN, w/encl.
D. F. Musser, NMM, w/encl.
Div. of INS, w/encl. & ltr. dtd
7/17/59 w/attachment
H. Steele, LRL, w/encl.
S. R. Gustavson, LRL, w/encl.
S/Health, lin. only
J. C. Delaney, LRL, lic. only
Doc. Rm., w/encl.
Formal, w/encl.

J. C. Delaney
Chief, Nuclear Materials Section
Licensing Branch
Division of Licensing & Regulation

Enclosure:
SNM-37, as amended

Suppl., w/encl.
I&R - LRL Readings, w/encl.
C. P. McCallum, LRL, w/encl.

E17
6/367

ITEM # 367

| | | | | | | |
|-----------|-----------------|----------------|---------------|--|--|--|
| OFFICE ▶ | LRL | FIN | LRL | | | |
| SURNAME ▶ | CPM McCallum | CFM Goodrow | J. C. Delaney | | | |
| DATE ▶ | 10/15/59 | 10/19/59 | 10/19/59 | | | |

"SURE" NO. 72-263
File Copy

Westinghouse

ELECTRIC CORPORATION



July 17, 1959

P.O. BOX 128
BLAIRSVILLE, PA.

United States Atomic Energy Commission
Licensing Branch
Division of Licensing & Regulations
Washington 25, D. C.

Attention: Mr. J. C. Delaney, Chief, Nuclear Materials Section

Gentlemen:

The following information is being submitted in reference to your letter of April 9, 1959; and our discussion on May 27, 1959; and again on June 30, 1959; on our plans for compliance with Section 70.24, 10 CFR 70.

Very truly yours,

G. W. Goodrow
G. W. Goodrow
Security Officer

WESTINGHOUSE METALS PLANT

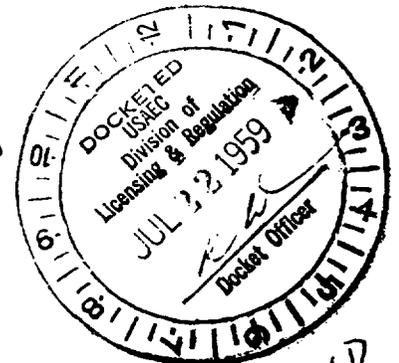
GWG:jmc

Attachment

*No claim re
7/23*

SM-37

ITEM # 368



E/8
(D)

YOU CAN BE SURE... IF IT'S Westinghouse

70-26
File G.

The sensing devices to be installed at the Blairsville Metals Plant are the "Gammaguard" GA-2 scintillation units manufactured by the Nuclear Measurements Corporation. Within the plant four units are to be installed any one of which will automatically sound the plant evacuation alarm upon detecting a sufficiently high radiation. A fifth unit will be installed at the disposal area located approximately six hundred (600) feet south of the main building with a local evacuation alarm and remote indicator at a central controlled guard desk, which is manned twenty-four (24) hours a day, seven days a week. Any plant evacuation desirable due to alarm of the disposal area unit would be manually operated by the guard.

Response times for the GA-2 units are approximately 63% of the initial radiation intensity with each time constant, e.g., at an initial intensity of approximately thirty-two (32) mr/hr. the units would alarm at a 20 mr/hr. setting in one time constant (2 seconds for the ordered equipment).

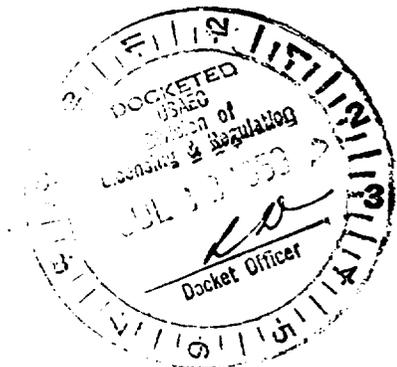
A weekly check of the alarm units will be made using gamma source to activate the individual units. This check will test the detecting probe and the circuits to the plant evacuation alarm. The evacuation alarm will then be tested separately.

Each unit will normally detect a small background radiation from a low level source. A power failure or malfunction of the detecting probe would cause the unit to fail to read the background and operate a remote alarm indicating improper operation. The plant evacuation alarm would not be sounded by this low scale alarm.

It is anticipated that the detecting and warning components will be delivered on or about August 1, 1959, and installation of a complete system should be made on or about September 1, 1959.

Practice evacuation drills for the plant will normally be conducted once every six (6) months, or not less than once each year. Notification of practice evacuation will be made to all plant employes via each supervisor, bulletin boards, or public address system. All employes will follow the emergency evacuation plan for their area upon sounding of the alarm signal.

Evacuation routes were selected to exit personnel by the nearest route out of areas where enriched material is handled and then away from affected area out of the plant. Evacuation routes outside those areas where enriched uranium is handled were selected leading away from likely accident areas. Assembly points after leaving the building have been established at a minimum distance of five hundred (500) feet from the plant.



70-86
LRL:JGD

MAR 20 1959

Westinghouse Electric Corporation
P. O. Box 128
Blairsville, Pennsylvania

Attention: Mr. George W. Goodrow
Materials Manufacturing Dept.

Gentlemen:

We have been advised by the Commission's Division of Classification that Appendix III "Criticality Control dated September 6, 1956" in support of your application for special nuclear material license has been downgraded from "Secret--Restricted Data" to "Confidential--Restricted Data". This letter is your authority to downgrade other copies of Appendix III.

Very truly yours,

Distribution:
Document room
Formal & Suppl.
Br & Div rf's
INS ~~_____~~

Lvall Johnson
Chief, Licensing Branch
Division of Licensing & Regulation

E/9
ITEM # 369

| | | | | | | |
|-----------|------------------|-----------|--|--|--|--|
| OFFICE ▶ | LRL | LRL | | | | |
| SURNAME ▶ | <i>W. D. ...</i> | L Johnson | | | | |
| DATE ▶ | 3-20-59 | 3-20-59 | | | | |

| | | | | | | |
|--|--|--|--|--|--|---------|
| | | | | | | DATE |
| | | | | | | SURNAME |
| | | | | | | OFFICE |

4-8-59
 [Signature]
 LRL

ITEM # 370

J. G. DeLong
 Chief, Motor Vehicle Section
 Division of Licensing & Registration

01/30/59
 E/10

Distribution:
 Document room
 Formal & Suppl.
 Br & Div r's
 INS w/ltr 2-24-59

1. Method of selection of applicant names and assembly points, with a statement of how applicant will have access to the application area only that information will be by the most direct route away from the accident.
 2. Frequency and description of applicant problem areas.
 3. Further description of the instruments and signs system, including response time of signs system to various conditions, method and frequency of testing, and full size sketches.
- In order for us to complete our evaluation of the information you have provided, you should submit within thirty days the following:

Reference is made to the information provided with your February 24, 1959 letter regarding your plans for compliance with Section 10.24, 10 CM 10.

Gentlemen:
 Attention: Mr. George W. Gordon
 P. O. Box 156
 Hartselle, Kentucky

APR 9 1959

70-85
 LRL:JED

DOCKET NO. 70-26
File 4.

Westinghouse

ELECTRIC CORPORATION



February 24, 1959

United States Atomic Energy Commission
Washington 25, D. C.

P.O. BOX 128
BLAIRSVILLE, PA.

Attention: Director of Division of Licensing and Regulations

Dear Sir:

Submitted for your review are six (6) copies of our proposal for the installation of a radiation monitoring alarm and emergency plans procedures as requested in the recent amendment to Title 10, Chapter 1, Part 70, Code of Federal Regulations.

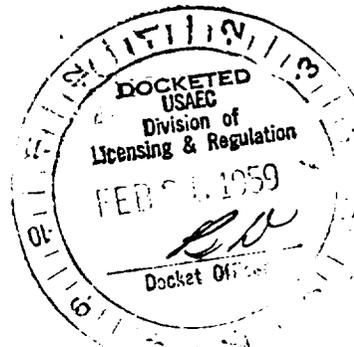
Kindly call upon us for whatever additional information you may need.

Very truly yours,

George W. Goodrow
George W. Goodrow,
Staff Supervisor
Industrial Relations

MATERIALS MANUFACTURING
DEPARTMENT

pbr



AKB/E/11

ITEM # 371

YOU CAN BE SURE... IF IT'S Westinghouse

14

PROPOSAL FOR RADIATION MONITORING ALARM

AND

EVACUATION PROCEDURES

SNM 37

DOCKET NO. 70-26
File 41.

(Trans. w/2/24/59 ltr)



199 sent w/d 4/23/59 by me

WESTINGHOUSE ELECTRIC CORPORATION



February 24, 1959

United States Atomic Energy Commission
Washington 25, D. C.

Attention: Director of Division of Licensing and Regulations

The following proposal is submitted in accordance with the recent amendment to Title 10, Chapter 1, Part 70, Code of Federal Regulations, and a request by the Pittsburgh Naval Reactors Operations Office, United States Atomic Energy Commission for the installation of a radiation monitor and alarm system in those areas where special nuclear material is stored or processed.

AREAS

The present activity for which the Westinghouse Metals Plant is authorized to receive, process, and handle special nuclear material under license SNM 37 is restricted to two plant areas. These areas are identified on the attached drawing as Ceramic Fuel Processing Area, shown in blue, and the Fuel Products Disposal Area, shown in brown.

The Ceramic Fuel Processing Area consists of one room approximately 40 X 50 feet in which is located a partitioned furnace room, powder preparation area and a general process area. Located on the second floor above the processing area, identified as Figure 1 on the attached drawing, is the Ceramic Fuel Storage Vault which is approximately 10 feet wide by 20 feet in length.

The Fuel Products Disposal Area is located approximately 600 feet south of the main building and consists of a concrete block building approximately 40 feet wide and 90 feet in length with 2 - 20X20 foot wings at each end. The disposal area building is used to house scrap materials awaiting return shipment for reclamation.

The shaded areas shown on the attached drawing in magenta and green are two additional areas in which special nuclear material is handled as Accountability Station WFP established under the direction of the Pittsburgh Naval Reactors Operations Office.

RADIATION MONITORING SYSTEM

We propose to install one gamma sensing detector, either a multiple channel monitoring system or a single channel system, in each of the abovementioned process areas, storage areas, and storage vaults. The location of each of the area gamma sensing detectors will be centrally located so as to conform to the 120 foot operation requirement set forth in Paragraph 70.24a1 of Title 10, Chapter 1, Code of Federal Regulations. The monitoring system to be selected will consist of gamma sensing units continuously reporting dose rates to either a central control unit or, in the event that single channel monitors are selected, to the individual control units.

ALARMS

A warning system consisting of both visual warning lights and a distinctive audible alarm device will be installed in each of the areas being monitored and a separate visual and audible alarm for each of the monitoring devices will be installed at a central control point under the observation of a twenty-four hour guard. The monitoring units located in each of those areas will be pre-set to actuate the alarm circuits in the event of a nuclear occurrence generating a radiation level in excess of 20 mr/hr.

TESTING

All monitoring equipment will be installed with self-testing devices or subjected to periodic manual testing in a manner recommended by the equipment manufacturer. If manual testing methods are employed, all equipment will be tested at least once each week.

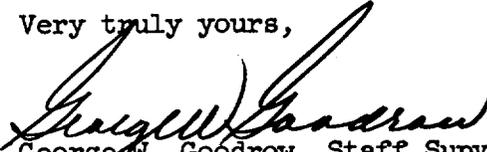
EMERGENCY PLANS

In the event of a nuclear occurrence total plant evacuation will become effective except in the case of an occurrence located within the Fuel Products Disposal Area where only area evacuation becomes necessary. We have attached preliminary plans for total plant evacuation and comprehensive emergency plans should be available within the very near future.

It is anticipated that acceptable equipment will be selected and approved for installation within the next sixty to ninety days and a

complete monitoring system should be in operation within thirty days after delivery of the equipment. The radiation monitoring system should be in operation, depending upon the availability and delivery of the equipment, on or about August 1, 1959.

Very truly yours,

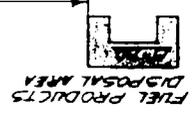
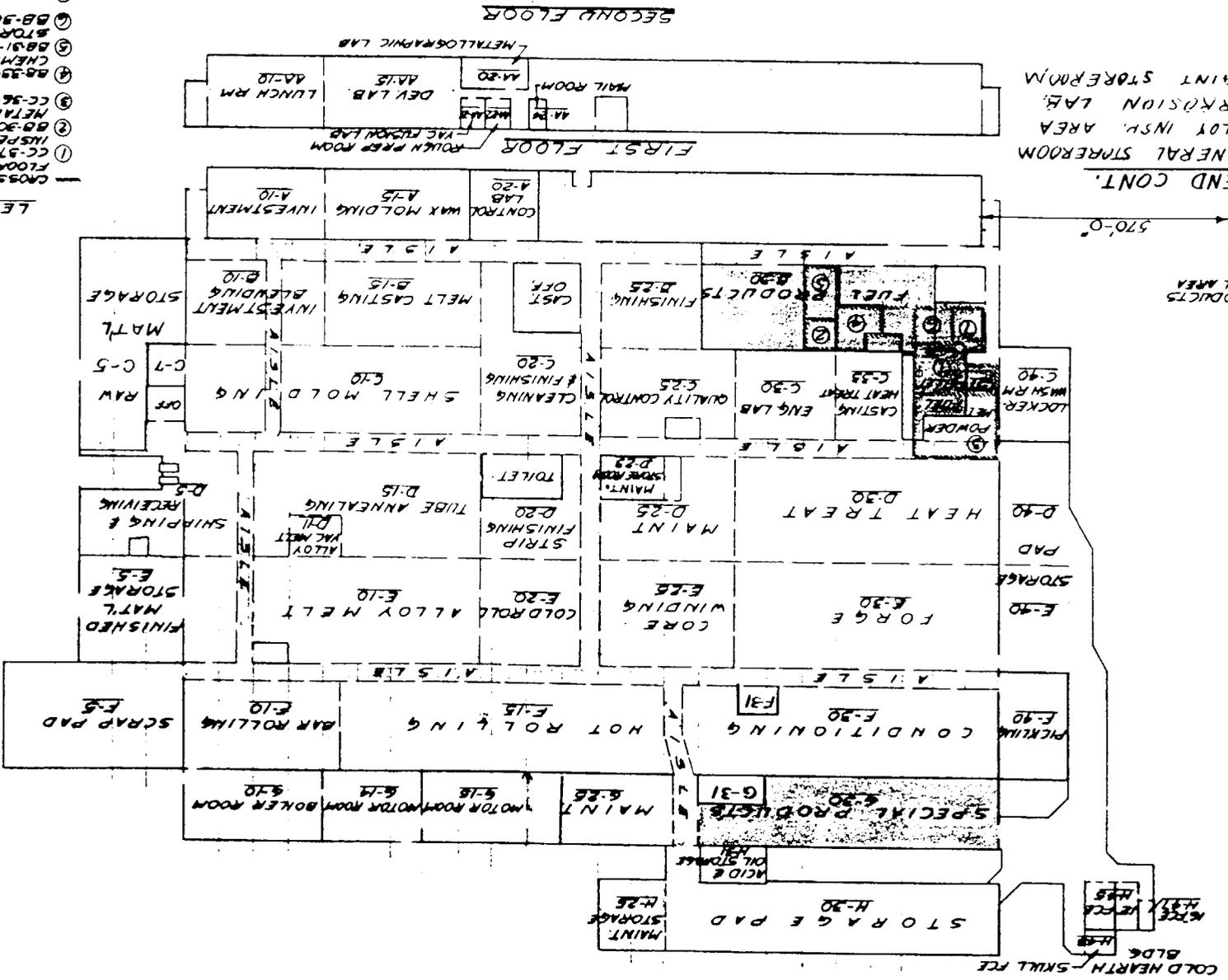

George W. Goodrow, Staff Supv.
Industrial Relations Dept.

MATERIALS MANUFACTURING
DEPARTMENT

pbr

Enclosures

- LEGEND
- ① CC-37-FUEL PRODUCTS ELEMENTS
 - ② BB-30-FUEL PRODUCTS METALLOGRAPHIC LAB
 - ③ CC-36-DIE SHOP
 - ④ BB-35-FUEL PRODUCTS CHEMICAL LAB
 - ⑤ BB-31-FUEL PRODUCTS STORE ROOM
 - ⑥ BB-36-HYGIENE LAB
 - ⑦ BB-38-LAUNDRY
- CROSS MATCHING DELETED & FLOOR AREAS



COLD HEARTH - SKILL PCE
 BLDS
 W-25
 MAINT STORAGE

WESTINGHOUSE ELECTRIC CORPORATION

METALS PLANT

EMERGENCY PLAN

WESTINGHOUSE ELECTRIC CORPORATION



February 24, 1959

EMERGENCY PLAN

EMERGENCY PHILOSOPHY

The following statements and supplementary discussion highlight some of the fundamental concepts upon which our emergency plan is based:

1. Line organizations have major emergency responsibilities.
The responsibility for emergency planning and execution must rest with the line organizations which are responsible for anticipating potential emergencies within their areas, arranging to avoid the occurrence of such emergencies, and making adequate preparation for handling these emergencies if they do occur.
2. Prompt local action is needed.
Because of the variety of potential hazards and conditions encountered, the most effective emergency control is supplied through action of the local emergency coordinating group. This group, consisting of a local Emergency Coordinator and his staff, must be prepared to effectively cope with any eventuality and to obtain and direct the efforts of the various plant emergency groups. Therefore, the Department Shift Supervisor must be well-trained in local emergency procedures and adequate equipment maintained in all hazardous areas.
3. Plant-wide emergency direction is necessary. Provision for plant-wide direction of emergency efforts is necessary, in cases of emergency, to insure that all emergency groups involved function as a team. Such direction is supplied by the Emergency Coordinator or in his absence the Shift Supervisor on duty. It is recognized that in combating emergencies he must rely heavily upon the performance of well-trained local and plant-wide emergency groups.
4. Shift organizations must handle emergencies.
In order to insure clear-cut responsibility for the direction of activities involved in actual handling of emergencies, responsibility must be fixed with the shift organization. Therefore, where shift supervisors participate in emergency work, they are expected to function as staff to the Local Plant Emergency Coordinator.

fire brigade officers.

8. If sprinklers are activated, make the decision whether their continued use is necessary.
9. Protect material, tools, and equipment from unnecessary water, smoke, and fire damage.
10. Direct salvage and clean-up operations, and replace or restore used fire fighting equipment in readiness.

Fire Brigade -

1. Upon receipt of a fire call, members will report to the fire equipment locker to obtain equipment and emergency area instructions.
2. The senior fire brigade officer will report to the area supervisor and assist him in directing the fire fighting forces and will assist with treatment of injured, sprinkler control, salvage and clean-up operations, and assist outside fire department officers as required. Act as council on whether or not additional help is needed.

Police Department -

1. Receive all incoming emergency calls and notify the fire brigade, safety department, and plant protection officer, and dispatch available police department personnel to the emergency area.
2. Officers assigned to the emergency area will report to the area or shift supervisor and assist him as required to treat any injured, obtain additional fire fighting equipment, direct evacuation of the affected area or plant, secure against theft, and the detection and removal of unauthorized persons.
3. In the event the area supervisor determines that outside assistance is required, the police department will notify the Blairsville Fire Department, unlock and open all entrance gates, and direct the assisting fire company to the emergency area.
4. Upon the termination of the emergency condition, officers will assist in restoring fire fighting equipment, secure the plant against unauthorized entry, and prepare report of fire conditions.

NUCLEAR INCIDENT

A nuclear incident may be a serious threat to employes in the area affected. The only means of protection is a rapid evacuation by the most direct route away from the incident.

The evacuation procedure for areas handling special nuclear material will be automatic in nature, that is, a nuclear occurrence will automatically signal the need for evacuation. Once the automatic alarm is sounded the police officer on duty at the control desk will activate the general plant evacuation push button alarm located at the control desk.

If a nuclear incident should occur, the following action will be taken by the shift supervisor:

1. Evacuate all personnel according to the General Plant Evacuation Procedure.
2. Notify Emergency Coordinator and personnel on emergency telephone list.
3. Activate safety and radiological teams for area survey and prevent re-entrance to affected areas and determine extent of radiation exposure received by personnel (Maximum permissible radiation exposure during emergency work will be held to a minimum and in no case in excess of 25r).
4. Under no circumstance will personnel enter the Special Nuclear Materials Processing Areas whenever a general evacuation is sounded.

The shift supervisor for the Special Nuclear Materials Processing Areas will assume the above responsibility in the event of a nuclear incident.

GENERAL PLANT EVACUATION

TO ALL EMPLOYEES:

In the interest of plant safety and the personal protection of our employes, in particular, it may become necessary for all employes to evacuate plant premises in the event of a major fire, explosion, nuclear occurrence or other plant disaster. It is, therefore, necessary that all employes become familiar with the evacuation signals, plant exits, and exit routes designated for this area and to follow evacuation procedures if a safe and orderly evacuation is to be achieved.

The evacuation alarm will consist of a continuous series of blasts (three seconds on and three seconds off) on the plant air whistle system. This signal will indicate the need for complete evacuation of all plant work, storage and office areas. When the evacuation signal is sounded, all employes will:

1. Immediately shut off machinery, etc., where practical.
2. WALK quickly (no running) to the nearest exit route and then to the exit designated.
3. Once clear of the exit, proceed to an area at least 300 feet from the building.
4. Remain in these areas for further instructions.

All vehicle and pedestrian gates located within the area fence have been equipped with seals which will facilitate a rapid exit through the fence. Gates may be opened simply by raising the gate handle and breaking the seal by pushing against the gate.

Disaster teams of maintenance, fire, police, medical, and radiation safety monitoring departments will report to their assigned areas for further instructions.

June 30, 1958

Mr. H. L. Price, Director
Division of Licensing & Regulation
U. S. Atomic Energy Commission
Washington 25, D. C.

Dear Sir:

The Westinghouse Atomic Power Department has had a reorganization in managerial personnel and administrative functions. The following information is submitted for your information and guidance.

All correspondence concerning licensing matters should be received from Mr. Ernest Aita, Manager, Office Methods and Security. In turn, any questions that you may have concerning an application or revision of a license should be referred to Mr. Aita. Also, licenses should be sent to Mr. Aita after they have been approved.

Mr. Aita may be contacted at the following mailing address:

Westinghouse Electric Corporation
Atomic Power Department
P. O. Box 355
Pittsburgh 30, Pennsylvania
ATTENTION: Mr. Ernest Aita

The telephone number is as follows:

Express 1-2800
Extension: Center 239 or 439

If Mr. Aita cannot be reached, you may refer your questions and correspondence to the writer of this letter.

Your cooperation in this matter will be greatly appreciated.

ITEM # 372

Very truly yours,

Ronald E. Tachiagg
Ronald E. Tachiagg
Security Officer
Office Methods & Security

APB
E/12
U.S. ATOMIC ENERGY COMMISSION
DIVISION OF LICENSING & REGULATION
OFFICE METHODS & SECURITY
PITTSBURGH, PA.

→ CC: Mr. Lyall Johnson, Chief
Licensing Branch
CC: Mr. James R. Mason, Chief
Isotopes Branch

TWX INCOMING

PERMIT NO.

Suppl. only

90-43,784
Central Files

ATOMIC ENERGY COMMISSION

f/westinghouse
SNM file

WESTINGHOUSE ATOMIC POWER DEPT FOR SA VAL SA 505 6434188 X 9 09
H. I. PRICE, DIRECTOR DIV OF LICENSING & REGULATION
ATOMIC ENERGY COMMISSION

DOCUMENT NO.

70-26

Suppl. only

PLEASE BE ADVISED THAT MR. W. D. SHEPHERD HAS TERMINATED HIS SERVICES WITH WESTINGHOUSE ATOMIC POWER DEPARTMENT - CIVILIAN ACCESS PERMIT NUMBER 425-1, AND THEREFORE ALL CORRESPONDENCE CONCERNING XXX CONCERNING LICENSE MATTERS FORWARDED FROM EITHER YOUR OFFICE OR LYALL JOHNSON'S OFFICE SHOULD BE DIRECTED TO THE ATTN OF MR. ERNEST AITA. YOUR COOPERATION IN THIS MATTER WILL BE GREATLY APPRECIATED.

RONALD E. TSCHIEGG, SECURITY OFFICER

END OF GA PLS

RECD OK MEM TKS

Handwritten notes:
Central Files
3/3/69
E/13
0303
ENM. Westinghouse

TWX INCOMING

ITEM # 373

UNITED STATES
ATOMIC ENERGY COMMISSION

SPECIAL NUCLEAR MATERIAL LICENSE

Pursuant to the Atomic Energy Act of 1954 and Title 10, Code of Federal Regulations, Chapter 1, Part 70, "Special Nuclear Material Regulations," a license is hereby issued authorizing the licensee to receive and possess the special nuclear material designated below; to use such special nuclear material for the purpose(s) and at the place(s) designated below; and to transfer such material to persons authorized to receive it in accordance with the regulations in said Part. This license shall be deemed to contain the conditions specified in Section 70.32(a) of said regulations, and is subject to all applicable rules, regulations, and orders of the Atomic Energy Commission now or hereafter in effect and to any conditions specified below.

| | | |
|--|---|---|
| Licensee | | 3. License No. SNM-37, as amended |
| 1. Name | Vestinghouse Electric Corporation | 4. Expiration Date July 1, 1961 |
| 2. Address | Blairsville, Pennsylvania | 5. Docket No. H-26 |
| 6. Special Nuclear Material Uranium enriched in the U-235 isotope | 7. Maximum quantity of special nuclear material which licensee may possess at any one time under this license is limited to that which may be used in accordance with procedures outlined in licensee's application of 2-13-56 and appendices thereto dated 2-20-56, 4-25-56 and 9-6-56. | |
| 8. Authorized use For use in accordance with the procedures described in the licensee's applications of February 13 and 20, April 25, and September 6, 1956; and April 18, 1957 and Feb. 24 and July 17, 1959. | | |
| 9. Quantity of special nuclear material allocated to licensee pursuant to Section 70.31(b) of said part None | | |

CONDITIONS

10. Unless otherwise specified, the authorized place of use is the licensee's address stated in Item 2 above.

ITEM # 374 *E/114*
QV27M

For the U. S. ATOMIC ENERGY COMMISSION

Date of issuance SEP 11 1957

ERA

E. R. Fleury
Acting Chief, Licensing Branch

REGNET NO. 70-26

CAL:JCD

SEP 1 1 1957

Westinghouse Electric Corporation
P. O. Box 128
Blairsville, Pennsylvania

Attention: Mr. W. M. Trigg, Manager
Westinghouse Metals Plant

Gentlemen:

Enclosed is Special Nuclear Material License ~~SM-37~~, as amended.

You will note that Section 8 of the license has been changed to condition your license to your use of the shipping procedures that you submitted to us previously.

Very truly yours,

E. R. Fleury
Acting Chief, Licensing Branch
Division of Civilian Application

Enclosure:
License ~~SM-37~~, as amended

DISTRIBUTION:

- Document Room, w/encl.
- Subject file, w/encl.
- H. M. Roth, OROO, w/encl.
- J. J. Flaherty, COO, w/encl.
- M. M. Mann, INS, w/encl.
- D. F. Musser, NMM, w/encl.
- J. C. Ryan, FIN, w/encl. (2)

- H. Steele, CA, w/encl.
- R. J. Frederick, CA, w/encl.
- Branch Reading file, w/encl.
- Division Reading file, w/encl.

41375
E/R

ITEM # 375

| | | | | | | |
|-----------|---------------------|---------|----------------|-------------|--|--|
| OFFICE ▶ | CAL | FIN | NMM | CAL | | |
| SURNAME ▶ | <i>De [unclear]</i> | M.K.K. | | E.R. Fleury | | |
| DATE ▶ | 9-11-57 | 9/11/57 | | | | |

DOCKET, No. N-26-70-26

File copy

Westinghouse

ELECTRIC CORPORATION



April 18, 1957

P.O. BOX 128
BLAIRSVILLE, PA.

Mr. Lyall Johnson
Chief, Licensing Branch
Division of Civilian Application
United States Atomic Energy Commission
Washington 25, D. C.

Dear Mr. Johnson:

Reference is made to your letter of March 15, 1957, requesting detailed information regarding our procedures for shipping of SS nuclear material.

At the present time our activity involving the receipt, storage, processing and shipping of SS nuclear material is limited to a sub-contract for the fabrication of plate-type fuel elements. The prime contract being between the Westinghouse Atomic Fuel Department and the Pittsburgh Area Office of the United States Atomic Energy Commission.

Finished fuel plate elements containing approximately 5 per cent of highly enriched uranium alloy (93 to 100%) are shipped in two combination locked Mosler steel safes, firmly attached to a steelbody truck bed. Safes are located at least 2 feet apart and are loaded below the safe limit, as determined by our Criticality Engineer. Safe loading limits are based on the type of material, the per cent of alloy and enrichment, and assumed fully moderated reflected conditions.

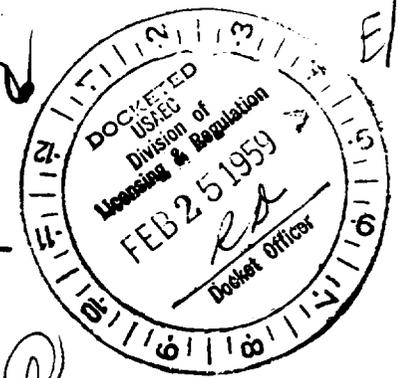
Acid solutions containing highly enriched material are at present being limited to less than 10 grams of special nuclear material per gallon of liquid for shipment and criticality purposes.

Machine turnings and other miscellaneous scrap, containing highly enriched special nuclear material in alloy form, are placed in individual containers, which limit the total uranium content to less than the safe loading limit. These containers are, if necessary due to the size of the shipment, placed inside other containers to give the required spacing. The foregoing is determined by the Criticality Engineer, on the basis of material composition, total uranium content, physical size or shape, and safety requirements, other than nuclear, affecting the shipment.

cy. to Ins. 9/12/57

ITEM # 376

9/12/57



Copy pulled for review + Transmitted to Doc. Room 4-24-57.

H.S. YOU CAN BE SURE... IF IT'S Westinghouse

Mr. Lyall Johnson

- 2 -

April 18, 1957

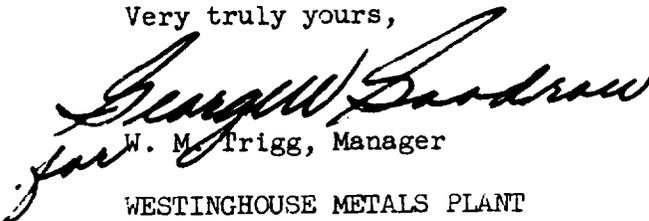
The minimum concentration of uranium oxide for an enrichment of 2.7 per cent will be 176 pounds, based on 1900 grams of U-235. With a safety factor of approximately 2, batch sizes will be limited to 84 pounds. The batches of 84 pounds will be shipped in containers separated by at least 6 inches. Finished material will be placed in individual containers of approximately 28 pounds with 2 containers to a shipping box, which will be spaced at least 10 to 12 inches apart.

Enriched material is received in "bird cage" type containers whereby SS nuclear material is maintained 2 feet apart due to the container design. All contemplated shipments of highly enriched material will be received directly from the Commission or its prime contractor.

Uranium oxide material of 2.7 per cent enrichment will be received from the Mallinckrodt Chemical Works, a contractor and licensee of the United States Atomic Energy Commission.

Please do not hesitate to call upon us for any additional information which may be required.

Very truly yours,



W. M. Trigg, Manager

WESTINGHOUSE METALS PLANT

/lcm

CAL:JCD

DOCUMENT NO. 70-26

MAR 15 1957

Westinghouse Electric Corporation
Blairsville, Pennsylvania

Attention: Mr. W. M. Trigg, Manager
Materials Manufacturing Department

Gentlemen:

Reference is made to special nuclear material license SNM-37 (as amended 11-15-56) Amendment No. 1, issued November 15, 1956.

It is requested that you submit detailed information regarding your procedures to avoid accidental criticality during shipment of special nuclear material to other licensees and to the Commission. With respect to shipments to be made to you on your order please provide us with the procedures you will instruct the shipper to use in sending special nuclear material to you.

Please let us know if you require any clarification of this request.

Very truly yours,

and
dispatched

Lyall Johnson
Chief, Licensing Branch
Division of Civilian Application

ITEM # 377

Handwritten: E/17
A/B/T/M
SNM - Westinghouse

| | | | | | | |
|-----------|----------------|----------------|-------------|--|--|--|
| OFFICE ▶ | CAL | CAL | CAL | | | |
| SURNAME ▶ | <i>Edwards</i> | C. T. Edwards | L. Johnson | | | |
| DATE ▶ | 3-12-57 | <i>3/15/57</i> | <i>3/11</i> | | | |

CAL:JCB

DOCUMENT NO. 70-26

NOV 19 1956

Westinghouse Electric Corporation
Blairsville, Pennsylvania

Attention: Mr. W. M. Trigg, Manager
Materials Manufacturing Department

Gentlemen:

Enclosed is Special Nuclear Material License No. SNM-37 (as amended
November 15, 1956) Amendment No. 1.

Very truly yours,

SIGNED

and

Dispatched

Lyall Johnson
Chief, Licensing Branch
Division of Civilian Application

Enclosure:
License No. SNM-37
Amendment No. 1

BCC: H. M. Roth, OROO, w/encl.
M. M. Mann, INS, w/encl.
D. F. Musser, NMM, w/encl.
J. C. Ryan, FIN, w/encl. (2)
L. Hydeman, OGC, w/encl.
H. Steele, CA, w/encl.
Docket File, w/encl.
J. J. Flaherty, COO, w/encl.

APPROVED:



H. L. Price, Director
Division of Civilian Application

ITEM # 378

ALBON E/18

| OFFICE ▶ | CAL | CAL | CAL | FIN | NMM | OGC |
|-----------|------------|---------------|------------|----------------|-----|-----|
| SURNAME ▶ | D. Edwards | C. T. Edwards | [Redacted] | See Attachment | | |
| DATE ▶ | 11-15-56 | 11/15/56 | | | | |

UNITED STATES
ATOMIC ENERGY COMMISSION

SPECIAL NUCLEAR MATERIAL LICENSE

Pursuant to the Atomic Energy Act of 1954 and Title 10, Code of Federal Regulations, Chapter 1, Part 70, "Special Nuclear Material Regulations," a license is hereby issued authorizing the licensee to receive and possess the special nuclear material designated below; to use such special nuclear material for the purpose(s) and at the place(s) designated below; and to transfer such material to persons authorized to receive it in accordance with the regulations in said Part. This license shall be deemed to contain the conditions specified in Section 70.32(a) of said regulations, and is subject to all applicable rules, regulations, and orders of the Atomic Energy Commission now or hereafter in effect and to any conditions specified below.

| | | |
|---|---|---|
| Licensee | | 3. License No. SNM-37 (as amended 11-15-56) Amendment No. 1 |
| 1. Name | Westinghouse Electric Corporation | 4. Expiration Date July 1, 1961 |
| 2. Address | Blairsville, Pennsylvania | 5. Docket No. N-26 |
| 6. Special Nuclear Material Uranium enriched in the U-235 isotope | 7. Maximum quantity of special nuclear material which licensee may possess at any one time under this license is limited to that which may be used in accordance with procedures outlined in licensee's application of 2-13-56 and appendices thereto dated 2-20-56, 4-25-56 and 9-6-56. | |
| 8. Authorized use As described in licensee's application of 2-13-56 and appendices thereto dated 2-20-56, 4-25-56 and 9-6-56. | | |
| 9. Quantity of special nuclear material allocated to licensee pursuant to Section 70.31(b) of said part None | | |

CONDITIONS

- 10. Unless otherwise specified, the authorized place of use is the licensee's address stated in Item 2 above.
- 11. Except as hereinafter provided the licensee shall comply with provisions of the Atomic Energy Commission's proposed standards for protection against radiation as published in the Federal Register July 16, 1955 (10 CFR 20), until such time as said proposed regulations or revisions thereof become effective regulations of the Commission. Notwithstanding Section 20.24(f) of said standards, labels shall not be required for laboratory containers such as beakers, flasks and test tubes, used transiently in laboratory procedures during presence of the user.

ITEM # _____

For the U. S. ATOMIC ENERGY COMMISSION

Date of issuance **NOV 15 1956**

Lyall Johnson
Chief, Licensing Branch

CAL:JED

Westinghouse Electric Corporation
Blairsville, Pennsylvania

Attention: Mr. W. M. Trigg, Manager
Materials Manufacturing Department

Gentlemen:

Enclosed is special nuclear material license No. SEM-37, Revision No. 1.

Very truly yours,

Lyall Johnson
Chief, Licensing Branch
Division of Civilian Application

Enclosure:
License No. SEM-37
Revision No. 1

BCC: H. M. Roth, OROO, w/encl.
M. M. Mann, INS, w/encl.
D. F. Musser, NMM, w/encl.
J. C. Ryan, FIN, w/encl. (2)
L. Hydenan, OGC, w/encl.
H. Steele, CA, w/encl.
Docket File, w/encl.
J. J. Flaherty, COO, w/encl.

ITEM # 379

4/279
E/19
Get Beck to sign to you
Way to File
of Revision

| OFFICE ▶ | CAL | CAL | CAL | FIN | NMM | OGC |
|-----------|---------------|----------------|------------|----------------|-----------|----------------|
| SURNAME ▶ | <i>DeLany</i> | C. T. Edwards | L. Johnson | M. K. K. | <i>2V</i> | <i>lml</i> |
| DATE ▶ | 11-1-56 | <i>11/5/56</i> | | <i>11/5/56</i> | 11-5-56 | <i>11/1/56</i> |

COPY

DOCKET NO. 70-26 (N-26)

March 19, 1959

*Supp. 7 de
Hoy*

NOTICE TO PUBLIC DOCUMENT ROOM

The following Appendices were filed by Westinghouse Electric Corp., Blairsville, Pa., in connection with their special nuclear material license application. These Appendices contain Restricted Data and are being withheld in accordance with the Atomic Energy Act of 1954, as amended.

Appendix II - "Criticality Report", dated April 25, 1956 and

Appendix III - "Criticality Control", dated September 6, 1956 and September 12, 1956 letter of transmittal.

*E/20
4/3/80*

ITEM # 380

CAL:JCD

AUG 23 1956

DOCKET NO. 70-26

Westinghouse Electric Corporation
Blairsville, Pennsylvania

Attention: Mr. W. M. Trigg, Manager
Materials Manufacturing Department

Gentlemen:

Reference is made to Special Nuclear Material License SNM-37, issued August 3, 1956, authorizing your receipt, possession and use of uranium enriched up to 7 $\frac{1}{2}$ % in the U-235 isotope.

A review of your application for a license for fully enriched uranium indicates that some additional information must be provided to us before further action can be taken on your application.

Your approach to the problem of avoiding accidental criticality by using geometrically safe equipment is quite satisfactory. However, you have not provided sufficiently detailed description of your equipment (tanks, hoppers, drums, etc.) to permit us to determine that the equipment is geometrically safe. Please provide these descriptions.

Please also provide more detailed information regarding the avoidance of accidental criticality where geometrically safe equipment is not in use. For example, how to insure against build-up of U-235 in pickling tanks, and how "double-batching" is avoided.

In regard to the data in the "Criticality Table" the "always-safe" designation of certain configurations is not clear. For example, under "Ingot Production - Furnace Residue" you classify as "always-safe" bulk metal of less than 200 cubic inches and comment that material "may stay in area until 200 cubic inch or area limit of four kilograms is reached. . ." Since 200 cubic inches would contain about 60 kilograms of uranium we feel that the always safe designation needs to be clarified.

Please also define your use of the term "always-safe." We use "always-safe" to refer to those parameters of mass, geometry, and concentration

SNM - Westinghouse

~~SECRET~~ E/228
ITEM # 383

Westinghouse Electric Corp

- 2 -

AUG 23 1956

which are considered safe for uranium material of any U-235 assay; values of the parameters other than the one specified as "always-safe" may be unlimited in value.

Very truly yours,

SIGNED

and

Dispatched

Lyall Johnson

Chief, Licensing Branch

Division of Civilian Application

| | | | | | | |
|-----------|------------|------------|--|--|--|--|
| OFFICE ▶ | CAL | CAJ | | | | |
| SURNAME ▶ | D. Johnson | L. Johnson | | | | |
| DATE ▶ | 8/23/56 | 8/23/56 | | | | |

License No. SNM-37

SPECIAL NUCLEAR MATERIAL LICENSE

Pursuant to the Atomic Energy Act of 1954 and Title 10, Code of Federal Regulations, Chapter 1, Part 70, "Special Nuclear Material Regulations", and subject to the conditions and limitations incorporated herein, Westinghouse Electric Corporation, Clairsville, Pennsylvania, (hereinafter referred to as the "licensee") is hereby licensed to receive, possess and use in the fabrication of fuel elements uranium enriched up to 7 1/2 per cent in the U-235 isotope.

This license is subject to all applicable provisions of the Atomic Energy Act of 1954 and to all applicable rules, regulations and orders of the Commission. It is also subject to the provisions of the Commission's proposed Part 20, 10 CFR, "Standards for Protection Against Radiation", published July 16, 1955, in the Federal Register until such time as said proposed regulations or revisions thereof shall become effective regulations of the Commission.

In connection with its possession and use of said special nuclear material, the licensee shall observe the procedures set forth in its application of February 13, 1956, and applicable thereto dated February 13, and April 19, 1956.

The provisions of Section 70.32(a) of Part 70, Title 10, Code of Federal Regulations, are incorporated herein by reference with the same force and effect as if fully set forth herein.

This license shall expire July 1, 1961.

FOR THE ATOMIC ENERGY COMMISSION

ITEM # 384

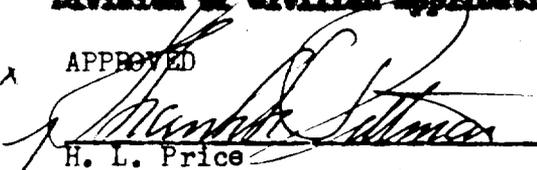
Lyall Johnson
Chief, Licensing Branch
Division of Civilian Applications

E/23

Date of Issuance: AUG 3 1956

APPROVED

H. L. Price



R/BDH

| | | | | | | |
|-----------|-----------------------|-----------------------|-----------------------|--------|-------------------|--|
| OFFICE ▶ | CAL <i>[initials]</i> | CAL <i>[initials]</i> | FIN <i>[initials]</i> | NMM | DGC | |
| SURNAME ▶ | Edwards/mad | L. Johnson | <i>[initials]</i> | George | <i>[initials]</i> | |
| DATE ▶ | 7/1/56 | <i>[initials]</i> | 7/19 | 7/23 | 6/31 | |

Return file to
J.C. Delaney
Rm. 1055-A

CAL:JCD

AUG 3 1956

DOCKET NO. 70-26

Westinghouse Electric Corporation
Blairsville, Pennsylvania

Attention: Mr. W. M. Trigg, Manager
Materials Manufacturing Department

Gentlemen:

Enclosed is special nuclear material license SNM-37 authorizing your receipt of uranium enriched up to 7½ per cent in the U-235 isotope. Your application is being given further consideration in regard to your use of more highly enriched uranium.

Enclosed also is a copy of license SNM-38 issued to the Westinghouse Forest Hills plant.

Very truly yours,

Lyall Johnson
Chief, Licensing Branch
Division of Civilian Application

Enclosures:

- 1. License No. SNM-37
- 2. Copy of license No. SNM-38

BCC: Westinghouse Forest Hills plant, w/encls.
 D. F. Musser, NMM, w/encl.
 J. C. Ryan, FIN, w/encl. (2)
 M. M. Mann, INS, w/encl.
 L. Hydeman, OGC, w/encl.
 H. Steele, CA, w/encl.
 Docket File, w/encl.

E/24

1/28/56

ITEM # 385

| OFFICE ▶ | CAL | CAL | CA | FIN | NMM | OGC |
|-----------|---------|--------------|------------|------|---------|------|
| SURNAME ▶ | Delaney | C.T. Edwards | L. Johnson | | George | MM |
| DATE ▶ | 7/16/56 | 7/17/56 | 7/18 | 7/19 | 7/23/56 | (12) |

① Edwards 416
② File

CAL:LJ

NO. 70-26 - 9

MAR 13 1956

Westinghouse Electric Corporation
P. O. Box 284
Elmira, New York

Attn: Mr. Joseph W. Baker, Asst. Purchasing Agent
Electronic Tube Division

Gentlemen:

This refers to your letter of March 8 regarding application forms for special nuclear material.

Application forms for use in applying for special nuclear material licenses have not yet been printed.

In the meantime, such applications should be filed by letter, in triplicate, executed under oath or affirmation, and should contain the information required under Section 70.22 of the regulation. Your attention is also invited to Section 70.21 which outlines certain procedures which should be used in the preparation and filing of such applications.

Enclosed in a copy of the special nuclear material regulation for your ready reference.

Yours very truly,

SIGNED

and

patched

Lyall Johnson, Chief
Licensing Branch
Division of Civilian Application

E/25

Enclosure
As noted above

ITEM # 387

AP/BAW
Spec Form
Misc

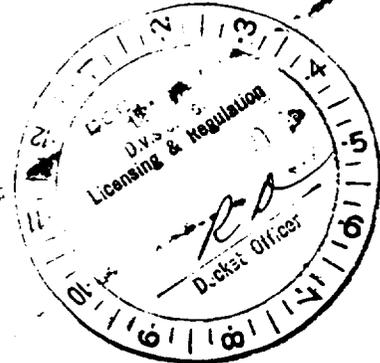
| | | | | | |
|-----------|--------------------------|--|--|--|--|
| OFFICE ▶ | CAL | | | | |
| SURNAME ▶ | L. Johnson/egh 3/1/56 | | | | |
| DATE ▶ | | | | | |

DOCKET NO. 70-26
File by

WESTINGHOUSE ELECTRIC CORPORATION



Blairsville, Penna.
February 20, 1956



Mr. P. G. Haywood
Westinghouse Electric Corp.
1625 K St., N.W.
Washington, D. C.

Dear Mr. Haywood:

We are presenting herewith six notarized copies of the first appendix to our application for license to receive, retain, process and transmit natural uranium, enriched uranium and their oxides. As we had agreed when Mr. Trigg, Mr. Goodrow and I were in Washington with you on Monday, February 13, we are mailing these appendices to you so that they might be personally delivered to Mr. Price in the Atomic Energy Commission. We would appreciate any comments from you as to the current status of our application and some prediction if possible as to expected future progress.

Yours very truly,

[Handwritten signature]
J. Q. A. MC CLURE

JQAMcC/vm
Enclosures -6

[Handwritten initials]
E/26

ITEM # 388

(8)

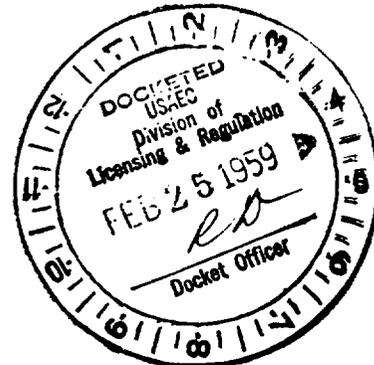
DOCKET NO. 70-26
File by

WESTINGHOUSE

ELECTRIC CORPORATION



Blairsville, Pa.
February 20, 1956



United States Atomic Energy Commission
Division of Licensing
Washington 25, D. C.

APPLICATION FOR LICENSE TO RECEIVE, RETAIN, PROCESS AND TRANSMIT NATURAL
URANIUM, ENRICHED URANIUM, AND THEIR OXIDES

APPENDIX I

On Monday, February 13, Messrs Trigg, Goodrow, McClure and Haywood of Westinghouse Electric Corporation, visited the offices of the Atomic Energy Commission, Division of Licensing, in Washington D. C., and presented six copies of our application of license as above. In attendance at this time were Messrs Harold Price and Dr. Frank Pittman.

At that time Mr. Price and Dr. Pittman examined casually our application for license and had some comments to make in connection with expanding its coverage. The specific suggestions made were that we provide information as to the precautions that we intend to take for fire prevention and the putting out of fires if they exist in the metals being worked upon. At the same time it was suggested that we include some specific information as to our criticality control plans in the process area. It was suggested that this information be provided as an appendix to the original license application. This information is presented here.

FIRE PREVENTION

To minimize the possibility of fire hazards during machine operations all metal cutting machines will be equipped with at least two coolant oil discharge pipes providing a constant flow of coolant at the cutting tool.

During metal cutting machine operations all machine operators will be required to keep all chips, shavings and cuttings away from the cutting tool and to submerge these in mineral oil in metal covered containers.

Scrap metal containers will be loosely covered, have several $\frac{1}{2}$ " holes drilled approximately 1" below the lid and will either be stored outside the building or in a well ventilated area.

Throughout the Fuel Element and Pellet area will be several 40# pails of G1 type metal extinguishing powder. Each pail will be conspicuously marked and will be provided with a suitable device for dispensing the powder. Several long handle metal shovels will also be provided for removing burning material to safe areas i.e- outside the production building.

Security guards and selected production personnel will be trained to combat and extinguish any metal fires which may be experienced within the production facilities.

Additional fire and safety protection will be provided within the fuel element and pellet areas by use of emergency alarm service with control devices strategically located about the area, also several CO₂ and pressurized water extinguishers will be similarly located within the production area.

CRITICALITY CONTROL

The equipment layout for the Blairsville Fuel Element plant was examined on 2-9-56 by Mr. Joseph Clark, criticality specialist in the health physics department at Westinghouse Atomic Power Division plant and AEC installation at Bettis Field. At this time Mr. Clark indicated that he could foresee no criticality problems in this process area if reasonable precautions as to material movements are taken. We outlined to him our plan to place all responsibility for the movement of enriched material in the hands of one person to be known as a courier. It will be the responsibility of this person to maintain records at all times of the whereabouts of all enriched material and it will be his sole

responsibility to see to it that safe quantities of material as specified by criticality specialists are not exceeded in any areas within the general process area or otherwise. No other persons within the area will be permitted to remove enriched material from within marked process areas. Movement within these areas, however, may be made at the discretion of the persons working within the area. Specifically Mr. Clark indicated that on the particular projects which we are first considering which will be enriched fuel elements a quantity of 52 elements within any given three foot radius is an always safe quantity even when submerged in water. Therefore, on this particular job we will follow this spacing rule; that no circles of 3 foot radius containing 52 elements or their equivalent will be permitted to overlap any given time. As our work load changes or as the character of the materials which we are processing changes, we will consult again with criticality specialists as to their recommendations on movement and storage of material in process.



W. M. TRIGG, MANAGER
MATERIALS MANUFACTURING DEPARTMENT
BLAIRSVILLE METALS PLANT

Sworn to and subscribed before me
this 21st day of Feb. 1956



Notary Public, Derry Twp., Westmoreland Co.
MY COMMISSION EXPIRES MARCH 10, 1959

WESTINGHOUSE ELECTRIC CORPORATION

Directors **SECRET** NO. 70-26
File by

Dillon Anderson
Baker, Botts, Andrews & Shepherd
Esperson Building
Houston 2, Texas
Citizenship - U.S.A.

Arthur W. Page
46 Cedar Street
New York 5, N. Y.
Citizenship - U.S.A.

E. O. Boshell
Chairman and President
Westinghouse Air Brake Company
401 Liberty Avenue
Pittsburgh 22, Pa.
Citizenship - U.S.A.

Thomas I. Parkinson
7 Park Avenue
New York, N. Y.
Citizenship - U.S.A.

G. H. Bucher
Pittsburgh, Pa.
Citizenship - U.S.A.

William A. Patterson
President - United Air Lines, Inc.
5959 South Cicero Avenue
Clearing Station
Chicago 38, Ill.
Citizenship - U.S.A.

Frank R. Denton
Vice Chairman
Mellon National Bank & Trust Company
514 Smithfield Street
Pittsburgh 30, Pa.
Citizenship - U.S.A.

Gwilym A. Price
President
Westinghouse Electric Corporation
Pittsburgh, Pa.
Citizenship - U.S.A.

John L. Hall
Choate, Hall & Stewart
30 State Street
Boston 9, Mass.
Citizenship - U.S.A.

John R. Read
7 Roslyn Road
Richmond 26, Va.
Citizenship - U.S.A.

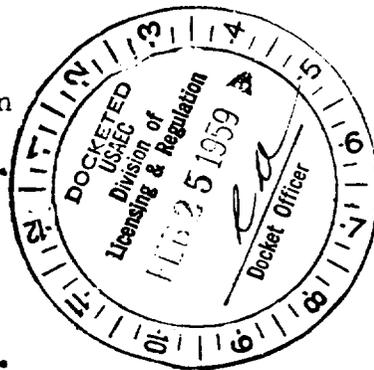
H. B. Higgins
President - Pittsburgh Plate Glass Company
1 Gateway Center
Pittsburgh 22, Pa.
Citizenship - U.S.A.

John W. Reavis
Jones, Day, Cockley & Reavis
1759 Union Commerce Building
Cleveland 14, Ohio
Citizenship - U.S.A.

Charles R. Hook
Chairman of the Board
Armco Steel Corporation
Middletown, Ohio
Citizenship - U.S.A.

A. W. Robertson
Pittsburgh, Pa.
Citizenship - U.S.A.

Edward Hopkinson, Jr.
Drexel & Company
1500 Walnut Street
Philadelphia 1, Pa.
Citizenship - U.S.A.



William C. Robinson
President - National Electric Pro-
ducts Company
140 Stanwix Street
Pittsburgh 22, Pa.
Citizenship - U.S.A.

John J. McCloy
Chairman of the Board
The Chase National Bank of City of New York
18 Pine Street
New York 15, N. Y.
Citizenship - U.S.A.

John M. Schiff
Kuhn, Loeb & Company
52 William Street
New York 5, N. Y.
Citizenship - U.S.A.

M. W. Smith
President - Baldwin-Lima-Hamilton Corp.
Philadelphia 42, Pa.
Citizenship - U.S.A.

Elected Officers (Cont'd)

James Clarke, Asst. Controller
3 Gateway Center
Pittsburgh, Pa.
Citizenship - U.S.A.

Donald P. Day, Asst. Treas. & Asst. Secy.
3 Gateway Center
Pittsburgh, Pa.
Citizenship - U.S.A.

H. E. Jensen, Asst. Secretary
40 Wall Street
New York, N. Y.
Citizenship - U.S.A.

H. P. MacDonald, Asst. Treas. & Asst. Secy.
3 Gateway Center
Pittsburgh, Pa.
Citizenship - U.S.A.

Albert Olsen, Asst. Secy. & Asst. Treas.
40 Wall Street
New York, N.Y.
Citizenship - U.S.A.

Divisions and Regions

J. H. Ashbaugh, Vice President
246 E. Fourth Street
Mansfield, Ohio
Citizenship - U.S.A.

C. H. Bartlett, Vice President
3 Gateway Center
Pittsburgh, Pa.
Citizenship - U.S.A.

Tomlinson Fort, Vice President
3 Gateway Center
Pittsburgh, Pa.
Citizenship - U.S.A.

R. S. Kersh, Vice President
40 Wall Street
New York, N. Y.
Citizenship - U.S.A.

W. O. Lippman, Vice President
150 Pacific Avenue
Jersey City, N.J.
Citizenship - U.S.A.

Emery W. Loomis, Vice President
3001 Walnut Street
Philadelphia, Pa.
Citizenship - U.S.A.

W. J. Maytham, Jr., Vice President
410 Bush Street
San Francisco, 8, California
Citizenship - U.S.A.

L. B. McCully, Vice President
East Pittsburgh, Pa.
Citizenship - U.S.A.

Lamar W. McLeod, Vice President
411 N. Seventh Street
St. Louis, Mo.
Citizenship - U.S.A.

Richard T. Orth, Vice President
Elmira, N. Y.
Citizenship - U.S.A.

John E. Payne, Vice President
306 Fourth Avenue
Pittsburgh, Pa.
Citizenship - U.S.A.

O. O. Rae, Vice President
1299 Northside Drive, N.W.
Atlanta, Ga.
Citizenship - U.S.A.

W. C. Rowland, Vice President
Lester Br. P. O.
Philadelphia, Pa.
Citizenship - U.S.A.

H. E. Seim, Vice President
1421 State Street
Bridgeport 2, Conn.
Citizenship - U.S.A.

C. C. Shutt, Vice President
Lima, Ohio
Citizenship - U.S.A.

F. L. Snyder, Vice President
469 Sharpsville Avenue
Sharon, Pa.
Citizenship - U.S.A.

Divisions and Regions (Cont'd)

Tom Turner, Vice President
4454 Genesee Street
Buffalo, N. Y.
Citizenship - U.S.A.

C. H. Weaver, Vice President
Bettis Field
Pittsburgh, Pa.
Citizenship - U.S.A.

C. S. Weber, Vice President
1625 K. Street, N. W.
Washington, D. C.
Citizenship - U.S.A.

L&R:JJL
70-26

Westinghouse Electric Corp.
P. O. Box 128
Blairsville, Pennsylvania

Attention: Mr. R. D. Rowley
Manager

Gentlemen:

Reference is made to your letter of February 28, 1961, advising that you do not intend to renew your License 384-37 beyond its expiration date of July 1, 1961.

Prior to that date you should complete the enclosed form "Certification of Status, etc.," and return it to this office so that we may properly terminate the license.

If it becomes necessary to possess material under this license beyond the period of its expiration date, the application for renewal should be submitted to this office at least 30 days prior to July 1, 1961.

Very truly yours,

J. C. Delaney
Chief, Nuclear Materials Branch
Division of Licensing & Regulation

E/27
~~3/27~~

Enclosures:
As stated

Distribution:

Doc. Rm. Compl. Br. & Div. Rdgs.
Formal Suppl. J. J. Lane

ITEM # 359

| | | | | | |
|-----------|-----------------|---------------|--|--|--|
| OFFICE ▶ | L&R | L&R | | | |
| SURNAME ▶ | J. J. Lane: sjs | J. C. Delaney | | | |
| DATE ▶ | 3-6-61 | 3-6-61 | | | |

MAY 5 1961

DLR:CGW
70-26

Westinghouse Electric Corporation
Metals Plant
Blairsville, Pennsylvania

Attention: Mr. R. D. Rowley, Manager

Gentlemen:

Thank you for your letter of February 28, 1961, in which you informed us that all manufacturing activities performed under Special Nuclear Material License No. SNM-37 had been discontinued.

With respect to your question concerning obligations that you must satisfy prior to the expiration of Special Nuclear Material License No. SNM-37, your attention is directed to the AEC's "Licensing of Source Material," Part 40, Title 10, Code of Federal Regulations, (amended) Section 40.3, "License requirements," and Section 40.47, "License requirements for persons possessing source material on the effective date of the regulation in this part." You will note that Section 40.3 states that no source or special nuclear material may be possessed, used, transferred or delivered except as authorized in a specific license. This means that the special nuclear material scrap you now possess must be disposed of to a person authorized to receive it prior to the expiration of License No. SNM-37, unless you intend to renew subject license. Should you have any questions about this matter, please feel free to write us.

Your cooperation with us is appreciated.

Sincerely yours,

bcc: Compliance Division, HQ)
Compliance Division, NYOO) w/cpy ltr. 2/28/61
Public Document Room

Eber R. Price
Assistant Director
Division of Licensing
and Regulation

E/28

Enclosure
10 CFR 40

ITEM # 353

ER Price

| | | | | | |
|-----------|-------------|----------|--|--|--|
| OFFICE ▶ | DLR:EB | DLR | | | |
| SURNAME ▶ | CGW:lrn:REG | ER Price | | | |
| DATE ▶ | 5-4-61 | | | | |

UNITED STATES GOVERNMENT

Memorandum

TO : R. F. Barker, Chief
Radiation Safety Branch

DATE:

FROM : J. C. Delaney, Chief *J. C. Delaney*
Nuclear Materials Branch

SUBJECT: INSPECTION REPORT FOR THE WESTINGHOUSE ELECTRIC CORPORATION, BLAIRSVILLE, PA. - DOCKET NO. 70-26

L&R:JLJ

In view of the elapsed time from date of inspection and a notification from Westinghouse dated February 28, 1961, that their Blairsville Metals Plant is terminating its license and operations on July 1, 1961, we believe that further information on their processing procedures dealing with criticality would not be appropriate at this time. However, since large quantities of special nuclear material have been handled at this site, you may wish to have the Division of Compliance conduct a check out at this site, upon license termination, to verify that all special nuclear material has been transferred, to determine if all transfers were made in accordance with the regulations, to determine the extent of fixed contamination, if any, of premises and equipment, etc.

E/29
APB/54
ITEM # 354

Office Memorandum • UNITED STATES GOVERNMENT

TO : H. L. Price, Director
Division of Licensing and Regulation

DATE: MAY 9 1960

FROM : Marvin M. Mann, Assistant Director for Compliance
Division of Inspection *M.M. Mann by P.C. Morris*

SUBJECT: WESTINGHOUSE ELECTRIC CORPORATION, LICENSE NO. SNM-37
~~WEST.~~

SYMBOL: INS:WEK

Attached is a copy of the report dated March 28, 1960, of the inspection of subject licensee, together with transmittal memorandum from NY Inspection Division dated March 28, 1960. We concur with the comments and recommendations submitted by NY.

Attachments:

1. Cy. memo, Kirkman to Mann, 3/28/60
2. Cy. Insp. Rpt. dtd. 3/28/60

Note - this came to me on Dec 1, '60 Dick [unclear] and I met with [unclear] and the three of us agreed that [unclear] should request specific on criticality hazard, including non-compliance listing. The discussion on pp. 3 & 4 while alarming, does not relate these practices to the approved application.

*Received R122
2/20/61*

*BDZ
1/6/61
E/30*

ITEM # 355 *A/B/S*

MAR 25 1960

Marvin M. Mann, Assistant Director,
Division of Inspection, Headquarters

Robert W. Kirkman, Director
Inspection Division, NYOO

TRANSMITTAL OF LICENSE COMPLIANCE INSPECTION REPORT -
10 CFR 70

SYMBOL: INS:JRS

Transmitted herewith is the following inspection
report involving noncompliance:

WESTINGHOUSE ELECTRIC CORP.
Metals Plant
Blairsville, Pennsylvania
License No. SNM-37

The following items of noncompliance were observed
or noted during the course of this inspection:

20.201 "Surveys" (b) - in that no breathing zone
air samples had been taken in areas near the
"knock out hood". (See page 8, paragraph 14
of report details.)

- in that no breathing zone air samples had
been taken near the de-jacketing table. (See
page 8, paragraph 14 of report details.)

* - in that an inadequate evaluation (failure to
agitate the tanks) had been performed in the
analysis of the amount of material released to
the sewerage or to the River. (See page 7,
paragraph 7 of report details.)

(continued)

E/31
4/25/6
ITEM # 356

(4)

(4)

Marvin M. Mann

- 2 -

- * 20.103 "Concentrations in effluents to unrestricted areas" (b)
 - in that the licensee has exceeded the stack effluent limits of Appendix B, Table II. (See pages 6 and 7, paragraph 6 of report details.)

- 20.305 "Treatment or disposal by incineration"
 - in that licensed material has been incinerated. (See page 9, paragraph 15 of report details.)

- 70.24 "Additional requirements" (2)
 - in that no evacuation drills had been conducted. (See page 11 of report details.)

We would also like to point out that the licensee possesses a 20.5 mc Co-60 sealed source (as of 1955) that is not covered by a byproduct license. This is discussed in paragraph 17 of the report details. Although application has been made to obtain a license, we feel that the letter to the licensee should state that the source is presently possessed illegally. ✓

The citations for failure to take breathing zone air samples (20.201(b)) are being made as we feel that the facilities where the subject operations are being performed are inadequate from a health and safety standpoint. Goodrow and Strenio both reported that these facilities would be redesigned in the near future. They presented the inspectors with a copy of a memorandum which listed the changes that would be made in the existing facilities.

With regard to the citation for failure to conduct evacuation drills (70.24), Goodrow stated that no drills had been conducted due to the cold weather. He added that he hoped to conduct a drill very shortly.

(continued)

With regard to nuclear safety and criticality control, we feel that this plant is sub-standard in a number of respects:

1. There are no written detailed procedures which pertain to nuclear safety and which would be available for study by the operators.
2. Some batch limits are higher than we have ever seen employed in fuel fabrication plants.
3. The evacuation route from the potentially most hazardous area, that of the pickling bath, has many obstacles in its path.
4. The haphazard method of storage in the waste disposal shed presents a potential fire hazard. With enriched material in the area, fire could conceivably result in a nuclear incident.
5. The criticality engineer has had to learn his job practically by himself, on-the-job, while at the same time responsible for formulating and enforcing the rules for nuclear safety. He has had no formal training in reactor theory or in calculating critical masses.
6. The criticality engineer has had little time for outside study. He could not, for instance, afford the time to attend the two-week Oak Ridge course on criticality problems.
7. There has been inadequate review of day-to-day operations by criticality-knowledgeable people outside of the plant operation.
8. Avoidance of double batching of finished plates in shipping containers clearly depends upon the correct actions of one individual. There seems to be no procedural check on this operation.
9. Process sheets do not **include** safe batch limits.

(continued)

10. Analytical samples taken from acid bottles were not representative of all the material in the bottles.
11. Fuel meat plates being fabricated in the machine shop area were observed to be transported on a cart which was not a safe criticality cart.
12. An interoffice memo from the criticality engineer, relative to safe storage in the in-process storage room, was not delivered to the responsible people for three months.
13. In the in-process storage room, twice the amount of material calculated to be a safe batch limit by the criticality engineer, was stored on a rack at the time of the inspection.

Mr. Goodrow admitted that this plant had grown from a pilot plant into a production facility without adequate planning. Mr. Rowley, the plant manager, stated that they had been just lucky that a serious accident has not occurred. We agree with Mr. Rowley.

We discussed all of the items noted above with Mr. Rowley, and he promised that each and every item would be investigated thoroughly and remedial steps taken.

After the inspection, we contacted Mr. G. Monteith, Vice President of Westinghouse in charge of the division responsible for the Blairsville Metal plant, and informed him that we had made an inspection of the plant and found it to be below our standards for licensed facilities. He stated that he had confidence that Mr. Rowley would see that the proper steps are taken to insure that the plant is operated safely.

We recommend that a letter be sent to the licensee citing the items of noncompliance, and stating that we had found the nuclear safety program to be sub-standard. We further recommend that this plant be reinspected within three months.

Enclosure:
4 cys.

DATE
SURNAME
OFFICE

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E/32
ALBEN

357802
1/30/60
W/1/30/60

**REGISTERED MAIL
RETURN RECEIPT REQUESTED**

ITEM # 357802

With respect to Item 2, we note that by letters dated March 22 and August 19, 1960, you requested an amendment to license No. SMC-37 to authorize the incineration of licensed waste materials and the request was granted on September 9, 1960. With regard to Items 1 and 3,

1. Surveys sufficient to determine personnel exposure to airborne uranium during performance of duty operations at the "dejecting table" and "mock out hood" were not performed as required by section 20.201(b), "Surveys."
2. Licensed material had been incinerated without special authorization as required by section 20.305, "Treatment or disposal by incineration."
3. Evacuation drills had not been conducted as required by section 70.24(z), "Additional requirements."

It appears that certain of your activities were not conducted in full compliance with the requirements of the AEC's "Standards for the Control of Radioactive Material," Part 20, and "Special Nuclear Material," Part 70, Title 10, Code of Federal Regulations, in that:

This refers to the inspection conducted on March 15 and 16, 1960, of your activities authorized under AEC Special Nuclear Material License No. SMC-37.

Conclusion:

Attention: Mr. C. W. Goodrow
Security Officer
Harris Plant
Harrisville, Pennsylvania
Westinghouse Electric Corporation

JAN 30 1961

DLR:CGM
80-26

Westinghouse Electric
Corporation

- 2 -

JAN 30 1961

pursuant to the provisions of section 2.201(a), "Notice of Violation," of the AEC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, you are requested to notify this office, within thirty days of your receipt of this notice, of the steps taken or to be instituted to achieve correction of the alleged violations and the date when such correction has been or will be achieved.

There is some question as to the validity of the method by which the two waste liquid holding tanks are sampled for radioactive content. We note that although the 100 milliliter sample is drawn two feet from the bottom of the tank, there is no agitation to mix the tank contents prior to sampling. In your reply to this letter, please describe the steps that you have taken or will take to assure that each sample drawn is reasonably representative of the total contents of each tank.

We also note that your survey records indicated that occasionally concentrations of licensed radioactive material combined with unlicensed radioactive material in stack exhaust air exceeded the permissible limits for unrestricted areas in 10 CFR 20, Appendix B, Table II, Column 1. We are enclosing for air survey guide for uranium miller and thorium miller operations, Table III, "Unrestricted Areas," of Regulatory Material Discharged as Air Effluents from Uranium Mills," which you may find useful in determining compliance with Section 20.103(b), "Concentrations in Effluents to Unrestricted Areas." In your reply to this letter, please describe how you have determined or will determine compliance with respect to permissible concentrations of radioactive materials in atmospheric effluents.

During the inspection, it was observed that you possessed a 20.5 millicurie Cobalt 60 sealed source without a byproduct license authorizing such possession. However, we note that you were issued a byproduct material license on June 1, 1960, to cover possession of the Cobalt 60 source.

Very truly yours,

cc: Compliance Division, HQ
Compliance Division, NYOO
Public Document Room

J. C. Delaney, Chief
Nuclear Materials Branch
Division of Licensing
and Regulation

Enclosures:

1. 10 CFR 20
2. 10 CFR 70
3. 10 CFR 2

| | | | | | |
|-----------|--------------------|--------------------|--|--|--|
| OFFICE ▶ | DIR:RSB | DIR:MMB | | | |
| | CGM:IRM:JRB | JC Delaney | | | |
| SURNAME ▶ | <i>[Signature]</i> | <i>[Signature]</i> | | | |
| DATE ▶ | 11-14-60 | 1/27/61 | | | |

D R A F T

Files (Thru Lyall Johnson)

F. C. Lee, Civilian Application Division

Subj: APPLICATION FOR SPECIAL NUCLEAR MATERIAL BY WESTINGHOUSE ELECTRIC CORPORATION

The Westinghouse Electric Corporation submitted a sworn application, dated February 13, 1956, for a license to "receive, retain, process and transmit natural uranium, enriched uranium and their oxides."

The application was presented to Mr. Price and Dr. Pittman personally by Westinghouse officials. It was discussed in a general way and Messrs. Price and Pittman suggested that more information be supplied regarding proposed precautions to prevent fires and the occurrence of criticality incidents. Westinghouse then submitted a notarized report entitled "Appendix I, dated February 20, 1956" presenting further information on these subjects.

The application (plus Appendix I) satisfies the requirements of Section 70.21 (10 CFR). No financial statement is supplied as required by Section 70.22 (a) 4, however, this can be dispensed with, in this instance, because ~~it is obvious this company is financially capable of meeting its obligation for this project.~~ ^{not requesting an allocation of material} *from the Commission*

It is evident from the application that the company has considered and made provision for its accountability for special nuclear material, employee health, fire prevention, storage and handling of special nuclear material, air wastes, liquid wastes, area and air monitoring, radiation detection equipment, ventilation, work clothing, wash ups, security and criticality.

Hewson The application is not sufficiently detailed and explanatory to give a

ITEM # 341

E/33
REVISION

clear picture of their system for preventing criticality in the handling of highly enriched special nuclear material or the competence of the personnel charged with the operation of the system. It can be assumed that Westinghouse with its extensive background of experience at Bettis Field and with the advice of competent men at that site to draw on, have adopted a system at Blairsville equally as effective, ~~if not more so~~. However, there is nothing in the record to show this.

There is also some doubt as to the competence of the staff that will be charged with the operation of the system at Blairsville as disclosed by the application. This may be due to confusion in the meaning of the term "health physics."

The plant was inspected by A.E.C. officials from COO and by the Bettis Field criticality specialist. There is no report at hand on the findings of the A.E.C. officials. In this connection, it would be helpful if A.E.C. officials from field offices, who inspect facilities which will require licenses, submit reports to the Civilian Application Division at their earliest convenience, so that they may be made a part of the record bearing on the licensing action of C.A.D.

The application states that the
A ~~the~~ criticality specialist from Bettis Field noted that the layout was satisfactory and that with ordinary precautions, no criticality incidents should occur.

The effectiveness of any system is directly proportional to the training and discipline of the operating force. It is not clear that Westinghouse plans to use a trained force at Blairsville until, at least, it can train its own force. Considering the quantities of highly enriched special nuclear material

that it is proposed to store and handle at Blairsville, it would seem imperative that no chance of mishandling should be taken with an untrained crew.

From the above it is recommended that Westinghouse be requested to furnish assurances:

1. That the system for storing and handling of special nuclear material at Blairsville is equivalent to that at Bettis Field.
2. That an experienced criticality specialist will be assigned to Blairsville to supervise handling and storage operations until a man can be trained to adequately replace him.
3. That sufficient trained personnel from Bettis Field will be assigned to Blairsville to insure safe operation of the storage and handling operations until an adequate crew can be trained to replace them.
4. That they furnish A.E.C. with a more detailed description of the "courier," his competence, his recording methods, his responsibilities and any provision that has been made to replace him when he is incapacitated or leaves.

It would also be well to have some statement from Westinghouse that they have provided against criticality in the metal cuttings cans.

EXPERT SYSTEM LICENSE EVALUATION
EVALUATION REPORT FOR LICENSE SNM-00037

INVENTORY CONTENTS FOR LICENSE NUMBER: SNM-00037

Docket 70-00026

Licensee: WESTINGHOUSE ELECTRIC CORPORATION

Address: BLAIRSVILLE, PENNSYLVANIA

Zip:

State of operation: PA

Site used: SAME AS LICENSEE

Disposition information present: CERTIFICATE AND LETTER

Contents of letter:

ALL NUCLEAR MATERIAL AND ECT TRANS TO WESTINGHOUSE AT CHESWICK, PA

Matl. Transfrd to: WESTINGHOUSE ATOMIC FUEL DEPARTMENT

License to which transferred: SNM-338

There is an NRC inspection report in this license file

Remarks: USE OF AN INCINERATOR AT THE SITE TO DISPOSE OF LOW-LEVEL WASTE

JOB NUMBER: 0275 BOX NUMBER: 01

DESCRIPTION OF ACTIVITY OR FACILITY: FUEL FABRICATION/MANUFACT

--Type and form of materials licensed--

Material--

--Form--

URANIUM/NATURAL U

Loose material

ENRICHED U, 4-10%

Loose material

Initial class of license from facility and materials description: 1A

--Amounts of the following materials were licensed--

| Material-- | --Form-- | --Amount-- | --Unit-- |
|-------------------|----------|---------------|---------------|
| URANIUM/NATURAL U | LOOSE | 364.5000000 | LB } See |
| ENRICHED U, 4-10% | LOOSE | 70000.0000000 | LB } Comments |

Rank of the license after information on specific materials: 871

1. U-235 or enriched U on license. Not a reactor
2. There was one identifiable site with this license.
3. High likelihood that activity could have generated significant contamination. Rank=rank*1.5
4. There was some decon of facility or site at CLOSEOUT
Rank=0.9*rank
5. There WAS a closeout survey for this license. Rank not changed
6. The closeout survey was conducted before 1970. Rank=rank*.90
7. There was a survey for alpha contamination, judged to be thorough. Rank=0.65*rank
8. There was an NRC FINAL INSPECTION of the facility. No change in rank.
9. Final inspection was thorough, could have missed potential problems. Rank=0.8*rank
10. There was evidence of serious releases to the environment
Rank=2*rank
11. Information insufficient to judge frequency of turnover for operation Rank not changed

E134
AJB/MZ

ITEM # 342

12. There was significant generation of waste material in routine cleanup of facility. Rank=rank*1.5
13. Possible inappropriate disposal or abandonment of contaminated material from cleanup. Rank=rank*1.2
14. There was adequate documentation of the disposition of materials. Rank=rank*0.7
15. There was no evidence of burial or dumping by licensee
Rank not changed

The final category is HIGHEST PRIORITY

The final ranking for this license is: 1179

Reviewer's comments concerning license SNM-00037

This license was issued in the mid 50's for uranium enriched in U-235. The maximum quantity on the license is stated as is limited to that which may be used in accordance with procedures outlined in licensee's application. When quantities were requested in the evaluation, I used values listed in the application and the inspections. Since an incinerator was used on site, the area surrounding this incinerator could be contaminated. The entire closeout survey should be evaluated for present standards as it was conducted in 1961.

ANGLE 78 FUEL AREA

| | | | |
|------|-------------|------|--|
| 1.5 | | 10.2 | |
| 0.99 | 0.95 | 9.5 | |
| 0.16 | 3.3 | 2.1 | |
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| 1000 | | | |

U.S. ATOMIC ENERGY COMMISSION
 WASHINGTON, D. C.
 FEB 14 1954

DIVISION OF CONSTRUCTION
 1954

alpha
 above

CAL:LJ

NOV 16 1956

Dr. Berwyn F. Mattison
Secretary of Health
Pennsylvania Department of Health
State Capitol
South Office Building
Harrisburg, Pennsylvania

Dear Dr. Mattison:

With reference to our letter to you dated August 13, 1956, this is to inform you that on November 15, 1956 the Westinghouse Electric Corporation, Blairsville, Pennsylvania, was granted an amended Special Nuclear Material License authorizing the licensee to receive and use in the fabrication of fuel elements uranium enriched in the isotope U-235.

The license as originally issued authorized the receipt and use of uranium enriched to 7 1/2% in the isotope U-235.

A copy of the amended license is enclosed for your information.

Sincerely yours,

Frank K. Pittman
Deputy Director
Division of Civilian Application

Enclosure:
Cy. of License No. SNM-37
(as amended 11/15/56)
Amendment No. 1

bcc: E. E. Fowler

ITEM # 344

E/36
ABM

| | | | | | | |
|-----------|--------------|-----------|---------|-------------|--|--|
| OFFICE ▶ | CAL | CAL | CA | CA | | |
| SURNAME ▶ | Steele:hs H2 | L Johnson | E Price | F K Pittman | | |
| DATE ▶ | 12/3/56 | 12/3/56 | | 12-6-56 | | |

Center of Files

SNM-37

Dockets 70-7, 70-70, N-26,
70-43, 70-113, 70-114, 70-123,
70-119 and 70-144

*1400
Blair, E. C.*

Dr. Berwyn F. Mattison
Secretary of Health
Pennsylvania Department of Health
State Capitol
Health & Welfare Building
Harrisburg, Pennsylvania

Dear Dr. Mattison:

In accordance with established procedure, we enclose
copies of special nuclear material licenses which have
been issued to companies and universities in the State
of Pennsylvania.

Sincerely yours,

Lyall Johnson
Chief, Licensing Branch
Division of Civilian Application

Enclosures:

- License SNM-6 (RNL-2), 9/5/57
- License SNM-61, as amended 11/7/57
- License SNM-37, as amended 9/11/57
- License SNM-38, as amended 9/12/57
- License SNM-95, 5/29/57
- License SNM-100, 7/2/57
- License SNM-114, 8/19/57
- License SNM-121, 9/18/57
- License SNM-123, 9/19/57

*E/37
AIBNS
12/19/57*

bcc: E. E. Fowler

ITEM # 345

| | | | | | |
|-----------|-----------|-----------|--|--|--|
| OFFICE ▶ | CAL | CAL | | | |
| SURNAME ▶ | Steele:hs | L Johnson | | | |
| DATE ▶ | 12/7/57 | 12/9/57 | | | |

COMMONWEALTH OF PENNSYLVANIA



DEPARTMENT OF HEALTH

HARRISBURG

P. O. Box 90

August 17, 1956

Mr. Frank K. Pittman
Acting Director
Division of Civilian Application
United States Atomic Energy Commission
Washington 25, D. C.

Dear Mr. Pittman:

Thank you for your informatory letter of August 13, 1956.
All of our Health Department agencies have been advised of the
authorizations.

Would you correct your records by deletion of the name of
Dr. Joseph Shilen of the Pennsylvania Bureau of Industrial Hygiene
since he is no longer in the employ of the Health Department?

Most sincerely,

Arthur B. Welsh
Arthur B. Welsh, M. D.,
Medical Coordinator
Civil Defense

ABW/g

ABW *E/38*
ITEM # 346

CAL:LJ

AUG 13 1956

Dr. Arthur B. Welsh
Medical Coordinator for Civil Defense
Pennsylvania Department of Health
Harrisburg, Pennsylvania

Dear Dr. Welsh:

This is to inform you that on August 3, 1956 the Atomic Energy Commission issued Special Nuclear Material licenses to Westinghouse Electric Corporation, Blairsville, Pennsylvania, and to Westinghouse Electric Corporation, Forest Hills, Pennsylvania, authorizing the licensee in each case to receive, possess and use in the fabrication of fuel elements uranium enriched in the isotope U-235.

Copies of the licenses are enclosed for your information. Also enclosed are copies of Part 70, Title 10, CFR, and proposed Part 20, Title 10, CFR, referred to in the licenses.

We are also notifying Dr. Joseph Shilen of the Pennsylvania Bureau of Industrial Hygiene of the issuance of these licenses.

Sincerely yours,

[Signature]
Dispatched

Frank K. Pittman
Acting Director
Division of Civilian Application

Enclosures:
Cys. of Licenses SNM-37 and SNM-38
Part 70
Proposed Part 20

E/39
CASH

ITEM # 347

| | | | | | | |
|-----------|--------------|-----------|-----------|-------------|--|--|
| OFFICE ▶ | CAL | CAL | CA | CA | | |
| SURNAME ▶ | Steele:hs #5 | L Johnson | E R Price | F K Pittman | | |
| DATE ▶ | 8/10/56 | 8/10/56 | | 8-13-56 | | |

ORNL SITES - SUMMARY

License No.: SNM-00037 ORNL Score: 1179
 Docket No.: 070-00026
 Licensee: Westinghouse Electric Corp Review Status: File Reviewed
 Site Address(es): Blairsville, Pennsylvania
 Site Contact: A. Joseph Nardi, Manager - License Administration
 Westinghouse Electric Corporation
 Pittsburgh, Pennsylvania
 Telephone No.: 412-374-4652
 SDMP Site: no
 Related License(s): ~~none~~ C-04971 ✓
 NRC Reviewer: Mark C. Roberts
 Review Abstract: Region I staff provided a copy of the contents of the docket file to Westinghouse who performed preliminary surveys.
 Recommendations: Review license application and plans when submitted by Westinghouse.

OK
 3-21-94
 (10)

Summary: Westinghouse conducted research and development on low-enriched uranium fuel. A preliminary survey of the site covered by License No. SNM-00037 has been performed by Westinghouse representatives. These survey results indicate that there are a very few locations where the non-removable contamination levels exceed current NRC guidelines for release for unrestricted use. Approximately 20 areas with a total area of 200 m² (2,000 ft²) were identified with an average contamination level of 10,000 dpm/100 cm² and a maximum contamination level of 150,000 dpm/100 cm². Region I has discussed the status of the site with representatives from Westinghouse in a February 22, 1994 meeting. Westinghouse will submit characterization and remediation plans for the site as a license request. Westinghouse plans to conduct characterization and remediation during the summer and fall of 1994.

Reviewed by: _____ Date _____

Approved by: _____ Date _____

E/40
 CABW

ITEM # 348

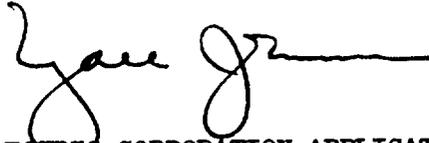
~~SECRET~~

Office Memorandum • UNITED STATES GOVERNMENT

TO : Clifford K. Beck

DATE: SEP 26 1956

FROM : Lyall Johnson



SUBJECT: WESTINGHOUSE ELECTRIC CORPORATION APPLICATION FOR SPECIAL NUCLEAR MATERIAL LICENSE

SYMBOL: CAL:JCD

Reference is made to your memorandum of July 26, 1956, which comments on the Westinghouse application for SNM license dated February 13, 1956, with appendices dated February 20 and April 25, 1956.

Transmitted herewith is our file on the Westinghouse application. Appendix III (dated September 6, 1956) to the Westinghouse application of February 13, 1956, provides additional information regarding criticality control.

Please review in regard to the adequacy of the applicant's proposed procedures to avoid criticality the application for license to receive and use fully enriched uranium in view of the additional information provided by Westinghouse.

The Westinghouse file should be returned with your comments.

Enclosure:
Westinghouse file

~~RESTRICTED DATA~~

This document contains restricted data as defined in the Atomic Energy Act of 1954. Its transmittal or the disclosure of its contents in any manner to an unauthorized person is prohibited.

TRANSMITTAL

When separated from enclosures, handle this document as Unclassified
(Insert proper classification)

~~SECRET~~ITEM # 332

MAR 28 1962

40-3558
70-36

Westinghouse Electric Corporation
Materials Manufacturing Department
P. O. Box 138
Ebensville, Pennsylvania

Attention: Mr. R. D. Rowley

Gentlemen:

This refers to the inspection conducted on October 18, 1961, of
your activities authorized under AEC Source Material License No.
G-1076 and Special Source Material License No. SSM-47.

No items of noncompliance have been noted as a result of this
inspection.

We appreciate the cooperation given the AEC representative.

Very truly yours,

Eber R. Price
Assistant Director
Division of Licensing
and Regulation

bcc: Compliance Division, HQ
Compliance Division, I
Public Document Room

E/42
~~350~~

ITEM # 360

SIGNED CONCURRENCE COPY IN DOCKET 40-3558

| | | | | | | |
|-----------|-------------|---------|--|--|--|--|
| OFFICE ▶ | LR:KB | LR | | | | |
| SURNAME ▶ | CGW:lrm:REC | ERPrice | | | | |
| DATE ▶ | 3-26-62 | | | | | |

CONFIDENTIAL

Office Memorandum • UNITED STATES GOVERNMENT

TO : E. R. Fleury, Assistant Chief, Licensing Branch
 Division of Licensing and Regulation **DATE:** MAR 17 1959

FROM : Murray L. Nash, Chief, Classification Branch
 Division of Classification *mln*

SUBJECT: CLASSIFICATION REVIEW OF DOCUMENTS IN CONNECTION WITH
 SPECIAL NUCLEAR MATERIAL APPLICATION - DOCKET NO. 70-26

SYMBOL: C:MK

As requested by your memorandum of March 4, 1959, we have reviewed the following appendices to Westinghouse Electric Corporation's application of February 13, 1956 for special nuclear material license.

1. Appendix II - "Criticality Report", dated April 25, 1956 - with an attachment entitled "Criticality Table by Work Sequence".

We have confirmed the present classification as Confidential - Restricted Data.

2. Appendix III - "Criticality Control", dated September 6, 1956.

This appendix can be downgraded from Secret - Restricted Data to Confidential - Restricted Data.

This memorandum will be your authority to downgrade other copies in your files and it is requested that Westinghouse Corporation be advised of this change in classification.

Enclosures:
 Appendix II
 Appendix III

~~When copied from this source, this document
 as **CONFIDENTIAL**
 (insert proper classification)~~

~~RESTRICTED DATA~~

3-18-60
3-14-60
WEC
to [unclear]

E/44

ITEM # 325

~~SECRET~~

Office Memorandum • UNITED STATES GOVERNMENT

TO : Wilbur A. Strauser, Deputy Director
Division of Classification

DATE: MAR 4 1959

FROM : E. R. Fleury, Assistant Chief, Licensing Branch
Division of Licensing and Regulation *ERF*

SUBJECT: CLASSIFICATION REVIEW OF DOCUMENTS IN CONNECTION WITH
SPECIAL NUCLEAR MATERIAL APPLICATION - DOCKET 70-26

SYMBOL: IRL:ERF

Attention: L. K. Kallmyer

Attached are the following appendices to Westinghouse Electric Corporation's application of February 13, 1956, for special nuclear material license, which I would like you to review from a classification standpoint for determination as to whether or not they are properly classified as marked:

1. Appendix II--"Criticality Report", dated April 25, 1956 - with an attachment entitled "Criticality Table by Work Sequence" - CONFIDENTIAL RD.
2. Appendix III--"Criticality Control", dated September 6, 1956 - SECRET RD (Copy 1A, 4 pp) and September 12, 1956 letter of transmittal.

Please review these appendices and return them to me as soon as possible indicating your determination. One copy of this memorandum should be retained for your files.

Enclosures:
Items 1 and 2 listed above
(1 cy. ea. - signed originals)

E145

When separated from enclosures, handle this document
as UNCLASSIFIED
(Insert proper classification)

*See 3/10/59 from M/60
to W/EC
ERF*

RESTRICTED DATA

This document contains information as defined in Executive Order 12812. Its transmission or the disclosure of its contents in any manner to an unauthorized person is prohibited.

~~SECRET~~

ITEM # 326

C. K. Beck
Chief, Hazards Evaluation Branch

February 27, 1959

Lyall Johnson
Chief, Licensing Branch

WESTINGHOUSE ELECTRIC CORPORATION PROPOSED PROCEDURES FOR
COMPLIANCE WITH SECTION 70.24, 10 CFR 70, DOCKET 70-26

SYMBOL: LRL:JCD

Attached for your review is a copy of the Westinghouse proposal for the installation of radiation monitoring alarm equipment and their emergency procedures submitted to show compliance with Section 70.24.

Please review the application and advise us as to the adequacy of the licensee's proposals. The backup material should be returned with your comments.

Enclosure:
Ltr & procedures dtd 2-24-59

E/46
~~1/32~~

ITEM # 327

| | | | | | | |
|-----------|-----------------------------------|------------------------|--|--|--|--|
| OFFICE ▶ | LRL | LRL | | | | |
| SURNAME ▶ | <i>Delaney</i> J. Delaney / cw | <i>L</i> L. Johnson | | | | |
| DATE ▶ | 2-27-59 | 2-27-59 | | | | |

Office Memorandum • UNITED STATES GOVERNMENT

TO : Files

DATE: September 10, 1957

FROM : J. C. Delaney *JCD*, Chief, Materials SectionSUBJECT: AMENDMENT OF WESTINGHOUSE ELECTRIC CORPORATION'S LICENSE SNM-37
(BLAIRSVILLE, PENNSYLVANIA)ANALYSIS AND FINDINGS

This amendment is being made to incorporate in the license the procedures provided by Westinghouse with their April 18, 1957 letter to avoid accidental conditions of criticality in the transfer of special nuclear material. Based upon our review of these procedures, it is hereby determined that they are adequate to protect health and minimize danger to life or property and that the license may and should be amended to reflect the changing procedures.

APPROVED:



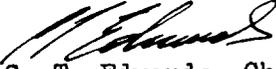
E. R. Fleury
Acting Chief, Licensing Branch

E/47
~~ET~~

ITEM # 328

TO : File

December 17, 1956

FROM : 
C. T. Edwards, Chief, Materials Section

SUBJECT: WESTINGHOUSE ELECTRIC CORPORATION, FOREST HILLS, APPLICATION FOR
SPECIAL NUCLEAR MATERIAL LICENSE REVISION

SYMBOL : CAL:JCD

ANALYSIS AND FINDINGS

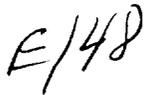
Reference is made to my memorandum to the files dated July 13, 1956, regarding the observations, conclusions and findings resulting from my review of the Westinghouse Electric Corporation's application of February 13, 1956, with appendices dated February 20 and April 25, 1956, for its Blairsville, Pennsylvania, plant, and its application of April 17, 1956, for its Forest Hills, Pennsylvania, plant. The applicable statements of my July 13, 1956, memorandum are incorporated herein by reference.

A subsequent analysis of Westinghouse's (Forest Hills) application of November 21, 1956, has resulted in the following observations, conclusions and findings:

The applicant requests that its license SNM-38 be modified to include authorization to receive, possess and use up to 100 grams of UO_2 fully enriched in the isotope U-235, and the special nuclear material produced during the neutron irradiation of the UO_2 for research and development studies. (The application is being treated as a request for license for 100 grams of UO_2 containing uranium enriched up to greater than 90% in the U-235 isotope, since no increased hazard is involved if material of lower enrichment is involved.)

The applicant's proposed use of special nuclear material is for the conduct of research and development activities of a type specified in Section 31 of the Act.

Based upon our review of the information furnished by the applicant it is hereby determined that the applicant is qualified by reason of training and experience to use the additional special nuclear material requested in its November 21, 1956, application for the purpose requested, and that the applicant's equipment and facilities are adequate to minimize danger to life or property. The additional quantity of special nuclear material to be licensed does not in itself represent a criticality hazard, and the applicant states that the highly enriched UO_2 will not be stored, processed, or used in the same physical location as the 5% enriched uranium previously licensed.



ITEM # 329

File

- 2 -

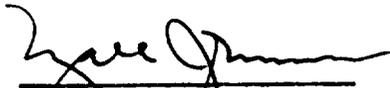
The applicant has provided adequate corporate data, and further advises that it is not owned, controlled or dominated by an alien, a foreign corporation or foreign government. The application has been signed under oath or affirmation.

The applicant requests an allocation of 20 grams of UF_6 containing uranium enriched to 20% in the U-235 isotope. This quantity of special nuclear material can be made available for allocation.

The applicant is financially qualified to engage in the proposed activity in accordance with the regulations of the Commission.

It is therefore determined that the application meets the requirements of the Act and of the regulations of the Commission; that the applicant qualified to receive an allocation of 20 grams of UF_6 containing uranium enriched to 20% in the U-235 isotope; and that license SNM-38 may be modified to authorize the additional activities proposed by the applicant.

APPROVED:


Lyall Johnson
Chief, Licensing Branch

| | | | | | | |
|-----------|-------------------|--|--|--|--|--|
| OFFICE ▶ | DCA | | | | | |
| SURNAME ▶ | <i>J. Johnson</i> | | | | | |
| DATE ▶ | 12/17/56 | | | | | |

Office Memorandum • UNITED STATES GOVERNMENT

TO : Files

DATE: November 1, 1956

FROM : *C. T. Edwards*
C. T. Edwards, Chief, Materials SectionSUBJECT: WESTINGHOUSE ELECTRIC CORPORATION (BLAIRSVILLE, PENNSYLVANIA)
APPLICATION FOR SPECIAL NUCLEAR MATERIAL LICENSE

SYMBOL: CAL:JCD

ANALYSIS AND FINDINGS

Reference is made to my memorandum to the files dated July 13, 1956, regarding the observations, conclusions and findings resulting from my review of the Westinghouse Electric Corporation's application for its Blairsville facility dated February 13, 1956, with appendices dated February 20 and April 25, 1956, and its application of April 17, 1956, for its Forest Hills facility. The applicable statements of the referenced memorandum are incorporated herein by reference.

A subsequent analysis of the Blairsville Plant application and appendices together with an additional appendix dated September 6, 1956, has resulted in the following observations, conclusions and findings:

The applicant requests that it be licensed to receive possess and use uranium enriched in the U-235 isotope to fabricate fuel elements.

The applicant's proposed use of the special nuclear material is for the conduct of research and development activities of a type specified in Section 31 of the Act.

Based upon our review of the information furnished by the applicant, and the favorable opinion expressed by Dr. C. K. Beck in his memorandum to Lyall Johnson dated October 24, 1956, it is hereby determined that the applicant's equipment and facilities are adequate to minimize danger to life or property; that the applicant's proposed procedures to avoid accidental criticality are adequate; and that the applicant is qualified by reason of training and experience to use uranium enriched in the U-235 isotope at its Blairsville, Pennsylvania, plant in accordance with the regulations of the Commission.

The following comments regarding Dr. Beck's memorandum are pertinent to the determinations made in the preceding paragraph:

1. In Item 1 of his memorandum Dr. Beck states that criticality data submitted by Westinghouse in Appendix III, Criticality Control, are satisfactory for the 12 specific items listed. He adds that "these data are specific

ITEM # 330

(continued)

E/149
~~12/20~~
30

answers to direct questions previously sent Westinghouse." We note his approval of the criticality data and note further that our letter of August 23, 1956, requesting information from Westinghouse was drafted with the assistance of Dr. Beck. Since we were seeking more detailed information about procedures and equipment already partially described by Westinghouse, our queries were directed to clarify specific points in the previous Westinghouse correspondence.

2. Item 2 states that Westinghouse has not provided a clear description of the procedural steps employed, the physical layout of the processing area, and that we therefore have no means of judging whether or not any potentially hazardous steps or processes have been omitted. We believe that the information provided by Westinghouse regarding procedures and facilities, training and experience are adequate to minimize the probability of hazard. An important part of the procedures is given in the following extract from the April 25, 1956 Appendix II, Criticality Report, "There will be one man and one man only (called the Courier) who will be authorized to move fissionable material either to or from the storage vault and work stations or between work stations. There will be one marked off spot in each station where the Courier will deposit the carrier of the fissionable material. This courier will move old material from a station before bringing new material into the station if necessary to stay below limits set by the criticality specialist."

We believe that control as exercised by the courier with the assistance of the criticality specialist will be adequate.

3. In Item 3, Dr. Beck concludes that Westinghouse appears to have developed a fuel handling system which is essentially free of the likelihood of inadvertent critical accumulations.

The applicant has provided adequate corporate data, such as state of incorporation and names, addresses and citizenship of its principal officers. The applicant further advises that the company is not owned, controlled or dominated by an alien, a foreign corporation or foreign government, and that the applicant is the real party in interest and is not making application as an agent for any undisclosed principal. The application and supplements thereto have been signed under oath or affirmation.

The applicant is financially qualified to engage in the proposed activity in accordance with the regulations of the Commission.

The applicant has not requested an allocation of special nuclear material.

It is therefore determined that the application meets the requirements of the Act and of the regulations of the Commission and that License SNM-37 (as amended November 15, 1956) Amendment No. 1, may be issued authorizing the activities proposed by Westinghouse Electric Corporation, Blairsville plant.

APPROVED:



Lynn Johnson
Chief, Licensing Branch

~~SECRET~~

Office Memorandum • UNITED STATES GOVERNMENT

TO :Lyll Johnson

DATE: OCT 24 1956

FROM :Clifford K. Beck *Clifford K. Beck*

SUBJECT:WESTINGHOUSE ELECTRIC CORPORATION APPLICATION FOR SPECIAL NUCLEAR MATERIAL LICENSE

SYMBOL: CA: RHES:CKB

Reference is made to your memorandum of September 26, 1956.

1. Criticality data submitted by Westinghouse in Appendix III, Criticality Control, are satisfactory for the 12 specific items listed. These data are specific answers to direct questions previously sent Westinghouse.
2. There is still lacking a clear description of the procedural steps employed, the physical layout of the processing area, and a means of judging whether or not any potentially hazardous steps or processes have been omitted.
3. I would conclude, insofar as can be judged from the data and descriptions given, that Westinghouse has developed a fuel handling system which is essentially free of the likelihood of inadvertent critical accumulations.

As you requested, we are returning herewith the Westinghouse file.

Enclosure

RESTRICTED DATA

This document contains information which is restricted to authorized personnel only. It is to be controlled, stored, handled, transmitted, and disposed of in accordance with the instructions in the instructions manual.

When separated from enclosures, handle this document

as RESTRICTED DATA
(insert proper classification)

E/50
4337

~~SECRET~~

ITEM # 331

Office Memorandum • UNITED STATES GOVERNMENT

TO : Files

DATE: October 1, 1956

FROM : *C. T. Edwards*
C. T. Edwards, Chief, Materials SectionSUBJECT: WESTINGHOUSE (FOREST HILLS AND EDGEWOOD FACILITIES) APPLICATION
FOR SPECIAL NUCLEAR MATERIAL LICENSE

SYMBOL: CAL:JCD

ANALYSIS AND FINDINGS

Reference is made to my memorandum to the files dated July 13, 1956, regarding the observations, conclusions and findings resulting from my review of Westinghouse Electric Corporation application of February 13, 1956, with appendices of February 20, and April 25, 1956, and their application of April 17, 1956. The applicable statements of my July 13, 1956, memorandum are incorporated herein by reference.

A subsequent analysis of Westinghouse's applications of July 31, and August 27, 1956, has resulted in the following observations conclusions and findings:

The applicant requests that it be licensed to receive and possess the special nuclear material resulting from the in-pile irradiation at a total dose of 10^{18} n/cm² of 50 pounds of normal uranium and 100 pounds of thorium.

The applications contain no information that contradict the general statements of my July 13, 1956, memorandum.

The applicant's proposed use of the special nuclear material is for the conduct of research and development activities of a type specified in Section 31 of the Act.

The applicant has received Byproduct Material License 37-497-2 covering up to 500 mc each of elements 3 through 83.

No allocation of special nuclear material is required by the applicant.

Based upon our review of the information furnished by the applicant it is hereby determined that the applicant is qualified by reason of training and experience to use the special nuclear material for the purpose requested, and that the applicant's equipment and facilities are adequate to minimize danger to life or property. The quantity of special nuclear material requested does not constitute a criticality hazard.

(continued)

~~E/S~~ E/S
ITEM # 333 (10)

The applicant is financially qualified to engage in the proposed activity in accordance with the regulations of the Commission.

The applicant has provided adequate corporate data, and further advises that it is not owned, controlled or dominated by an alien, a foreign corporation or foreign government. The application has been signed under oath or affirmation.

It is therefore determined that the applications meet the requirements of the Act and of the regulations of the Commission and that a license may be issued authorizing the activities proposed by the applicant.

APPROVED:



Lyall Johnson
Chief, Licensing Branch

~~SECRET~~

Clifford K. Beck

SEP 26 1956

Lyall Johnson

SIGNED
and
Dispatched

WESTINGHOUSE ELECTRIC CORPORATION APPLICATION FOR SPECIAL NUCLEAR MATERIAL LICENSE

SYMBOL: CAL:JCD

Reference is made to your memorandum of July 26, 1956, which comments on the Westinghouse application for SNM license dated February 13, 1956, with appendices dated February 20 and April 25, 1956.

Transmitted herewith is our file on the Westinghouse application. Appendix III (dated September 6, 1956) to the Westinghouse application of February 13, 1956, provides additional information regarding criticality control.

Please review in regard to the adequacy of the applicant's proposed procedures to avoid criticality the application for license to receive and use fully enriched uranium in view of the additional information provided by Westinghouse.

The Westinghouse file should be returned with your comments.

Enclosure:
Westinghouse file

~~TRANSMITTAL~~

RESTRICTED DATA

When separated from enclosures, handle this document as Unclassified
(Insert proper classification)

This document contains restricted data as defined in the Atomic Energy Act of 1954. Its transmittal or the disclosure of its contents in any manner to an unauthorized person is prohibited.

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|-----------|------------------|---------------|-------------|--------|------------|
| OFFICE ▶ | CAL | CAL | CAL | | |
| SURNAME ▶ | <i>D. H. ...</i> | C. T. Edwards | L. Johnson | ITEM # | <u>334</u> |
| DATE ▶ | 9-24-56 | <i>9/25</i> | <i>9/26</i> | | |

Office Memorandum • UNITED STATES GOVERNMENT

TO : Lyall Johnson, Chief, Licensing Branch
Division of Civilian Application

DATE: JUL 26 1956

FROM : Clifford K. Beck, Scientific Advisor to *CKB*
Director, Division of Civilian Application

SUBJECT: COMMENTS ON WESTINGHOUSE APPLICATION FOR SNM LICENSE, WITH
APPENDICES I & II

SYMBOL: CA:RHES:CKB

1. The storage arrangements seem to be adequate.
2. The report reflects satisfactory acquaintance with basic critical hazards data, except "always safe" designation of certain configurations in work sequence tables is not clearly applicable.
3. The statement "no equipment...can contain a liquid...which has dimensions...greater than those of the always safe equivalent sphere, infinite cylinder, or infinite slab as determined by measurements at ORNL..." reflects an entirely acceptable approach. However, there is no means of determining whether this equipment actually reflects this policy or not; no descriptions are given.
4. Similarly with batching operations; specified size of batches are acceptable. Whether procedures contain adequate checks and double-checks against double-batching and other misoperations cannot be judged, for no procedures are described.

Enclosures:

1. Blairsville application
2. Forest Hills application

E/S3
~~*335*~~

ITEM # 335

Office Memorandum • UNITED STATES GOVERNMENT

TO : Clifford K. Beck, Acting Deputy
Director for Reactor Hazards Evaluation

DATE: JUL 17 1956

FROM : Lyall Johnson, Chief, Licensing Branch
Division of Civilian Application

SUBJECT: WESTINGHOUSE ELECTRIC CORPORATION APPLICATIONS FOR SNM LICENSES

Symbol: CAL:JCD

Enclosed is the Westinghouse Electric Corporation, (1) Blairsville Plant application of February 13, 1956 with appendices of February 20 and April 25, 1956, and (2) Forest Hills Plant application of April 17, 1956, for special nuclear material licenses.

On the basis of the information provided in the applications we plan to license (1) the Blairsville Plant to receive uranium enriched to 7 $\frac{1}{2}$ % in the U-235 isotope and (2) the Forest Hills Plant to receive uranium enriched to 5% in the U-235 isotope. (See attached memo to files dated July 12, 1956 for information regarding criticality review.)

Please review the application for the Blairsville Plant with respect to its adequacy regarding procedures for the avoidance of accidental criticality during processing of fully enriched uranium. The Forest Hills application is enclosed for your information only.

The applications should be returned with your comments.

Enclosures:

1. Blairsville application
2. Forest Hills application

Luke

Hevorka

Scott

Garrick

M.G.N.

E.W.S.

E/SY
~~356~~

ITEM # 336

Office Memorandum • UNITED STATES GOVERNMENT

TO : File

DATE: July 13, 1956

FROM :  Charles T. Edwards, Chief, Materials Section

SUBJECT: WESTINGHOUSE ELECTRIC CORPORATION REQUESTS FOR SPECIAL NUCLEAR MATERIALS

SYMBOL: CAL:JCD

ANALYSIS AND FINDINGS

An analysis of the application submitted by Westinghouse Electric Corporation dated February 13, 1956, with appendices dated February 20 and April 25, 1956, for their Blairsville, Pennsylvania, plant and their application of April 17, 1956, for their Forest Hills, Pennsylvania, plant has resulted in the following observations, conclusions and findings:

The applicant requests that it be licensed, (1) to receive uranium enriched up to 5 per cent in the U-235 isotope for use at the Forest Hills Plant in the manufacture of pellet-type fuel elements for the Belgian Thermal Reactor, and (2) to receive uranium enriched up to $7\frac{1}{2}$ per cent in the isotope U-235 for use at the Blairsville plant in the fabrication of plate-type and oxide-type fuel elements.

The applicant's proposed use of the special nuclear material is for the conduct of research and development activities of a type specified in Section 31 of the Act.

Based upon our favorable review of the information furnished by the applicant, and the favorable opinion expressed by A. D. Callihan, J. D. McClendon and J. W. Wachter, UCNC, it is hereby determined that the applicant is qualified by reason of training and experience to use uranium (up to 5 per cent U-235) at their Forest Hills plant and uranium (up to $7\frac{1}{2}$ per cent U-235) at their Blairsville plant for fabrication into fuel elements in accordance with the Commission's regulations. (The Blairsville plant application is receiving further consideration regarding use of more highly enriched uranium.)

It is also determined that the applicant's equipment and facilities appear to be adequate to minimize danger to life or property, and that the applicant's proposed procedures to avoid accidental criticality are adequate.

(continued)

E/S
~~337~~ITEM # 337

②

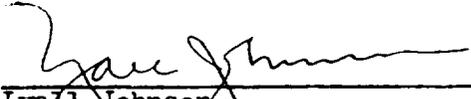
The applicant is financially qualified to engage in the proposed activity in accordance with 10 CFR 70.

The applicant has provided adequate corporate data, such as state of incorporation and names, addresses and citizenship of its principal officers. The applicant further advises that the company is not owned controlled or dominated by an alien, a foreign corporation or foreign government, and that the applicant is the real party in interest and is not making application as an agent for any undisclosed principal. The applications have been signed under oath or affirmation.

A request for an allocation of special nuclear material for fabrication of fuel elements for a reactor to be constructed for Belgium is under consideration by the Division of International Affairs.

It is therefore determined that the application meets the requirements of the Act and of the special nuclear material regulations (10 CFR 70), and that licenses may be issued authorizing the Westinghouse Blairsville and Forest Hills Plants to receive and use $7\frac{1}{2}$ per cent and 5 per cent enriched uranium respectively.

APPROVED:



Lyall Johnson
Chief, Licensing Branch
Division of Civilian Application

Office Memorandum • UNITED STATES GOVERNMENT

TO : Files *[Signature]*
(Thru) CTEdwards, Chief, Materials Section

DATE: JUL 12 1956

FROM : J. C. *[Signature]*

SUBJECT: WESTINGHOUSE (BLAIRSVILLE AND FOREST HILLS) APPLICATION FOR SPECIAL
NUCLEAR MATERIAL LICENSE

Symbol: CAL:JCD

The Westinghouse (Blairsville) application of February 13, 1956, with appendices dated February 20, and April 25, 1956, and the Westinghouse (Forest Hills) application of April 17, 1956, were reviewed with respect to the applicant's procedures to avoid accidental criticality by A. D. Callihan, J. W. Wachter and J. D. McClendon, UCNC.

The reviewers advised that the two applications were examined as a single application and only in respect to the use of uranium enriched up to $7\frac{1}{2}\%$ in the U-235 isotope. On this basis it was the consensus that the applicant's procedures to avoid accidental criticality were adequate.

The above was confirmed during my telephone conversation of June 18, 1956, with Dr. Callihan who advised that the Blairsville application should be re-reviewed if uranium of greater than $7\frac{1}{2}\%$ enrichment were to be required at Blairsville.

E/56

~~FILED~~

ITEM # 338

Office Memorandum • UNITED STATES GOVERNMENT

TO : Lyall E. Johnson, Chief, Licensing Branch
Division of Civilian Application

DATE: JUN 6 1956

FROM : Walker E. Campbell
Assistant Controller for Accounting

SUBJECT: FINANCIAL RESPONSIBILITY OF WESTINGHOUSE ELECTRIC CORPORATION

SYNOPSIS: FAC:MKK

The Division of Finance, based on its review of financial data obtained from the applicant and other sources, has concluded that Westinghouse Electric Corporation is financially qualified to assume the responsibility for payment of Commission charges for the use and consumption or loss of the special nuclear material for which the applicant has applied. We believe that Westinghouse is financially qualified to carry out the proposed use of the material for a reasonable period of time.

We are enclosing the financial statement which you requested be returned to you.

Attachment

E/S7
~~339~~

ITEM # 339

Office Memorandum • UNITED STATES GOVERNMENT

TO : File

DATE: MAR 26 1956

FROM : Lyall Johnson SUBJECT: APPLICATION FOR SNM LICENSE - WESTINGHOUSE ELECTRIC CORP.,
BLAIRSVILLE PLANT

On March 15, 1956 Mr. P. G. Haywood of the local Westinghouse office visited this branch, at which time I discussed with him the lack of adequate information in the Westinghouse application insofar as procedures to avoid criticality during operations were concerned. At his request, I showed Mr. Haywood one or two other applications submitted by fuel element fabricators and pointed out to him the manner in which these other companies had prepared and submitted information of this nature. Mr. Haywood recognized that the Westinghouse application, including the supplement filed on February 20, did not provide sufficient data.

During my conversation with Mr. Haywood it appeared that Westinghouse was anxious to receive this license because the company felt such a license would be necessary in connection with a job it is undertaking to do under a Commission sub-contract. This sub-contract would be with another Westinghouse group. I pointed out to Mr. Haywood that depending upon the terms of the contract a license may or may not be required under the circumstances.

On March 16 I talked with Mr. Long, Chief, Materials Branch, Pittsburgh Area Office, AEC, with respect to this contract matter. Mr. Long stated that as presently envisioned this contract will be of the usual type with respect to materials to be used and that an accountability station has been established at Blairsville in connection with this contract.

After this conversation with Mr. Long I telephoned Mr. Haywood the same day and stated to him that in view of these circumstances it appears that the Westinghouse Blairsville work pursuant to the AEC contract would be exempted from the licensing requirements and that therefore the urgency of a license issuance, as far as the AEC contract job is concerned, did not exist.

Mr. Haywood said that he had already communicated with his Blairsville people and that an amendment to the application will be submitted incorporating the required data on criticality control procedures. He said that this amendment would take at least ten days or more to prepare.

~~340~~
ITEM # 340 E/58

Wilbur A. Strauser, Deputy Director
Division of Classification

E. R. Fleury, Assistant Chief, Licensing Branch
Division of Licensing and Regulation

CLASSIFICATION REVIEW OF SNM APPLICATION
SUPPLEMENT - DOCKET NO. 70-26

SYMBOL: LRL:ERF

Attached is a supplement to an application for special nuclear material license, filed by Westinghouse Electric Corporation, dated February 24, 1959 (consisting of letter and report-- "Proposal for Radiation Monitoring Alarm and Evacuation Procedures"), which we propose to place in the AEC Public Document Room in accordance with established procedures.

Please review the above supplement, and if no Restricted Data are contained therein, indicate this determination in the space provided below. One copy of this memorandum should be retained for your file.

In the event the supplement does contain Restricted Data, return it to us with your memorandum indicating the specific references which include Restricted Data.

Enclosure:
WEC's Suppl. of 2/24/59

The supplement listed above has been reviewed and it has been determined that it contains no Restricted Data:

Division of Classification

Date

E/59
~~ERF~~

ITEM # 324

| | | | | | |
|-----------|-----------------------|--|--|--|--|
| OFFICE ▶ | LRL | | | | |
| SURNAME ▶ | RBiggs:ed ERFleury | | | | |
| DATE ▶ | 3/19/59 | | | | |

Office Memorandum • UNITED STATES GOVERNMENT

TO : Wilbur A. Strauser, Deputy Director
Division of Classification

DATE: MAR 19 1959

FROM : E. R. Fleury, Assistant Chief, Licensing Branch
Division of Licensing and Regulation

SUBJECT: CLASSIFICATION REVIEW OF SNM APPLICATION
SUPPLEMENT - DOCKET NO. 70-26

SYMBOL: IRL:ERF

Attached is a supplement to an application for special nuclear material license, filed by Westinghouse Electric Corporation, dated February 24, 1959 (consisting of letter and report-- "Proposal for Radiation Monitoring Alarm and Evacuation Procedures"), which we propose to place in the AEC Public Document Room in accordance with established procedures.

Please review the above supplement, and if no Restricted Data are contained therein, indicate this determination in the space provided below. One copy of this memorandum should be retained for your file.

In the event the supplement does contain Restricted Data, return it to us with your memorandum indicating the specific references which include Restricted Data.

Enclosure:
WEC's Suppl. of 2/24/59

The supplement listed above has been reviewed and it has been determined that it contains no Restricted Data:

for LK Kastlmeier
Division of Classification

24 Mar 59
Date

*Copy for AEC Public Document Room
3/24/59
ERF
E/60*

ITEM # 323

C. K. Beck, Chief
Hazards Evaluation Branch

August 26, 1960

Lvall Johnson, Chief
Licensing Branch

WESTINGHOUSE ELECTRIC CORPORATION APPLICATION DATED AUGUST 19, 1960,
DOCKET NO. 70-26

SYMBOL: LRL:JL

Please review the subject application which supplements their initial application, dated March 22, 1960, for the disposal of low level waste by incineration. The enclosed docket 70-26 should be returned with your comments.

Enclosure:
Appl. dtd 8/26/60 &
Dkt. 70-26

Distribution:
Suppl.
LRL - L&R Rdgs.
JLane

E/61

ITEM # 313

| | | | | | | |
|-----------|-----------|-----------|----------|--|--|--|
| OFFICE ▶ | L&R | L&R | L&R | | | |
| SURNAME ▶ | JLane:sjs | JCDelaney | LJohnson | | | |
| DATE ▶ | 8/26/60 | 8/1/60 | 8/1/60 | | | |

181

DRAFT
JJLane:sjs
7/1/60
Docket No.70-26

Westinghouse Electric Corporation
P. O. Box 128
Blairsville, Pennsylvania

Attention: Mr. R. Funk
Manager, Industrial Relations

We have reviewed your application of March 22, 1960, for the incineration of combustible waste materials resulting from your activities authorized under License SNM-37.

In order to continue our review of the application, the following information is required:

1. The method for controlling the release of ash material from the exhaust stack.
2. The procedures and frequency for periodic inspection and cleaning of all sections of the incinerator to assure that hazardous amounts of special nuclear material will not build up within the equipment, and
3. The procedures to be followed to insure against the accumulation of critical amounts of special nuclear material in the collecting drums.

Upon receipt of this information, we will continue the review of your application.

It is brought to your attention that 10 CFR 20, entitled "Standards for Protection Against Radiation," Section 20.305, copy enclosed, requires the licensee to obtain specific approval prior to the treatment or disposal of licensed material by incineration.

*Questions given to Mr Funk
by telecom on 7/6/60 - He will
submit all answers - JDL*

Very truly yours,

J. C. Delaney

E/60
~~CSH~~
ITEM # 314

C. K. Beck, Chief
Hazards Evaluation Branch

June 30, 1960

Lvall Johnson, Chief
Licensing Branch

WESTINGHOUSE ELECTRIC CORP. REQUEST DATED MARCH 22, 1960, FOR
AMENDMENT TO INCINERATE MATERIAL UNDER LICENSE SIM-37 - DOCKET
70-26

SYMBOL: LRL:JL

This is to confirm our request ^{to Dr. Luke} of this date for review of the
subject application.

Distribution:

Suppl.
LRL Rdg.
L&R Rdg.
JJLane

E/63

ITEM # 315

| | | | | | | |
|-----------|------------|-----------|----------|--|--|----------------|
| OFFICE ▶ | LRL | L&R | L&R | | | |
| SURNAME ▶ | JJLane:sjs | JCDelaney | LJohnson | | | JSB |
| DATE ▶ | 6/30/60 | 6/30/60 | 7/5/60 | | | |

UNITED STATES GOVERNMENT

*Memorandum*TO : Lyall E. Johnson, Chief
Licensing Branch

DATE: 4/1/60

FROM : Clifford K. Beck, Chief *OKB*
Hazards Evaluation BranchSUBJECT: WESTINGHOUSE ELECTRIC CORPORATION *26*

We have reviewed the application dated March 22, 1960, requesting approval of a low-level uranium waste incinerator, for the Westinghouse Metals Plant near Blairsville, Pennsylvania.

Our review of the application for criticality hazard cannot be completed without further information relative to procedures for periodic inspection and cleaning of all sections of the incinerator to assure that hazardous amounts of special nuclear material will not build up within the equipment. Furthermore, we require information on procedures which will insure against critical amounts of SNM accumulated in the 55-gallon residue collecting drums.

The application has been returned to your office.

E/64
ITEM # 316 ~~4516~~

UNITED STATES GOVERNMENT

Memorandum

TO : Lyall Johnson, Chief, Licensing Branch
Division of Licensing and Regulation

DATE:

JUN 16 1960

FROM : Lester R. Roger, Chief, Radiation Safety Branch
Division of Licensing and Regulation *L.R. Roger*

SUBJECT: WESTINGHOUSE ELECTRIC CORP., DOCKET NO. 70-26

Conclusion: The information contained in the subject's application of March 22, 1960, for the disposal of low-level radioactive waste by incinerator is not complete from a radiological safety standpoint.

In order to continue the review of this application, the following information is requested:

1. The method which will be used to prevent fly ash from leaving the incinerator. Drawing Nos. 749 D 815 and 749 D 803 do not indicate the presence of filters, baffles or other traps.

The applicant has given a brief description of the location of the plant in a rural area. The design of the incinerator and shelter are shown in the blueprint Nos. 749 D 803 and 749 D 815. Approximately 200-250 lbs. of waste will be incinerated daily. This results in about 20 lbs. of ash residue. The total uranium in the ash is estimated to be from 40-50 grams/day.

Survey results indicate that greater than one foot distance from the stack outlet, the air concentration is less than MPC. The stack outlet is 25 feet above ground level. The applicant has indicated three possible methods of ash disposal which meet the requirements of 10 CFR 20. An incinerator monitoring program has been established for the incinerator process. A more detailed description of the health physics program and equipment is contained in the original application for SNM, Docket No. 70-26, docketed February 20, 1959.

This application should be reviewed from a criticality standpoint.

E/65
~~317~~
ITEM # 317

UNITED STATES GOVERNMENT

Memorandum

TO : Lester Rogers, Chief
Radiation Safety Branch

DATE: May 6, 1960

FROM : Lyall Johnson, Chief *J*
Licensing Branch

SUBJECT: WESTINGHOUSE ELECTRIC CORPORATION - REQUEST DATED MARCH 22, 1960
FOR AMENDMENT TO THEIR SPECIAL NUCLEAR MATERIAL LICENSE NO.
SNM-37 - DOCKET NO. 70-26

SYMBOL: LRL:JL

Please review the subject request for the adequacy of the applicant's procedures to minimize the hazards from radiation. The enclosed docket 70-26 should be returned with your comments.

Enclosure:
Docket No. 70-26

E/66
~~*4/2/60*~~

ITEM # 318

Office Memorandum • UNITED STATES GOVERNMENT

TO : Files

DATE: October 15, 1959

FROM : Charles P. McCallum, Jr.

SUBJECT: WESTINGHOUSE ELECTRIC CORPORATION REQUEST DATED FEBRUARY 24, 1959,
AS AUGMENTED JULY 17, 1959 FOR AMENDMENT TO THEIR SPECIAL NUCLEAR
MATERIAL LICENSE SNM-37 - DOCKET NO. 70-26ANALYSIS AND FINDINGS

Reference is made to the memorandum to the files dated September 10, 1957 and the memoranda to the files to which it in turn refers regarding the observations, conclusions and findings resulting from the review of Westinghouse Electric Corporation's application for a special nuclear material license and the subsequent amendments thereto.

By application dated February 24, 1959, as augmented July 17, 1959, the applicant requests that SNM-37 be amended to authorize its proposed emergency alarm and evacuation procedures submitted pursuant to the provisions of Section 70.24 of 10 CFR 70.

Based on our review of the information provided by the applicant, it is hereby determined that the applicant's procedures are in accordance with the regulations of the Commission and that the license may be amended accordingly.

APPROVED:



J. C. Delaney

E167
~~4319~~
ITEM # 39

Office Memorandum • UNITED STATES GOVERNMENT

TO : Lyall Johnson, Chief
Licensing Branch

DATE: OCT 12 1959

FROM : Clifford K. Beck, Chief
Hazards Evaluation Branch

CKB

SUBJECT: WESTINGHOUSE ELECTRIC CORP.

We have reviewed the Westinghouse letter dated July 17, 1959, submitting additional information on the alarm system and emergency procedure (ref: our memo April 6, 1959).

On the basis of the information we have received, we believe the applicant's plans for compliance with Section 70.24 are satisfactory.

E168
~~FILED~~

ITEM # 320

C. K. Beck
Chief, Hazards Evaluation Branch

July 23, 1959

E. R. Fleury
Acting Chief, Licensing Branch

WESTINGHOUSE ELECTRIC CORPORATION PLANS FOR COMPLIANCE WITH
SECTION 70.24, 10 CFR 70 (DOCKET 70-26)

SYMBOL: LRL:JCD

Reference is made to your memorandum of April 6, 1959, Project
SNM-39, Docket 70-26.

By letter dated July 17, 1959, attached, Westinghouse has
provided information requested in the referenced memorandum.
Please review and advise us as to the adequacy of their proposed
procedures and equipment to achieve compliance with Section 70.24,
10 CFR 70. The application need not be returned.

Enclosure:
Cy ltr 7-17-59

E/69

~~ERF~~

ITEM # 321

| | | | | | | |
|-----------|-------------------|----------|--|--|--|--|
| OFFICE ▶ | LRL | LRL | | | | |
| SURNAME ▶ | <i>Johnson/cw</i> | ERFleury | | | | |
| DATE ▶ | 7-23-59 | 7-23-59 | | | | |

Office Memorandum • UNITED STATES GOVERNMENT

APR 6 1959

TO : Lyall Johnson, Chief
Licensing Branch

FROM : Clifford K. Beck, Chief
Hazards Evaluation Branch

SUBJECT: WESTINGHOUSE ELECTRIC CORP.

DATE: Project SNM-39
Docket 70-26
(re Sect. 70.24)

We have reviewed the Westinghouse application dated February 24, 1959, submitted in compliance with Section 70.24.

In order for us to complete our evaluation of the application, we request further information as follows:

- a. Further description of the instruments and alarm system, including response time of alarm system to various radiation levels, method and frequency of testing, and fail safe features.
- b. Frequency and description of evacuation practice drills.
- c. Method of selection of evacuation routes and assembly points, with a statement of how employees will know which route to follow. The application states only that evacuation will be by the most direct route away from the accident.

We note that comprehensive emergency plans are to be available soon; these plans may furnish the information requested in b. and c. above.

E/70.
~~322~~

ITEM # 322

Leo Dubinski, Assistant Director for
Materials, Division of Compliance

Donald A. Nussbaumer, Chief, Source & Special
Nuclear Materials Branch, Division of Licensing & Regulation

CLOSE-OUT INSPECTION OF A LICENSE TERMINATION

LR:JLL

We have been advised by Westinghouse Electric Corporation in
letter dated February 28, 1961, that they will not renew their
Special Nuclear Material License No. SMM-37 - DOCKET 70-26.
This license covers their fuel element fabrication processes at
their metals plant in Blairsville, Pennsylvania, and expired July 1,
1961.

In view of the large quantity of special nuclear material that has
been handled at this site for the past few years, it is requested
that a close-out inspection be made at this site to verify that all
licensed materials have been transferred from the site in accordance
with the regulations and to determine the extent of radioactive con-
tamination, if any, of the premises and equipment/

Attachments
Cy ltr dtd 2-28-61

ITEM # 307

E/71

~~307~~

| | | | | | | |
|-----------|------------|--------------|--|--|--|--|
| OFFICE ▶ | L&R | L&R | | | | |
| SURNAME ▶ | JJLane:sjs | DANussbaumer | | | | |
| DATE ▶ | 8-14-61 | 8-8/4-61 | | | | |

R. F. Barker, Chief
Radiation Safety Branch

J. C. Delaney, Chief
Nuclear Materials Branch

INSPECTION REPORT FOR THE WESTINGHOUSE ELECTRIC CORPORATION,
BLAIRSVILLE, PA. - DOCKET NO. 70-26

L&R:JLL

In view of the elapsed time from date of inspection and a notification from Westinghouse dated February 28, 1961, that their Blairsville Metals Plant is terminating its license and operations on July 1, 1961, we believe that further information on their processing procedures dealing with criticality would not be appropriate at this time. However, since large quantities of special nuclear material have been handled at this site, you may wish to have the Division of Compliance conduct a check out at this site, upon license termination, to verify that all special nuclear material has been transferred, to determine if all transfers were made in accordance with the regulations, to determine the extent of fixed contamination, if any, of premises and equipment, etc.

E/72

~~638~~

ITEM # 308

| | | | | | | |
|-----------|------------|----------|--|--|--|--|
| OFFICE ▶ | L&R | L&R | | | | |
| SURNAME ▶ | JLLane:sjs | JDelaney | | | | |
| DATE ▶ | 4-14-61 | 4-17-61 | | | | |

UNITED STATES GOVERNMENT

Memorandum

APR 1960

TO : Lyall Johnson, Chief
Licensing Branch
Division of Licensing and Regulation

FROM : Lester R. Rogers, Chief
Radiation Safety Branch *L.R. Rogers*
Division of Licensing and Regulation

SUBJECT: WESTINGHOUSE ELECTRIC CORPORATION, DOCKET NO. 70-26

DATE:

Conclusion: The information submitted by the subject company in their letter completes the data needed to evaluate their application for the incineration of radioactive waste. The application appears satisfactory from a radiation safety standpoint.

E173

~~309~~

ITEM # 309

UNITED STATES GOVERNMENT

Memorandum

TO : Files

DATE: September 8, 1960

FROM :  J. J. Lane

SUBJECT: WESTINGHOUSE ELECTRIC CORPORATION APPLICATION DATED MARCH 22, 1960, FOR AMENDMENT OF SPECIAL NUCLEAR MATERIAL LICENSE NO. SNM-37 - DOCKET NO. 70-26

SYMBOL: LRL:JLJ

ANALYSIS AND FINDINGS

By application dated March 22, 1960, Westinghouse Electric Corporation, Blairsville, Pennsylvania, requested authorization to dispose of low level radioactive material by the incineration method. Supplemental information was submitted August 19, 1960.

Based on our review of the information submitted by the applicant, it is hereby determined that their Special Nuclear Material License No. SNM-37 may be amended to authorize the disposal of low level radioactive material by incineration.

APPROVED:



J. C. Delaney
Chief, Nuclear Materials Section

E/74
~~374~~

ITEM # 310

UNITED STATES GOVERNMENT

Memorandum

TO : Lyall E. Johnson, Chief
Licensing Branch

DATE:

FROM : Clifford K. Beck, Chief *CKB*
Hazards Evaluation Branch

SUBJECT: WESTINGHOUSE ELECTRIC CORPORATION (BLAIRSVILLE) - AUGUST 19, 1960

We have reviewed the subject application, forwarded with your August 26th memorandum.

The applicant's proposed operation of a nuclear waste incinerator does not represent a criticality hazard, and the large inherent factor of safety makes the possibility of such an accident extremely remote.

We therefore have no objection to approval of this application.

E/75
~~*CKB*~~

ITEM # 311

UNITED STATES GOVERNMENT

Memorandum

TO : Lester Rogers, Chief
Radiation Safety Branch

DATE: August 26, 1960

FROM : *J. L. Johnson*
Lyall Johnson, Chief
Licensing Branch

SUBJECT: WESTINGHOUSE ELECTRIC CORPORATION APPLICATION DATED AUGUST 19, 1960,
DOCKET NO. 70-26

SYMBOL: LRL:JLL

Please review the subject application which supplements their initial application, dated March 22, 1960, for the disposal of low level waste by incineration. Please return the application with your comments.

Enclosure:
Appl. dtd 8/26/60

ITEM # 312

E176

[Signature]

UNITED STATES ATOMIC ENERGY COMMISSION
MATERIAL STATUS REPORT

FOR SPECIAL NUCLEAR MATERIALS HELD UNDER LICENSE
PREPARE A SEPARATE REPORT FOR EACH LICENSE

| | | | |
|--|-------------------------|------------------------------------|---------------|
| 1. REPORTING LICENSEE: | | c. License No. <u>888-37</u> | |
| a. Name <u>Westinghouse Electric Corporation</u> | | d. Period Ending <u>6-30-61</u> | |
| b. Address <u>Blairsville Metals Plant, Blairsville, Pa.</u> | | | |
| 2. MATERIAL: (Prepare separate report for each material) | 3. WEIGHT UNIT | 4. TOTAL QUANTITY AND ISOTOPE DATA | |
| <u>TSB Reactor Uranium</u> | <u>OZMS</u> | a. ELEMENT | b. ISOTOPE |
| 5. BEGINNING INVENTORY: | | <u>47,584</u> | <u>60,311</u> |
| 6. RECEIPTS: | | | |
| From | Shipper's License No. | | |
| <u>(W) Electric Corp., Chester, Pa.</u> | <u>888-338</u> | <u>926</u> | <u>668</u> |
| <u>(W) Electric Corp., Pittsburgh, Pa.</u> | <u>888-37</u> | <u>8</u> | <u>8</u> |
| <u>Commission Engineering Corp.</u> | <u>5-Station WCH</u> | <u>8</u> | <u>8</u> |
| | | <u>936</u> | <u>678</u> |
| 7. TOTAL RECEIPTS | | | |
| 8. PRODUCTION | | | |
| 9. MATERIAL TO BE ACCOUNTED FOR (Total of Items 5, 7, and 8). | | <u>50,520</u> | <u>67,283</u> |
| 10. SHIPMENTS: | | | |
| To | Consignee's License No. | | |
| <u>ORNL, Apollo, Pennsylvania</u> | <u>888-115</u> | <u>20,267</u> | <u>15,988</u> |
| <u>(W) Electric Corp., Chester, Pa.</u> | <u>888-338</u> | <u>30,253</u> | <u>28,295</u> |
| | | <u>50,520</u> | <u>67,283</u> |
| 11. TOTAL SHIPMENTS | | | |
| 12. PROCESSING LOSSES, DISCARDS, ETC.: | | | |
| a. MATERIAL FOR WHICH THE REPORTING LICENSEE IS FINANCIALLY RESPONSIBLE | | | |
| b. MATERIAL FOR WHICH THE REPORTING LICENSEE IS NOT FINANCIALLY RESPONSIBLE | | | |
| 13. BURN-UP | | <u>0</u> | <u>0</u> |
| 14. ENDING INVENTORY | | | |
| 15. MATERIAL ACCOUNTED FOR (Total of Items 11, 12a, 12b, 13 and 14). | | <u>50,520</u> | <u>67,283</u> |
| 16. DETAIL OF ENDING INVENTORY: | | | |
| a. MATERIAL ON HAND FOR WHICH REPORTING LICENSEE IS FINANCIALLY RESPONSIBLE TO THE AEC UNDER ABOVE LICENSE | | | |
| b. MATERIAL ON HAND FOR WHICH SOMEONE OTHER THAN REPORTING LICENSEE IS FINANCIALLY RESPONSIBLE TO THE AEC (Detail below) | | | |
| Name | Licensee No. | | |
| | | | |
| c. Total of a. and b. | | | |
| 17. MATERIAL IN POSSESSION OF OTHERS FOR WHICH REPORTING LICENSEE IS FINANCIALLY RESPONSIBLE TO THE AEC UNDER ABOVE LICENSE (Detail below) | | | |
| Name | Licensee's License No. | | |
| | | | |
| TOTAL | | | |

ITEM # 305

E. M. ...

COMPLIANCE INSPECTION REPORT

| | |
|---|---|
| 1. Name and address of licensee WESTINGHOUSE ELECTRIC CORPORATION Materials Manufacturing Department P. O. Box 128 Blairsville, Pa. | 2. Date of inspection October 18, 1961 |
| | 3. Type of inspection Initial & Reinspection |
| 4. 10 CFR Part(s) applicable 20 - 40 - 70 | |

5. License number(s), issue and expiration dates, scope and conditions (including amendments)

| <u>License No.</u> | <u>Date</u> | <u>Exp. Date</u> | <u>Docket No.</u> |
|---|----------------|------------------|-------------------|
| C-4971 (Initial) | 12/9/60 | 12/31/61 | 40-3558 |
| (See report details for scope and conditions) | | | |
| SMM-37 (Reinspection) | 9/9/60 | 7/1/61 | 70-26 |

6. Inspection findings (and items of noncompliance)

The inspection of the licensee's fuel fabrication facility of the Westinghouse Materials Plant, Blairsville, Pennsylvania, where special nuclear material had been processed, was made after all material and associated equipment had been transferred and the facility decontaminated. The inspection consisted of (1) a review of the action taken by the licensee to return the facility to a normal status (uncontaminated), (2) a review of the licensee's survey results at completion of their decontamination, (3) a review of records of transfers, and (4) a contamination survey of the facility by the inspector. Contamination of the facility was found to be insignificant. The only licensed material in the possession of the licensee was 364.5 pounds of natural uranium bars which had been in storage since December of 1960. No items of noncompliance were observed or noted by the inspector during the course of the inspection.

| | |
|--|--|
| 7. Date of last previous inspection March 15 & 16, 1960 - SMM-37 | 8. Is "Company Confidential" information contained in this report? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (Specify page(s) and paragraph(s)) Entire Report |
|--|--|

DISTRIBUTION

4 cys - COM
2 cys - CUI

Approved by: **Paul R. Nelson**
(Inspector)

Approved by: **Robert W. Kirkman, Director**
Region I, Division of Compliance
(Operations office)

February 7, 1962
(Date report prepared)

If additional space is required for any numbered item above, the continuation may be extended to the reverse of this form using the back of each page in the format leaving sufficient margin at top of binding, identifying each item by number and noting "Continued" on the face of form under appropriate item.

RECOMMENDATIONS SHOULD BE SET FORTH IN A SEPARATE COVERING MEMORANDUM

PART 40 - 70 INSPECTION

WESTINGHOUSE ELECTRIC CORPORATION
Materials Manufacturing Department
P. O. Box 128
Blairsville, Pennsylvania

Date of Inspection: October 18, 1961 (Announced)

Persons Accompanying Inspector:

Mr. G. Brown, Health Physicist, AEC, Region I, Division of Compliance
Mr. Stang, Regional Industrial Hygienist, Pennsylvania Department of Health

Persons Contacted and Titles:

Mr. R. C. Humphrey, Manager of Management and Staff Services
Mr. G. Goodrow, Accountability Representative
Mr. W. C. McKee, Safety Inspector and Radiation Safety Officer
Mr. P. Morrow, Accountability Supervisor of Atomic Fuel Department,
Cheswick, Pennsylvania

DETAILS

Background Information

9. On March 15 and 16, 1960, an inspection of the activities being conducted under License No. SNM-37 was conducted by Mr. John R. Sears of this office. The report forwarded to Inspection Headquarters under memorandum dated March 28, 1960, listed items of noncompliance with Sections 20.201 (b), "Surveys", 20.103 (b) "Concentrations in effluents to unrestricted areas", 20.305 "Treatment or disposal by incineration", and 70.24 (2) "Additional requirements", in that no evacuation drills had been conducted.
10. On January 30, 1961, the Division of Licensing and Regulation informed the licensee of the items of noncompliance with the exception of the item concerning 20.103 (b) "Concentrations in effluents to unrestricted areas".
11. The licensee, by letter of February 28, 1961, informed DL&R that the comments in their (DL&R) letter of January 30, 1961, were no longer applicable in that (1) all manufacturing activities performed under SNM-37 had been discontinued, (2) all nuclear bearing material and associated processing and handling equipment had been transferred to the Corporation's Atomic Fuel Department, located at Cheswick, Pennsylvania, (3) the current quantity of special nuclear material on hand, totalling approximately 46,311 grams of U-235, had been packaged and would be returned to a reclamation site in approximately 60 to 90 days, and (4) the areas in which special nuclear materials had been handled or processed were being decontaminated and renovated.
12. On August 21, 1961, the Division of Compliance, Headquarters, informed this office that Westinghouse Electric Corporation was not renewing their Special Nuclear Material License No. SNM-37 which covered their

fuel fabrication at Blairsville, Pennsylvania and that the license had expired on July 1, 1961. Headquarters requested, in view of the large quantity of special nuclear material that had been processed and used at the licensee's facilities during the past few years, that an appropriate inspection be made to verify that all licensed material had been disposed of in accordance with the regulations and to determine the extent of radioactive contamination, if any, to the premises and equipment.

13. On October 18, 1961, the inspection of SNM-37, as now being reported, was made as requested. Included was an inspection of the activities being conducted under the licensee's source License C-4971.

Facility Decontamination

14. The decontamination of the special nuclear material processing area (60' x 160') was described as follows:
 - (1) All of the usable equipment was transferred to the Atomic Fuel Department at Cheswick, Pennsylvania, after removal of loose contamination and after wrapping in plastic. This equipment consisted of water hold up tanks, rolling mills, a press, storage racks, hoods, milling machines, furnaces, delpark filter apparatus, exhaust fans, duct work, and conduit.
 - (2) All non-usable contaminated material which was not combustible and could not be decontaminated, was shipped to Oak Ridge for burial. This material consisted of wall material, metal containers, furnace brick, hand tools, some equipment such as hood structures.
 - (3) All non-usable material which was not contaminated, as determined by direct measurements (Eberline portable scintillation meter) and smear surveys, was disposed of to the licensee's own dump. This material consisted of such items as concrete blocks (painted prior to use of the facility), sheet metal, transite, etc.
 - (4) All contaminated combustible material was incinerated as authorized by SNM-37, amended September 9, 1960. The resulting ash was shipped to Oak Ridge.
 - (5) The entire Nuclear Fuel Area was then vacuumed, beginning with the ceiling.
 - (6) The entire Area was then washed down, starting with the ceiling.
 - (7) The entire Area was then isolated by means of plastic, maintained in a wet condition and the walls removed, brick by brick.
 - (8) The final step was the decontamination of the floor which consisted of:
 - (a) Initial scrub down
 - (b) Paint removal
 - (c) Second scrub down
 - (d) Hot-spots etched with acid
 - (e) Filling of sumps with concrete
 - (f) Removal of some concrete

Licensee's Survey Results

15. A final smear survey of the floor in the Nuclear Fuel Area by the licensee (walls having been removed) revealed levels of 0 to 14 d/m/ft². Of the 75 smears taken, three were greater than 10 d/m.

Inspectors Survey Results

16. A contamination survey was made by the inspector of the area where special nuclear material had been processed, an area approximately 60 feet by 160 feet. The survey consisted of direct radiation measurements of the floor using an end window GM as well as smears. No reading could be detected (less than 0.05 mrad/hr) with the open window positioned approximately one to two inches from the floor. The smears, which were counted by NYOO, Health and Safety Laboratory for alpha activity, revealed all floor areas to have less than 10 d/m/ft² of removable contamination with the exception of one area of 16 d/m. The maximum amount of removable contamination, 320 d/m/ft², was found on a horizontal surface above floor level in an area which had previously been a storage room. The other smears of horizontal surfaces in this storage area showed loose contamination of 150, 180, 44, and 42 d/m/ft². A sketch of the Nuclear Fuel Area, showing smear locations and results, has been included as Exhibit "A".

Transfer and Inventory Records

17. A review of the licensee's inventory and transfer record indicated that no special nuclear material was in their possession as of June 30, 1961. The licensee's "Material Status Report" showing a beginning inventory of 46,311 grams of U-235 and an ending inventory of zero on 6/30/61 has been included as Exhibit "B". A schedule of receipts and removals, showing the licensee's disposition of the 46,311 grams of U-235 plus an additional 872 grams, has been included as Exhibit "C".
18. Humphrey, Manager of Management and Staff Services, stated that an inventory was made listing all of the equipment used in the Nuclear Fuel Area, which was carefully followed to ensure that each piece shipped was received by the Atomic Fuel Department at Cheswick, Pennsylvania. He added that trucks were rented and Westinghouse personnel performed the transfer which required 20 to 30 truck loads. The transfer records for this equipment consist of L orders. A list of the L order numbers totalling 45 are included in the licensee's file.
19. The record covering the transfer of non-combustible waste to Oak Ridge was reported by Humphrey as being on AEC Shipping Form SF 101-WFP-CYT-48. This shipment required a total of 27 drums.

C-4971

20. The licensee at the time of the inspection possessed a total of 364.5 pounds of uranium in the form of metal bars. Their license authorized possession of 3,500 pounds of source material. The material, which had not been used since December of 1960 was in

storage within a locked concrete block building located within a locked security area enclosed by an eight foot fence. This area, designated as the "Contaminated Disposal Area", is under a 24 hour security guard with only the guards possessing keys to the area and building.

21. The initial and only shipment of uranium totaling 998.1 pounds was received in 1957 from National Lead. The material was used for qualifying runs in fuel element production and some development work associated with fuel element fabrication. Records of receipt and use were available.
22. The fence around the "Contaminated Disposal Area" was posted on all four sides with the sign worded, "Caution - Radioactive Material" and showing the prescribed radiation symbol.
23. The wooden box in which the uranium metal was stored was tagged with the sign worded, "Caution - Radioactive Material", displaying the prescribed radiation symbol and showing the kind, quantity, and date of measurement of the quantity of radioactive material it contained.
24. A survey by the inspector revealed the maximum accessible dose rate, as measured 12 to 18 inches from the storage box, was 3 mr/hr.

Leo Dubinski, Asst. Dir. for Mtls.
Division of Compliance, HQ

FEB 13 1962

Robert W. Kirkman, Director
Region I, Division of Compliance

TRANSMITTAL OF LICENSE COMPLIANCE INSPECTION REPORT -
10 CFR 40 - 70

CO:I:PRN

Transmitted herewith is the following clear inspection
report:

WESTINGHOUSE ELECTRIC CORPORATION
Materials Manufacturing Department
P. O. Box 128
Blairsville, Pennsylvania

License No.: C-4971

SNM-37

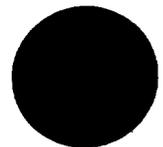
It should be noted that the inspection of the activities associated with expired License No. SNM-37 was made as you requested. The inspection, limited in scope, verified that all licensed Special Nuclear Material procured under this license, had been disposed of in accordance with the regulations and that the extent of radioactive contamination to the licensee's premises and equipment was not significant.

Enclosure:
4 cys of Rpt.

RECEIVED
FEB 13 1962
ITEM # 303

E/80

~~3/13~~



Eber R. Price, Assistant Director
Division of Licensing and Regulation

FEB 15 1962

Leo Dubinski, Assistant Director
for Materials

Original Signed by
Leo Dubinski

Division of Compliance

WESTINGHOUSE ELECTRIC CORPORATION, BLAIRSVILLE, PENNSYLVANIA;
LICENSE NOS. SNM-37 AND C-4971

CO:RMH

We have attached a copy of a memorandum dated February 13, 1962, from Region I, Division of Compliance, together with a copy of an inspection report dated February 7, 1962, on the subject licensee.

This inspection was requested by Mr. D. A. Nussbaumer by memorandum dated August 14, 1961, (copy attached) in order to determine that all licensed material had been transferred or disposed of in accordance with the regulations and to determine the extent of radioactive contamination, if any, of the premises and equipment.

This inspection, which included License No. C-4971, revealed no items of noncompliance. Since the licensee was not issued a Form 591, we would appreciate it if you would send the licensee a letter acknowledging the fact that no items of noncompliance were noted.

We are forwarding a copy of the inspection report and transmittal memorandum to Mr. Nussbaumer.

Attachments:

1. Cpy memo fm CO:I to CO
dtd 2/13/62, w/insp.rpt.
2. Cpy memo fm L&R to CO
dtd 8/14/61

cc: D. A. Nussbaumer, L&R, w/attach. No. 1
R. W. Kirkman, CO:I, w/o

ITEM # 302

E/81
~~9/32~~



RA 95-041 AJN

Westinghouse **Energy Systems**
Electric Corporation

Box 355
Pittsburgh Pennsylvania 15230-0355

December 19, 1995

U. S. Nuclear Regulatory Commission, Region I
475 Allendale Road
King of Prussia, PA 19406-1415

Attention: Mr. Mark C. Roberts

Subject: Second Transmittal of Site Survey Information for the Westinghouse Blairsville Site
(Former USAEC License Number SNM-47)

Reference: Westinghouse Letter Dated June 12, 1995 (Letter No. RA 95-017AJN) From
A. J. Nardi to Mr. Mark C. Roberts (USNRC)

Dear Mr. Roberts:

As you are aware, Westinghouse has had underway a program to perform a detailed radiological survey of the Blairsville Site. This site was formerly operated under both USAEC Contract and USAEC License Number SNM-47 for the fabrication of uranium bearing fuels. Attached for your information is a second report which provides the results of the site investigation conducted during 1995. The study is limited to the site areas external to the buildings and includes an investigation for both radiological and chemical species. Therefore, in addition to this letter, a separate transmittal is being made to the Pennsylvania Department of Environmental Protection. The initial report for this site was transmitted by the letter referenced above.

If you have any questions concerning the attached report or the project, please contact me at 412-374-4652.

Sincerely,

A. J. Nardi, Supervisory Engineer
Regulatory Affairs

dh

Enclosure

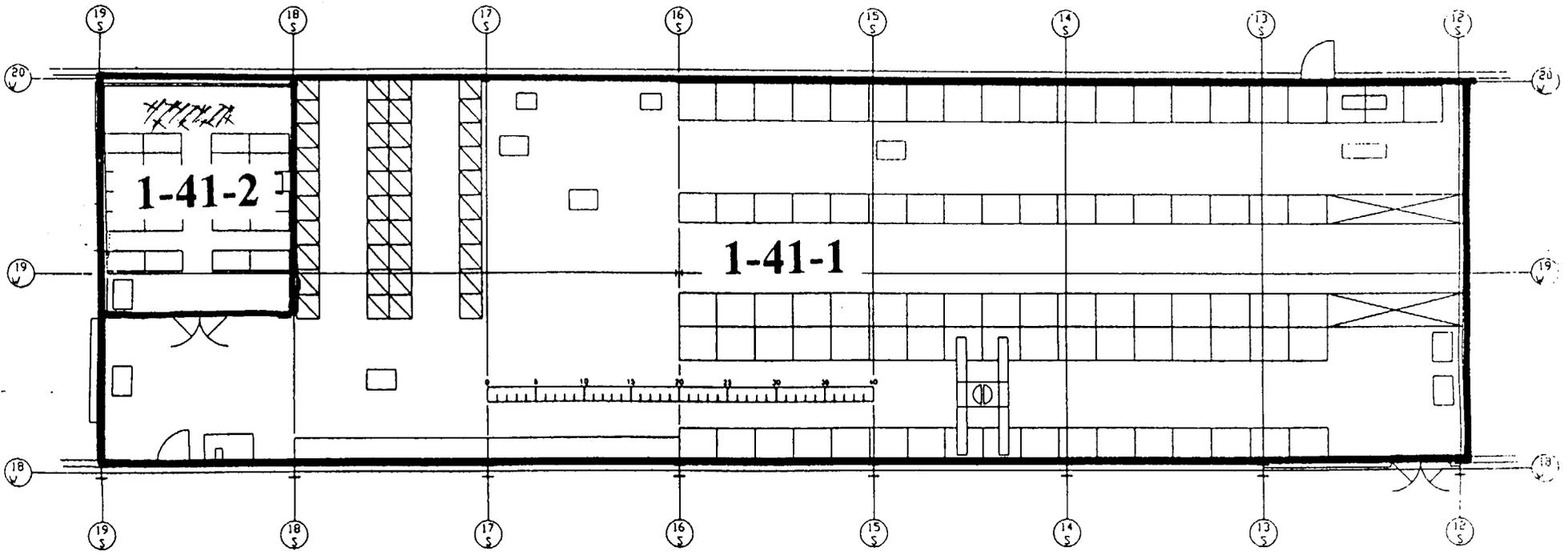
cc: Mr. James G. Yusko, CHP
Regional Manager
Department of Environmental Protection
Field Operations, Radiation Protection
400 Waterfront Drive
Pittsburgh, PA 15222-4745

ITEM # 301

E/82
~~301~~

RED REPRESENTS
REMEDIATED SURFACE

→
NORTH



STORE ROOM
SMP BLAIRSVILLE, PA

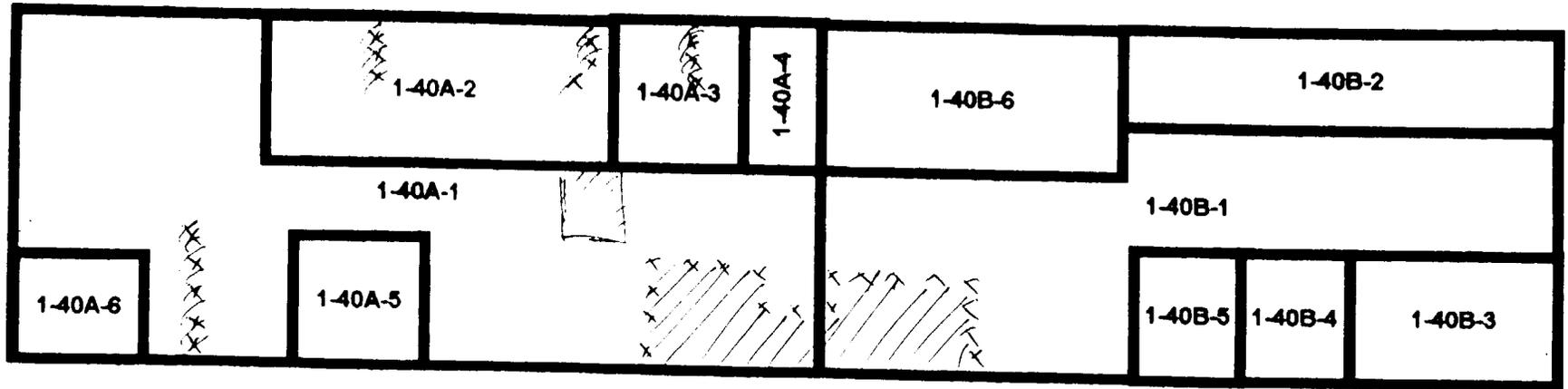
KEY-29



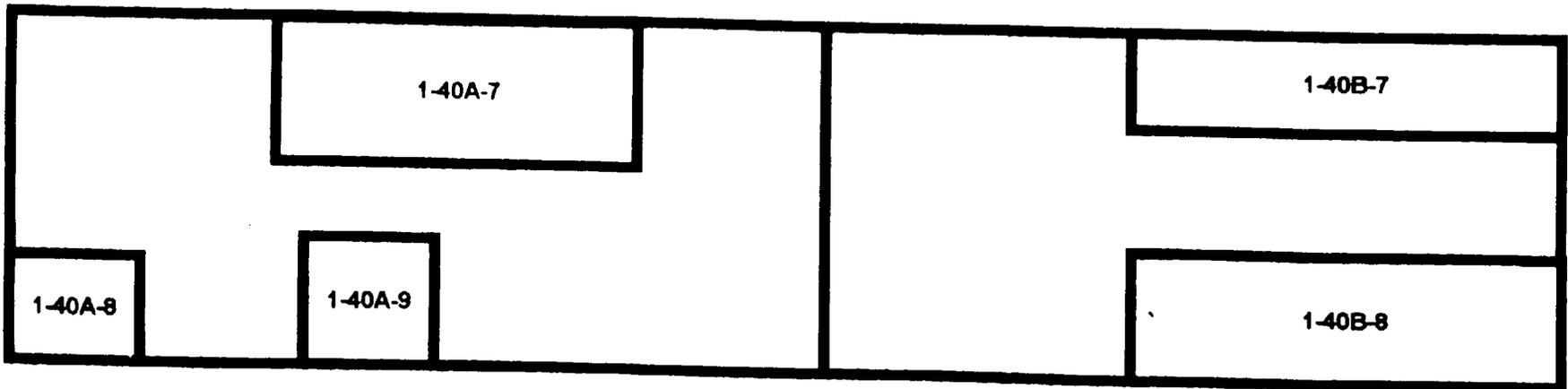
RED REPRESENTS
REMEDIATED SURFACES

UNIT 1-40A & B (Main Floor)

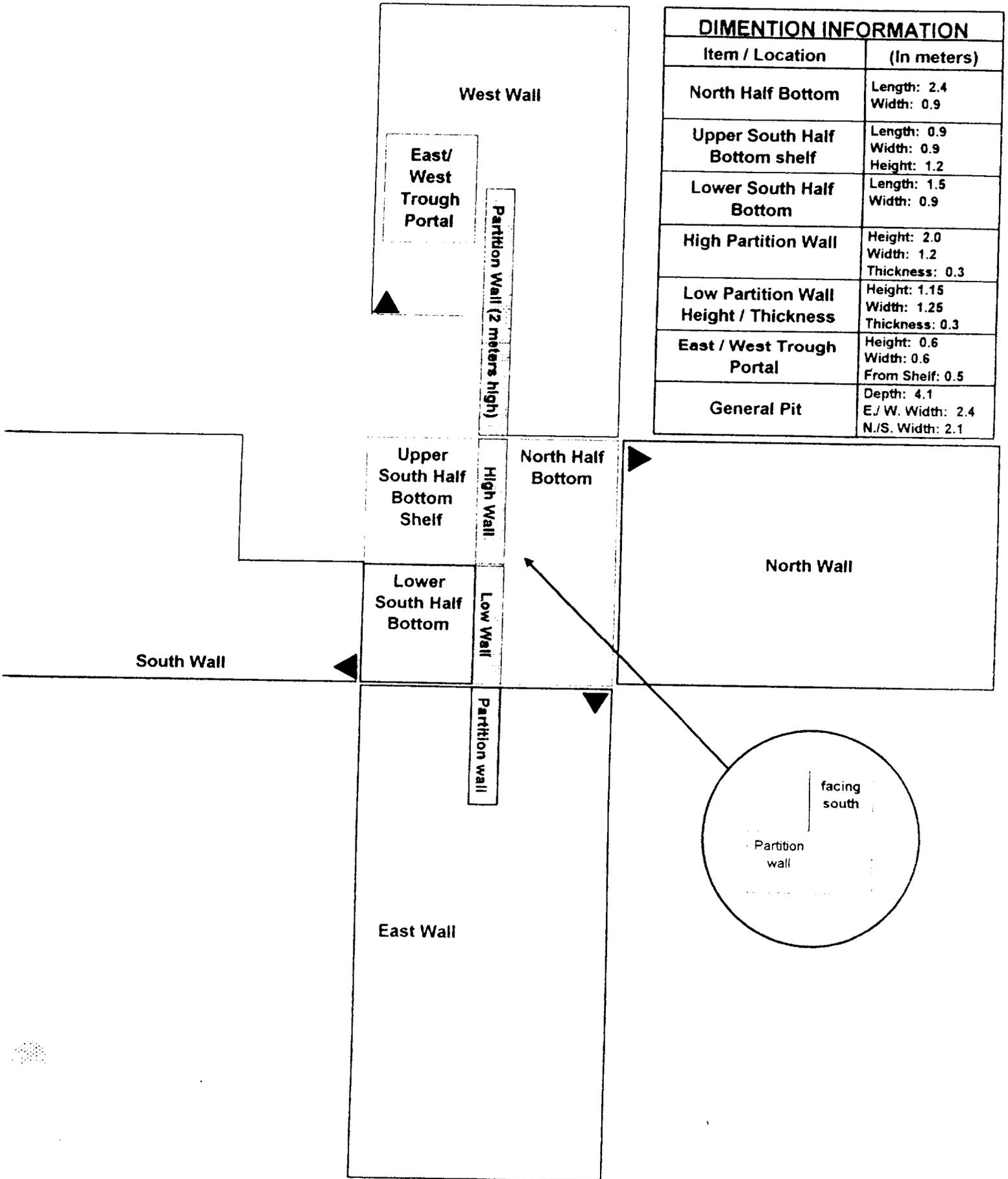
→
NORTH



UNIT 1-40A & B (Second Floor Surfaces)



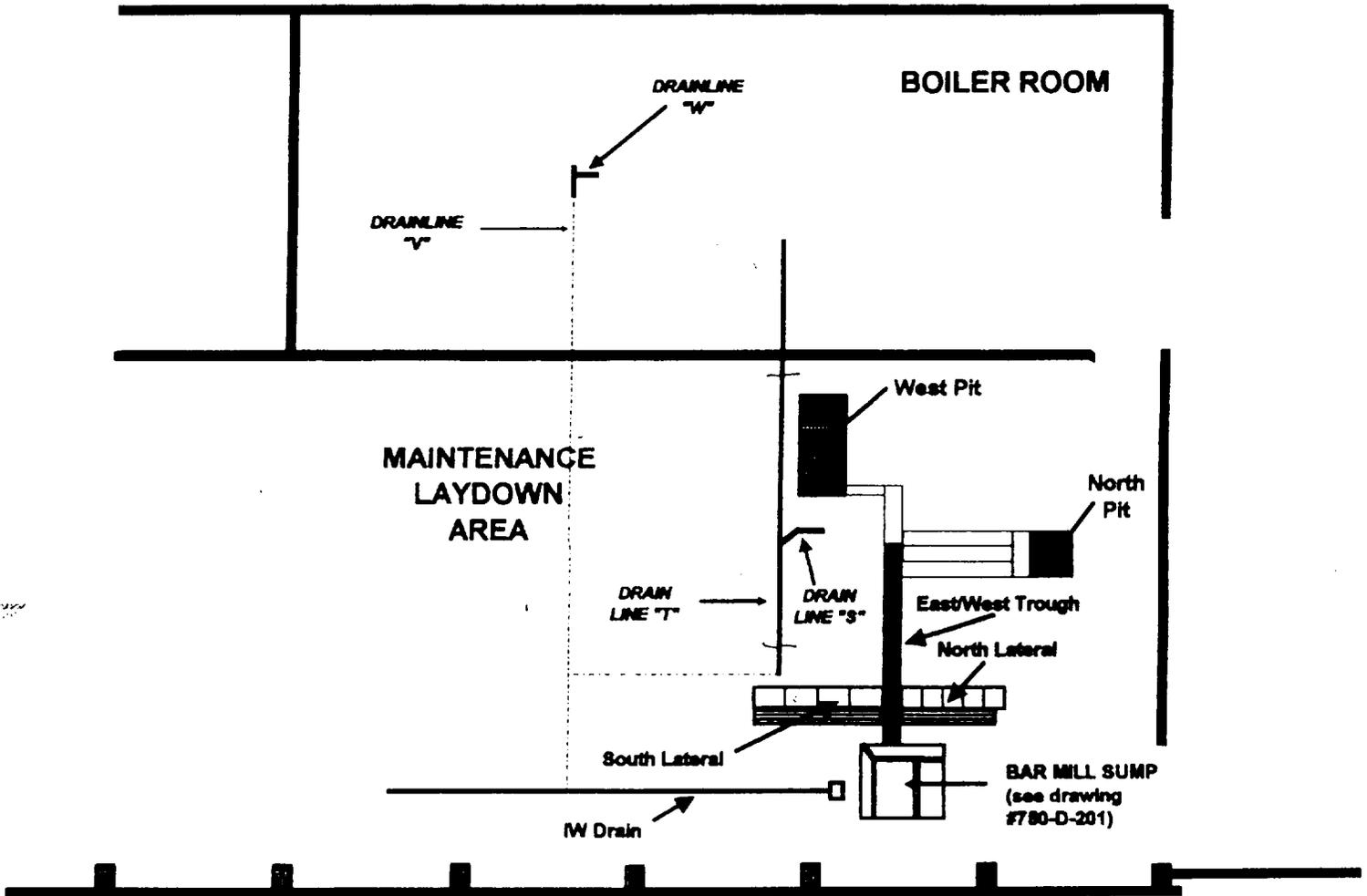
UNIT 1-39-1 BARMILL SUMP PIT



| DIMENTION INFORMATION | |
|---------------------------------------|---|
| Item / Location | (In meters) |
| North Half Bottom | Length: 2.4 Width: 0.9 |
| Upper South Half Bottom shelf | Length: 0.9 Width: 0.9 Height: 1.2 |
| Lower South Half Bottom | Length: 1.5 Width: 0.9 |
| High Partition Wall | Height: 2.0 Width: 1.2 Thickness: 0.3 |
| Low Partition Wall Height / Thickness | Height: 1.15 Width: 1.25 Thickness: 0.3 |
| East / West Trough Portal | Height: 0.6 Width: 0.6 From Shelf: 0.5 |
| General Pit | Depth: 4.1 E./ W. Width: 2.4 N./S. Width: 2.1 |

UNITS 1-39 & 1-43 DRAINLINES AND TROUGHS

NORTH →



KEY:

- IW drain lines (path not yet determined)
- Shallow concrete lined troughs
- East/West Deep Trough to Barmill Sump Pit
- Concrete lined Lateral north and south of East/West Trough
- Deeper Lateral troughs sloped towards East/West Trough
- Concrete lined pits

**UNITS 1-39 & 1-43
TROUGH & PIT
INFORMATION**

West Pit Information:

Width: 1.47 Meters
Length: 2.19 Meters
Depth from floor level: 1.83 Meters
Distance from West Wall: 1.22 Meters
Distance from North Wall: 11.58 Meters

North Pit Information:

Width: 1.22 Meters
Length: 1.22 Meters
Depth from floor level: 0.91 Meters
Distance from West Wall: 5.87 Meters
Distance from North Wall: 2.18 Meters

East / West Deep Trough to sump pit:

Width: 0.61 Meters
Length: (to sump pit) 7.92 Meters
Depth from floor level: 1.75 Meters
**Depth from floor level @
portal to sump pit: 2.44 Meters**
Distance from West Wall: 5.41 Meters
Distance from North Wall: 8.53 Meters

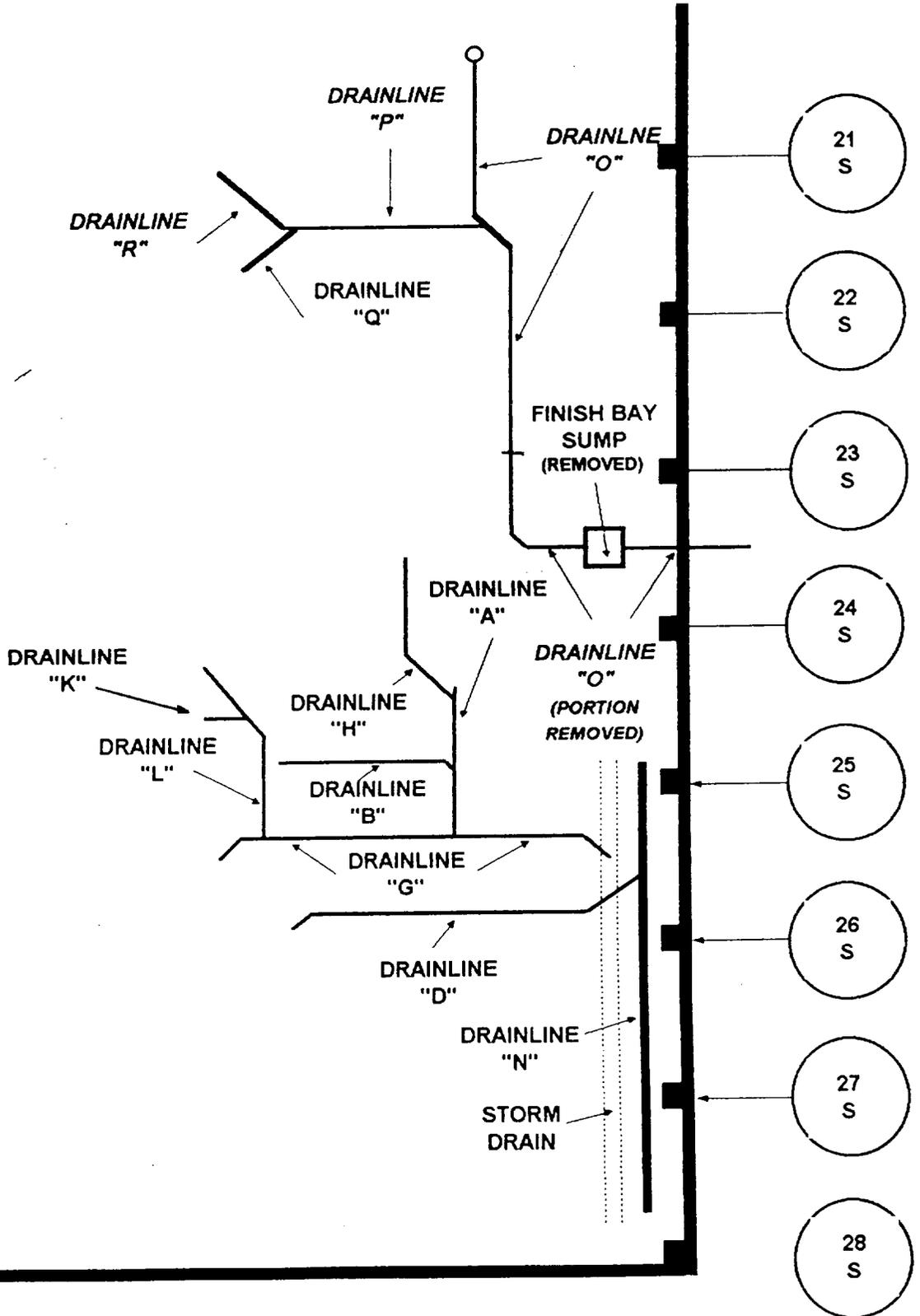
North Lateral Trough:

Width of Shallow Portion: 1.27 Meters
Width of Entire Lateral: 2.13 Meters
Length of Lateral: 4.39 Meters
Depth of Shallow Portion: 0.78 Meters
**Depth of deeper portion
@ northern most point: 1.35 Meters**
**Length of Deeper portion
@ northern most point: 3.74 Meters**
**(note that deeper portion tapers south down
to East/West trough)**
Distance from West Wall: 9.04 Meters
Distance from North Wall: 5.28 Meters

South Lateral Trough:

Width of Shallow Portion: 1.27 Meters
Width of Entire Lateral: 2.13 Meters
Length of Lateral:
Depth of Shallow Portion:
**Depth of deeper portion
@ southern most point:**
**Length of Deeper portion
@ southern most point:**
**(note that deeper portion tapers north down
to East/West trough)**
Distance from West Wall:
Distance from North wall:

FINISHING BAY PROCESS DRAIN LINE





1581

RECEIVED 10-5-95
 REPORTED 10-11-95

Originator A J Nardi

Company/Div. W ESBU Environmental & Regulatory Services

RESULTS OF ANALYSIS

pCi/gram +/- 2 sigma @ sample date: 10-5-95

| Analytical Service # | Sample Identification | Cs137 | Tl208 | Bi212 | Bi214 | Pb212 | Pb214 | Ra228 | Ra228/Ac228 | Th228 | U235 | Other | U-238 |
|----------------------|-----------------------|-------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|---------------|--------------|-------|-------------|
| 45-2045 | B-366 | - | 11.9 ±0.5 | 36.2 ±4.7 | - | 38.6 ±1.0 | 0.755 ±0.45 | 0.843 ±0.45 | 42.3 ±2.9 | 34.1 ±1.5 | 75.0 ±1.0 | | 473 ±58 |
| 45-2046 | B-367 | - | 2.14 ±0.22 | 6.78 ±2.48 | - | 7.41 ±0.45 | 0.636 ±0.32 | 0.485 ±0.30 | 7.79 ±1.30 | 6.15 ±0.64 | 41.8 ±0.8 | | 161 ±35 |
| 45-2047 | B-368 | - | 0.494 ±0.17 | - | - | 1.80 ±0.32 | - | 0.475 ±0.28 | 1.37 ±0.87 | 1.42 ±0.49 | 105 ±1 | | 381 ±38 |
| 5-2048 | B-369 | - | 1.89 ±0.23 | 6.14 ±1.89 | 0.795 ±0.27 | 5.53 ±0.48 | 1.46 ±0.57 | 0.795 ±0.27 | - | 5.42 ±0.67 | 1286 ±4 | | - |
| 5-2049 | B-370* | - | 0.797 ±0.22 | - | 0.971 ±0.49 | 2.08 ±0.57 | - | 0.971 ±0.49 | 3.73 ±2.18 | 2.29 ±0.64 | 38.6 ±0.9 | | 1073 ±77 |

NOTE: DUE TO THE TYPE OF SAMPLE (CLAY TILE), THE RESULTS SHOULD BE CONSIDERED TO BE QUALITATIVE. A PROPER GEOMETRY COULD NOT BE OBTAINED.

Procedures: A-524
 Analyst: WTF, TRK
 Page 2 OF 2

Approved: L.F. Beckes
M.R.K.
 M. R. Kawchak
 Senior Scientist

10102 ✓

Westinghouse

ELECTRIC CORPORATION



Blairsville, Pennsylvania

December 13, 1956

Mr. Lyle Johnson
Chief, License Branch
Division of License
U. S. Atomic Energy Comm.
1717 High Street, N. W.
Washington 25, D. C.

Dear Mr. Johnson:

Subject: Authorization to Procure Normal Uranium Melting Stock

In reference to our telephone conversation of December 10, 1956, it is requested that the Blairsville Metals Plant of the Westinghouse Electric Corporation be authorized to procure, to the extent not already covered under our License SNM-37, 1000 pounds of normal uranium melting stock for use in the preparation of uranium alloys for the fabrication of Fuel Plate Elements as outlined in Paragraph 2 (A) and (D) of our License Application. *SNM-37*

Material to be purchased should meet Westinghouse Electric Corporation specification PDS-12795-B. This specification is for a low carbon metal which is furnished to the Pittsburgh Area Office by the Fernald Area Office of the Atomic Energy Commission. If possible, material should be delivered in lengths of 1' to 4' with an approximate diameter of 1".

We understand that the Pittsburgh Area Office may make available to us a small amount of material which meets the specification of the material we wish to purchase. We would, therefore, appreciate authorization to purchase direct from the Pittsburgh Area Office whatever material they will release for direct sale.

We wish to thank you in advance for your early consideration of this request and for your past cooperation.

Very truly yours,

Warren M. Trigg
Warren M. Trigg, Manager

E/83
4300

ITEM # 300 BLAIRSVILLE METALS PLANT

gwg:lcm

YOU CAN BE SURE... IF IT'S Westinghouse

Westinghouse
ELECTRIC CORPORATION



Blairsville, Pa.

December 21, 1956

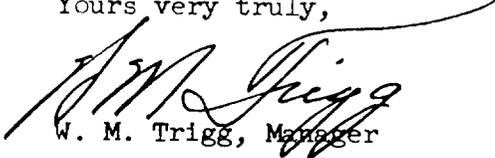
Mr. Lyle Johnson
Chief, License Branch
U. S. Atomic Energy Commission
Division of License
1717 High Street, N.W.
Washington 25, D. C.

Dear Mr. Johnson:

Subject: Authorization to Procure Normal Uranium
Melting Stock

Referring to our letter of December 13 and telephone conversation of December 20 on the above subject, we wish to advise you that we can accept low carbon uranium in other form than that specified in our letter. Since we intend to use this material for melting stock, it will be possible for us to use billets, bar croppings, or other shapes which may be more readily available.

Yours very truly,


W. M. Trigg, Manager

MATERIALS MANUFACTURING
DEPARTMENT

wmt*fms

E184
4299
ITEM # 299

YOU CAN BE SURE... IF IT'S Westinghouse

UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON 25, D. C.

SOURCE MATERIAL LICENSE

License No. C-3640

Dated: 1/18/57

Westinghouse Electric Corporation
Box 128
Blairsville, Pennsylvania

Attention: Mr. Warren M. Trigg, Manager
Blairsville Metals Plant

Gentlemen:

Pursuant to the Atomic Energy Act of 1954 and Section 40.21 of the Code of Federal Regulations, Title 10 - Atomic Energy, Chapter 1, Part 40 - Control of Source Material, you are hereby licensed to receive possession of and title to one thousand pounds of refined source material* during the term of this license for use in the preparation of alloys for the fabrication of fuel elements.

You are further licensed to transfer and deliver possession of and title to refined source material to any person licensed by the Atomic Energy Commission, within the limits of his license.

As a condition of issuance of this license, you are required to maintain records of your inventories, receipts and transfers of refined source material.

This license is subject to all the provisions of the Atomic Energy Act of 1954 now or hereafter in effect and to all valid rules and regulations of the U. S. Atomic Energy Commission. Except as herein provided, it is subject also to the provisions of the Commission's proposed regulations, published in the Federal Register July 16, 1955, Title 10, Code of Federal Regulations, Part 20, entitled "Standards for Protection Against Radiation" until such time as said proposed regulations or revisions thereof shall become effective regulations of the Commission. Notwithstanding Section 20.24(f) of said standards, labeling shall not be required for laboratory containers such as beakers, flasks and test tubes, used transiently in laboratory procedures during presence of the user.

Neither this license nor any right under this license shall be assigned or otherwise transferred in violation of the provisions of the Atomic Energy Act of 1954.

This license shall expire February 1, 1958.

ITEM # 298

FOR THE ATOMIC ENERGY COMMISSION

Lyall Johnson, 1/18/57
Chief, Licensing Branch
Division of Civilian Application

*uranium metal

DICTATED

APPROVED

RAB
[Signature]

E/85
[Signature]



Central Files
SM

CAL:RFB

JAN 1 1957

Westinghouse Electric Corporation
Box 128
Blairsville, Pennsylvania

Attention: Mr. Warren M. Trigg, Manager
Blairsville Metals Plant

Gentlemen:

Enclosed is Source Material License No. C-3640.

This letter constitutes your authorization to purchase from the AEC, prior to May 1, 1957, one thousand pounds of normal uranium metal melting stock for use under your License No. C-3640.

For details regarding the purchase of this material you should communicate with the Oak Ridge Operations Office, U. S. Atomic Energy Commission, P. O. Box E, Oak Ridge, Tennessee, Attention: Dr. H. M. Roth.

Very truly yours,

Lyall Johnson
Chief, Licensing Branch
Division of Civilian Application

Enclosures:

- 1. Lic No. C-3640
- 2. 10 CFR 20

cc: Roth, Oak Ridge Oper Off, w/cy Lic, ltrs 12/13/56 and 12/21/56 fm Westinghouse
 Mann, INS " " "
 Docket " " "
 Musser, NMM " " "
 Ryan, FIN (2) " " "
 Labowitz, PROD " " "
 Steele, CA " " "

I HEREBY CERTIFY THAT THE ABOVE QUANTITY WILL NOT EXCEED MATERIAL APPLICABLE FOR THIS DIVISION FOR FISCAL YEAR 1957.

[Signature]
D. F. Musser, Director
Division of Nuclear
Materials Management

JAN 8 1957

ITEM # 297

| | | | | | |
|-----------|-------------------|------------------|------------------|--------------------|--------------------|
| OFFICE ▶ | CAL | CAL | CAL | FIN | |
| SURNAME ▶ | 1/3/56 <i>RFB</i> | 1/3/56 <i>ME</i> | 1/3/56 <i>LJ</i> | 1/3/57 <i>M.K.</i> | <i>[Signature]</i> |
| DATE ▶ | RFBorlik:ew | CTEdwards | LJohnson | MKKellogg | <i>E/86</i> |

DOCKET NO. 40-355-8

Westinghouse

ELECTRIC CORPORATION



BLAIRSVILLE, PA.

November 11, 1958

Mr. Joseph C. Delaney, Chief
Materials Branch
Division of Licensing and Regulations
United States Atomic Energy Commission
Germantown District
Washington 25, D.C.

Subject: RENEWAL OF SOURCE MATERIAL LICENSE C-3640

Dear Mr. Delaney:

This is to request the renewal of our license C-3640 which expired on February 1, 1958.

We would appreciate it if our license could be reissued under the expired license number C-3640, and include the receipt, storage, and transfer of depleted uranium.

As of our last inventory which was conducted November 8, 1958, we have in our possession 103 pounds of uranium dioxide (UO₂), 990 pounds of uranium metal (reject slugs), and 106 pounds of uranium dioxide (depleted). These materials will be used in research and development programs designed for the development of manufacturing processes for ceramic type fuel pellets and the fabrication of uranium alloy fuel elements.

We regret the oversight in permitting our license to expire, and appreciate the interest and guidance shown by your staff in assisting us in obtaining a renewal of our license.

Yours very truly,

R. D. Rowley
R. D. Rowley, Manager

Materials Manufacturing
Department

E/87

~~Handwritten initials~~

(4)

rdr*fms
attachments

maw

ITEM # 296

YOU CAN BE SURE ... IF IT'S Westinghouse

FORM AEC-2
(7-55)

UNITED STATES OF AMERICA
ATOMIC ENERGY COMMISSION

Form approved.
Budget Bureau No. 33-R002.4.

**APPLICATION FOR AEC LICENSE TO
TRANSFER, DELIVER, EXPORT, OR RECEIVE
URANIUM OR THORIUM SOURCE MATERIAL**

Pursuant to Code of Federal Regulations, Title 10—
Atomic Energy, Part 40—Control of Source Material

2. PREVIOUS AEC LICENSE NUMBER, IF ANY.

C-3640

INSTRUCTIONS

File two (2) copies of this application with the U. S. Atomic Energy Commission, 1901 Constitution Ave. NW., Washington 25, D. C. This application may be used for an original license or for the renewal of a license. In the case of a renewal, this application should be received by the Commission on or before 30 days before the expiration of the previous license. Complete blocks 1, 2, 3, 9, and if you combine two or more of the activities of Producer, Processor, Distributor, Exporter, or Consumer, complete each of the applicable blocks numbered 4 through 8.

TO: U. S. Atomic Energy Commission,
1901 Constitution Ave. NW.,
Washington 25, D. C.

1.

NAME
AND
ADDRESS
OF
APPLICANT
(Street,
city,
zone,
state)

Westinghouse Electric Corporation
Materials Manufacturing Department
P.O. Box 128
Blairsville, Pennsylvania

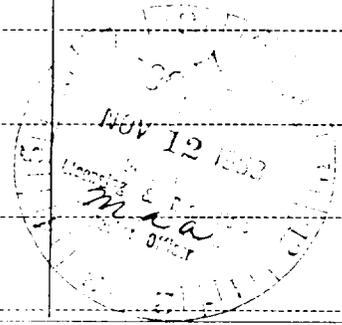
3. INVENTORY. INVENTORY OF SOURCE MATERIAL, RAW AND REFINED, AS OF November 8, 1958

(Specify date of last inventory)

INSTRUCTION.—Include all source material in your possession or under your control, regardless of location. Include any source material you have possession of but which is owned by others, whether or not they are licensees of the Commission. Please specify that part of your inventory which is owned by other persons, listing the names, addresses, and quantities owned by each. Do not include in this inventory any raw source material not yet removed from its place of deposit in nature.

(a) Raw Source Material

| DESCRIPTION OF MATERIAL | ESTIMATED PERCENT URANIUM OR THORIUM | QUANTITY IN INVENTORY (Gross tons) | NAME AND ADDRESS OF OWNER, IF DIFFERENT FROM THAT IN BLOCK 1 ABOVE |
|-------------------------|--------------------------------------|------------------------------------|--|
| | | | |
| | | | |
| | | | |
| | | | |



(b) Refined Source Material

| DESCRIPTION OF MATERIAL | GRADE (Comm., CP, USP, etc.) | PERCENT OF URANIUM OR THORIUM | QUANTITY (Lb.) | NAME AND ADDRESS OF OWNER, IF DIFFERENT FROM THAT IN BLOCK 1 ABOVE |
|------------------------------------|------------------------------|-------------------------------|----------------|--|
| Uranium Dioxide (UO ₂) | CP | 88.1 | 103 | Same as block (1) |
| Uranium Metal (Reject slugs) | CP | 100. | 990 | Same as block (1) |
| Uranium Dioxide (Depleted) | CP | 88.0 | 106 | Same as block (1) |
| | | Total | 1199 | |

5. PROCESSORS. IF YOU REQUEST AN ATOMIC ENERGY COMMISSION LICENSE TO CHEMICALLY PROCESS SOURCE MATERIAL, CHECK THIS BOX AND SUPPLY THE INFORMATION REQUESTED IN THIS BLOCK, AS WELL AS THE INFORMATION REQUESTED IN BLOCKS 1, 2, 3, AND 9.

(a) THE APPLICANT CHEMICALLY PROCESSES SOURCE MATERIAL IN PLANTS LOCATED AT: *(These plants include all of the plants in which the applicant will process source material under the terms of any license issued by the Commission.)*

1.

2.

3.

4.

(b) IN THE EVENT RESIDUES AND TAILINGS ARE TO BE DISCARDED PLEASE DESCRIBE THESE RESIDUES AND TAILINGS, THE FREQUENCY OF DISCARDS, THE PROBABLE SOURCE MATERIAL CONTENT AND THE REASONS FOR NOT CONSERVING THE MATERIAL:

6. DISTRIBUTORS. IF YOU REQUEST AN ATOMIC ENERGY COMMISSION LICENSE TO RECEIVE SOURCE MATERIAL FOR RESALE ONLY, WITHOUT ANY INTERMEDIATE PROCESSING, CHECK THIS BOX AND COMPLETE BLOCKS 1, 2, 3, AND 9.

7. CONSUMERS. IF YOU REQUEST AN ATOMIC ENERGY COMMISSION LICENSE TO USE SOURCE MATERIAL IN CHEMICAL ANALYSIS OR IN THE MANUFACTURE OF, OR FOR INCORPORATION IN, ANY PRODUCT, CHECK THIS BOX AND SUPPLY THE INFORMATION REQUESTED IN THIS BLOCK AS WELL AS THE INFORMATION REQUESTED IN BLOCKS 1, 2, 3, AND 9.

| DESCRIPTION OF SOURCE MATERIAL TO BE USED | ESTIMATED ANNUAL REQUIREMENTS (Lb.) | USES |
|---|--|---|
| | | INDICATE WHETHER (1) AS ANALYTICAL REAGENT, (2) FOR INCANDESCENT MAN- TLES, (3) MEDICINAL, OR (4) OTHER. IN THE CASE OF OTHER USES, DESCRIBE THE PRODUCT, THE SOURCE MATERIAL CONTENT, AND THE MANNER IN WHICH THE PRODUCT WILL BE USED. |
| Uranium Dioxide (UO ₂) | 2500 | The source materials will be used in Research and Development programs designed for the development of manufacturing processes for ceramic type fuel pellets and the fabrication of Uranium-alloy fuel elements. All source material will be of re-agent grade purity composed of normal or depleted uranium. |
| Uranium Dioxide (Depleted) | 1000 | |
| | | |
| Total | 3500 | |

8. EXPORTERS. IF YOU REQUEST AN ATOMIC ENERGY COMMISSION LICENSE TO EXPORT SOURCE MATERIAL, CHECK THIS BOX AND SUPPLY THE BALANCE OF THE INFORMATION REQUESTED IN THIS BLOCK AS WELL AS THE INFORMATION REQUESTED IN BLOCKS 1, 2, 3, AND 9. *(Note that approval on Form AEC-7 is required for each individual export transaction.)*

Name and address of each of your agents who for your account will prepare Department of Commerce "Shipper's Export Declaration" (Form 7525-V), will request permission to export on Form AEC-7, and will ship source material.

| NAME OF AGENT | ADDRESS |
|---------------|---------|
| | |
| | |
| | |
| | |
| | |

Westinghouse

ELECTRIC CORPORATION



40-3558

November 29, 1960

P.O. BOX 128
BLAIRSVILLE, PA.



U. S. Atomic Energy Commission
1901 Constitution Ave., N.W.
Washington 25, D. C.

Gentlemen:

Enclosed for your consideration is our application for the renewal of License C-4971.

Please do not hesitate to call upon the writer should you desire any additional information.

Very truly yours,

George W. Goodrow
Staff Supv.-Industrial Relations

BLAIRSVILLE METALS PLANT

gc

Enclosures

E/88

~~295~~

ITEM # 295

YOU CAN BE SURE... IF IT'S Westinghouse

(5)

40-3558

FORM AEC-2
(9-55)

UNITED STATES OF AMERICA
ATOMIC ENERGY COMMISSION

Form approved.
Budget Bureau No. 38-R002.5.

APPLICATION FOR AEC LICENSE TO
TRANSFER, DELIVER, EXPORT, OR RECEIVE
URANIUM OR THORIUM SOURCE MATERIAL

Pursuant to Code of Federal Regulations, Title 10—
Atomic Energy, Part 40—Control of Source Material

2. PREVIOUS AEC LICENSE NUMBER, IF ANY.

C-4971

INSTRUCTIONS

File two (2) copies of this application with the U. S. Atomic Energy Commission, 1901 Constitution Ave. NW., Washington 25, D. C. This application may be used for an original license or for the renewal of a license. In the case of a renewal, this application should be received by the Commission on or before 30 days before the expiration of the previous license. Complete blocks 1, 2, 3, 9, and if you combine two or more of the activities of Producer, Processor, Distributor, Exporter, or Consumer, complete each of the applicable blocks numbered 4 through 8.

TO: U. S. Atomic Energy Commission,
1901 Constitution Ave. NW.,
Washington 25, D. C.

1.

NAME AND ADDRESS OF APPLICANT
(Street, city, zone, state)

Westinghouse Electric Corporation
Materials Manufacturing Department
P. O. Box 128
Blairsville, Pennsylvania

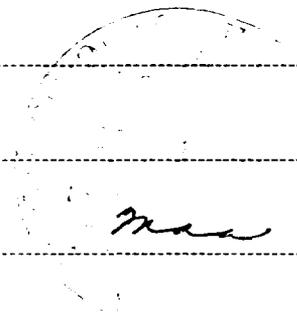
3. INVENTORY. INVENTORY OF SOURCE MATERIAL, RAW AND REFINED, AS OF

November 1, 1960

(Specify date of last inventory)

INSTRUCTION.—Include all source material in your possession or under your control, regardless of location. Include any source material you have possession of but which is owned by others, whether or not they are licensees of the Commission. Please specify that part of your inventory which is owned by other persons, listing the names, addresses, and quantities owned by each. Do not include in this inventory any raw source material not yet removed from its place of deposit in nature.

(a) Raw Source Material

| DESCRIPTION OF MATERIAL | ESTIMATED PERCENT URANIUM OR THORIUM | QUANTITY IN INVENTORY (Gross tons) | NAME AND ADDRESS OF OWNER, IF DIFFERENT FROM THAT IN BLOCK 1 ABOVE |
|-------------------------|--------------------------------------|------------------------------------|---|
| DNA | | |  |
| | | | |
| | | | |
| | | | |

(b) Refined Source Material

| DESCRIPTION OF MATERIAL | GRADE (Comm., CP, USP, etc.) | PERCENT OF URANIUM OR THORIUM | QUANTITY (Lb.) | NAME AND ADDRESS OF OWNER, IF DIFFERENT FROM THAT IN BLOCK 1 ABOVE |
|-------------------------|------------------------------|-------------------------------|----------------|--|
| Uranium Metal | CP | 100 | 342.5 | Same as 1 above |
| | | | | |
| | | | | |
| | | | | |

9. CERTIFICATION AND AGREEMENT. THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION AND AGREEMENT ON BEHALF OF THE APPLICANT (1) CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH CODE OF FEDERAL REGULATIONS, TITLE 10—ATOMIC ENERGY, PART 40—CONTROL OF SOURCE MATERIAL; (2) CERTIFY THAT ALL INFORMATION CONTAINED IN THIS APPLICATION IS TRUE AND COMPLETE TO THE BEST OF THEIR KNOWLEDGE AND BELIEF; AND (3) AGREE THAT IN THE EVENT THAT THIS APPLICATION IS APPROVED BY THE ATOMIC ENERGY COMMISSION, AND A LICENSE IS ISSUED, THAT THE DULY AUTHORIZED REPRESENTATIVES OF THE COMMISSION MAY FREELY INSPECT AT ALL REASONABLE TIMES FACILITIES AND RECORDS, TAKE SAMPLES FOR ASSAY, AND DO SUCH OTHER THINGS AS WILL, IN THE OPINION OF THE COMMISSION, ASSURE THAT ALL SOURCE MATERIAL HANDLED BY THE APPLICANT UNDER THE AUTHORITY OF HIS LICENSE, IS PROPERLY ACCOUNTED FOR AND USED.

BY R. D. Rowley / R. D. Rowley
(Signature of applicant)

November 28, 1960
(Date)

Manager
(Title)

Section 35 (A) of the United States Criminal Code, 18 U. S. C. Sec. 80, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(FOR GOVERNMENT USE ONLY)

UNITED STATES OF AMERICA
ATOMIC ENERGY COMMISSION
SOURCE MATERIAL LICENSE

LICENSE NO. _____

5. PROCESSORS. IF YOU REQUEST AN ATOMIC ENERGY COMMISSION LICENSE TO CHEMICALLY PROCESS SOURCE MATERIAL, CHECK THIS BOX AND SUPPLY THE INFORMATION REQUESTED IN THIS BLOCK, AS WELL AS THE INFORMATION REQUESTED IN BLOCKS 1, 2, 3, AND 9.

(a) THE APPLICANT CHEMICALLY PROCESSES SOURCE MATERIAL IN PLANTS LOCATED AT: (These plants include all of the plants in which the applicant will process source material under the terms of any license issued by the Commission.)

1. DNA

2.

3.

4.

(b) IN THE EVENT RESIDUES AND TAILINGS ARE TO BE DISCARDED PLEASE DESCRIBE THESE RESIDUES AND TAILINGS, THE FREQUENCY OF DISCARDS, THE PROBABLE SOURCE MATERIAL CONTENT AND THE REASONS FOR NOT CONSERVING THE MATERIAL:

6. DISTRIBUTORS. IF YOU REQUEST AN ATOMIC ENERGY COMMISSION LICENSE TO RECEIVE SOURCE MATERIAL FOR RESALE ONLY, WITHOUT ANY INTERMEDIATE PROCESSING, CHECK THIS BOX AND COMPLETE BLOCKS 1, 2, 3, AND 9. DNA

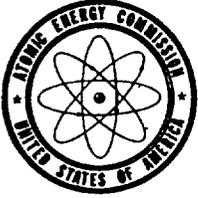
7. CONSUMERS. IF YOU REQUEST AN ATOMIC ENERGY COMMISSION LICENSE TO USE SOURCE MATERIAL IN CHEMICAL ANALYSIS OR IN THE MANUFACTURE OF, OR FOR INCORPORATION IN, ANY PRODUCT, CHECK THIS BOX AND SUPPLY THE INFORMATION REQUESTED IN THIS BLOCK AS WELL AS THE INFORMATION REQUESTED IN BLOCKS 1, 2, 3, AND 9. DNA

| DESCRIPTION OF SOURCE MATERIAL TO BE USED | ESTIMATED ANNUAL REQUIREMENTS (Lb.) | USES |
|---|--|--|
| | | INDICATE WHETHER (1) AS ANALYTICAL REAGENT, (2) FOR INCANDESCENT MAN- TLES, (3) MEDICINAL, OR (4) OTHER. IN THE CASE OF OTHER USES, DESCRIBE THE PRODUCT, THE SOURCE MATERIAL CONTENT, AND THE MANNER IN WHICH THE PRODUCT WILL BE USED. |
| | | |
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8. EXPORTERS. IF YOU REQUEST AN ATOMIC ENERGY COMMISSION LICENSE TO EXPORT SOURCE MATERIAL, CHECK THIS BOX AND SUPPLY THE BALANCE OF THE INFORMATION REQUESTED IN THIS BLOCK AS WELL AS THE INFORMATION REQUESTED IN BLOCKS 1, 2, 3, AND 9. (Note that approval on Form AEC-7 is required for each individual export transaction.)

Name and address of each of your agents who for your account will prepare Department of Commerce "Shipper's Export Declaration" (Form 7525-V), will request permission to export on Form AEC-7, and will ship source material.

| NAME OF AGENT | ADDRESS |
|---------------|---------|
| DNA | |
| | |
| | |
| | |
| | |



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON 25, D. C.

IN REPLY REFER TO:

40-3558
LRL:MD

SOURCE MATERIAL LICENSE

Westinghouse Electric Corporation
Materials Manufacturing Department
P.O. Box 128
Blairsville, Pennsylvania

License No. ~~C-4413~~

Dated: NOV 12 1958

Gentlemen:

Pursuant to the Atomic Energy Act of 1954 and Section 40.21 of the Code of Federal Regulations, Title 10 - Atomic Energy, Chapter 1, Part 40 - Control of Source Material, you are hereby licensed to receive possession of and title to ~~at the above stated location,~~ **thirty five hundred (3,500) pounds of source material for use in the preparation of alloys for the fabrication of fuel elements.**

You are further licensed to transfer and deliver possession of and title to refined source material to any person licensed by the Atomic Energy Commission, within the limits of his license.

As a condition of this license, you are required to maintain records of your inventories, receipts and transfers of refined source material.

This license is subject to all the provisions of the Atomic Energy Act of 1954 now or hereafter in effect and to all valid rules and regulations of the U. S. Atomic Energy Commission, including 10 CFR 20, "Standards For Protection Against Radiation."

Neither this license nor any right under this license shall be assigned or otherwise transferred in violation of the provisions of the Atomic Energy Act of 1954.

This license shall expire ~~November 30,~~ **1959.**

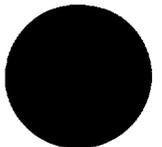
FOR THE ATOMIC ENERGY COMMISSION

J. C. Delaney
Chief, Materials Section
Licensing Branch
Division of Licensing and Regulation

E189

~~40-3558~~

ITEM # 294



Westinghouse

ELECTRIC CORPORATION



DOCKET NO. 40-3558

December 18, 1959

P.O. BOX 128
BLAIRSVILLE, PA.

U. S. Atomic Energy Commission
1901 Constitution Ave., N. W.
Washington 25, D. C.

Attention: Mr. L. Johnson, Chief, Licensing Branch

Gentlemen:

Enclosed are two copies of our application to receive and transfer uranium source material.

Since our previous Source Material License C-4415 expired on November 30, 1959, and a renewal application was not submitted until this time, would it be possible, upon acceptance of the enclosed application, to re-issue the C-4415 license number?

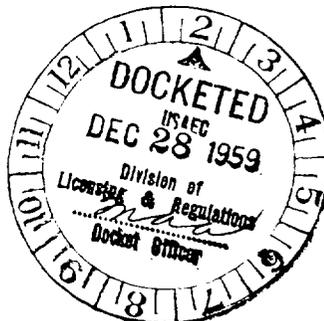
We regret the inconvenience that we may have caused as a result of permitting this license to expire.

Very truly yours,

George W. Goodrow
Staff Supv. - Industrial Relations

gc

Encl. - 2



ITEM # 293

E/90
C/293

YOU CAN BE SURE... IF IT'S Westinghouse

LELAND
40-3558

JAN 4 1960

Westinghouse Electric Corporation
P. O. Box 128
Blairsville, Pennsylvania

Attention: Mr. George W. Goodrow
Staff Supervisor
Industrial Relations

Gentlemen:

Pursuant to your request of December 18, 1959, we are enclosing Source Material License No. C-4971.

As your request for renewal of License No. C-4971 was not submitted prior to its expiration date, we do not use the same number under these circumstances.

DISTRIBUTION

Div. of INS, w/encl. &
cy appl. dtd 12/18/59
Doc. Rm., w/encl.
Formal " "
Suppl. " "
L&R Reading, w/o encl.
LRL Reading " "

Very truly yours,

J. C. Delaney
Chief, Nuclear Materials Section
Licensing Branch
Division of Licensing and Regulation

Enclosure:
License No. C-4971

ITEM # 291

E 191

| | | | | | |
|-----------|------------|----------|-------|--|--|
| OFFICE ▶ | LRL | LRL | 066 | | |
| SURNAME ▶ | NDoulos/rh | Delaney | JC | | |
| DATE ▶ | 12/29/59 | 12/31/59 | 12/31 | | |

FORM AEC-2
(9-58)

UNITED STATES OF AMERICA
ATOMIC ENERGY COMMISSION

Form approved.
Budget Bureau No. 38-R002.4.

APPLICATION FOR AEC LICENSE TO
TRANSFER, DELIVER, EXPORT, OR RECEIVE
URANIUM OR THORIUM SOURCE MATERIAL

Pursuant to Code of Federal Regulations, Title 10—
Atomic Energy, Part 40—Control of Source Material

2. PREVIOUS AEC LICENSE NUMBER, IF ANY.
C-4415

TO: U. S. Atomic Energy Commission,
1901 Constitution Ave. NW.,
Washington 25, D. C.

INSTRUCTIONS

File two (2) copies of this application with the U. S. Atomic Energy Commission, 1901 Constitution Ave. NW., Washington 25, D. C. This application may be used for an original license or for the renewal of a license. In the case of a renewal, this application should be received by the Commission on or before 30 days before the expiration of the previous license. Complete blocks 1, 2, 3, 9, and if you combine two or more of the activities of Producer, Processor, Distributor, Exporter, or Consumer, complete each of the applicable blocks numbered 4 through 8.

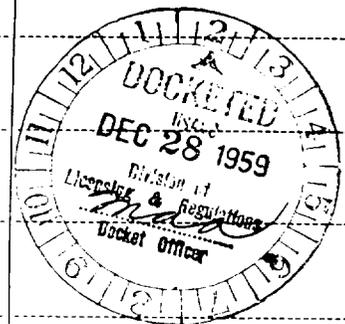
1. NAME AND ADDRESS OF APPLICANT
(Street, city, zone, state)
Westinghouse Electric Corporation
Materials Manufacturing Department
P. O. Box 128
Blairsville, Pennsylvania

3. INVENTORY. INVENTORY OF SOURCE MATERIAL, RAW AND REFINED, AS OF December 14, 1959
(Specify date of last inventory)

INSTRUCTION.—Include all source material in your possession or under your control, regardless of location. Include any source material you have possession of but which is owned by others, whether or not they are licensees of the Commission. Please specify that part of your inventory which is owned by other persons, listing the names, addresses, and quantities owned by each. Do not include in this inventory any raw source material not yet removed from its place of deposit in nature.

(a) Raw Source Material

| DESCRIPTION OF MATERIAL | ESTIMATED PERCENT URANIUM OR THORIUM | QUANTITY IN INVENTORY (Gross tons) | NAME AND ADDRESS OF OWNER, IF DIFFERENT FROM THAT IN BLOCK 1 ABOVE |
|-------------------------|--------------------------------------|------------------------------------|--|
| DNA | | | |
| | | | |
| | | | |
| | | | |



(b) Refined Source Material

| DESCRIPTION OF MATERIAL | GRADE (Comm., CP, USP, etc.) | PERCENT OF URANIUM OR THORIUM | QUANTITY (Lb.) | NAME AND ADDRESS OF OWNER, IF DIFFERENT FROM THAT IN BLOCK 1 ABOVE |
|-------------------------|------------------------------|-------------------------------|----------------|--|
| Uranium Dioxide | CP | 88.1 | 98 | Same as Block (1) |
| Uranium Metal | CP | 100 | 990 | Same as Block (1) |
| ITEM # <u>292</u> | | | | |

EPR
~~CP~~

UNITED STATES
ATOMIC ENERGY COMMISSION

SOURCE MATERIAL LICENSE

Pursuant to the Atomic Energy Act of 1954, and Title 10, Code of Federal Regulations, Chapter 1, Part 40, "Licensing of Source Material," and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, possess and import the source material designated below; to use such material for the purpose(s) and at the place(s) designated below; and to deliver or transfer such material to persons authorized to receive it in accordance with the regulations in said Part. This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954 and is subject to all applicable rules, regulations, and orders of the Atomic Energy Commission, now or hereafter in effect, including Title 10, Code of Federal Regulations, Chapter 1, Part 20, "Standards for Protection Against Radiation," and to any conditions specified below.

| | | |
|-------------------------------------|--|--------------------------|
| Licensee | | 3. License No. |
| 1. Name | Westinghouse Electric Corporation Materials Manufacturing Department | 30C-509 |
| 2. Address | P.O. Box 128 Blairsville, Pennsylvania | 4. Expiration Date |
| Attention: Mr. R. D. Rowley | | December 31, 1964 |
| 6. Source Material | | 5. Docket No. |
| Uranium Metal (Reject Slags) | | 40-3558 |
| | 7. Maximum quantity of source material which licensee may possess at any one time under this license | |
| | Three hundred and sixty (360) pounds | |

CONDITIONS

8. Authorized use (Unless otherwise specified, the authorized place of use is the licensee's address stated in Item 2 above.)

For storage purposes only.

ITEM # 284
E193

Doc. off

DEC 5 1961

Date of issuance

For the U. S. ATOMIC ENERGY COMMISSION

[Signature]

40-3558

FILE FILE CODE

**APPLICATION FOR AEC LICENSE TO
TRANSFER, DELIVER, EXPORT, OR RECEIVE
URANIUM OR THORIUM SOURCE MATERIAL**

Pursuant to Code of Federal Regulations, Title 10—
Atomic Energy, Part 40—Control of Source Material

PREVIOUS AEC LICENSE NUMBER, IF ANY.

C-4971

INSTRUCTIONS

File two (2) copies of this application with the U. S. Atomic Energy Commission, 1901 Constitution Ave. NW., Washington 25, D. C. This application may be used for an original license or for the renewal of a license. In the case of a renewal, this application should be received by the Commission on or before 30 days before the expiration of the previous license. Complete blocks 1, 2, 3, 9, and if you combine two or more of the activities of Producer, Processor, Distributor, Exporter, or Consumer, complete each of the applicable blocks numbered 4 through 8.

TO: U. S. Atomic Energy Commission,
1901 Constitution Ave. NW.,
Washington 25, D. C.

1. NAME AND ADDRESS OF APPLICANT
(Street, city, zone, state)

Westinghouse Electric Corporation
Materials Manufacturing Department
P. O. Box 128
Blairsville, Pennsylvania

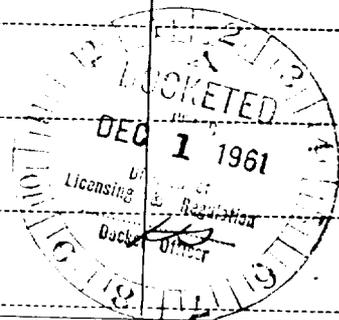
2. INVENTORY. INVENTORY OF SOURCE MATERIAL, RAW AND REFINED, AS OF November 28, 1961

(Specify date of last inventory)

INSTRUCTION.—Include all source material in your possession or under your control, regardless of location. Include any source material you have possession of but which is owned by others, whether or not they are licensees of the Commission. Please specify that part of your inventory which is owned by other persons, listing the names, addresses, and quantities owned by each. Do not include in this inventory any raw source material not yet removed from its place of deposit in nature.

(a) Raw Source Material

| DESCRIPTION OF MATERIAL | ESTIMATED PERCENT URANIUM OR THORIUM | QUANTITY IN INVENTORY (Gross tons) | NAME AND ADDRESS OF OWNER, IF DIFFERENT FROM THAT IN BLOCK 1 ABOVE |
|-------------------------|--------------------------------------|------------------------------------|--|
| DNA | | | |
| | | | |
| | | | |
| | | | |



(b) Refined Source Material

| DESCRIPTION OF MATERIAL | GRADE (Comm., CP, USP, etc.) | PERCENT OF URANIUM OR THORIUM | QUANTITY (Lb.) | NAME AND ADDRESS OF OWNER, IF DIFFERENT FROM THAT IN BLOCK 1 ABOVE |
|------------------------------|------------------------------|-------------------------------|----------------|--|
| Uranium Metal (Reject Slugs) | CP | 100.0 | 360 | Same as 1 above |
| | | | | |
| | | | | |
| | | | | |

E194
E195

ITEM # 285

5. PROCESSORS. IF YOU REQUEST AN ATOMIC ENERGY COMMISSION LICENSE TO CHEMICALLY PROCESS SOURCE MATERIAL, CHECK THIS BOX AND SUPPLY THE INFORMATION REQUESTED IN THIS BLOCK, AS WELL AS THE INFORMATION REQUESTED IN BLOCKS 1, 2, 3, AND 9

(a) THE APPLICANT CHEMICALLY PROCESSES SOURCE MATERIAL IN PLANTS LOCATED AT: *(These plants include all of the plants in which the applicant will process source material under the terms of any license issued by the Commission.)*

1.

2.

3.

4.

(b) IN THE EVENT RESIDUES AND TAILINGS ARE TO BE DISCARDED PLEASE DESCRIBE THESE RESIDUES AND TAILINGS, THE FREQUENCY OF DISCARDS, THE PROBABLE SOURCE MATERIAL CONTENT AND THE REASONS FOR NOT CONSERVING THE MATERIAL:

6. DISTRIBUTORS. IF YOU REQUEST AN ATOMIC ENERGY COMMISSION LICENSE TO RECEIVE SOURCE MATERIAL FOR RESALE ONLY, WITHOUT ANY INTERMEDIATE PROCESSING, CHECK THIS BOX AND COMPLETE BLOCKS 1, 2, 3, AND 9.

7. CONSUMERS. IF YOU REQUEST AN ATOMIC ENERGY COMMISSION LICENSE TO USE SOURCE MATERIAL IN CHEMICAL ANALYSIS OR IN THE MANUFACTURE OF, OR FOR INCORPORATION IN, ANY PRODUCT, CHECK THIS BOX AND SUPPLY THE INFORMATION REQUESTED IN THIS BLOCK AS WELL AS THE INFORMATION REQUESTED IN BLOCKS 1, 2, 3, AND 9.

| DESCRIPTION OF SOURCE MATERIAL TO BE USED | ESTIMATED ANNUAL REQUIREMENTS (Lb.) | USES INDICATE WHETHER (1) AS ANALYTICAL REAGENT, (2) FOR INCANDESCENT MAN- TLES, (3) MEDICINAL OR (4) OTHER. IN THE CASE OF OTHER USES, DESCRIBE THE PRODUCT, THE SOURCE MATERIAL CONTENT, AND THE MANNER IN WHICH THE PRODUCT WILL BE USED. |
|---|--|--|
| Uranium Metal | 360 # | Material originally purchased for R & D of fuel elements. This work has since been transferred to other corporate facilities. Material presently being retained pending disposition. |

8. EXPORTERS. IF YOU REQUEST AN ATOMIC ENERGY COMMISSION LICENSE TO EXPORT SOURCE MATERIAL, CHECK THIS BOX AND SUPPLY THE BALANCE OF THE INFORMATION REQUESTED IN THIS BLOCK AS WELL AS THE INFORMATION REQUESTED IN BLOCKS 1, 2, 3, AND 9. *(Note that approval on Form AEC-7 is required for each individual export transaction.)*

Name and address of each of your agents who for your account will prepare Department of Commerce "Shipper's Export Declaration" (Form 7525-V), will request permission to export on Form AEC-7, and will ship source material.

| NAME OF AGENT | ADDRESS |
|---------------|---------|
| | |
| | |

Materials Mfg. Dept.
Blairsville, Pa.

11-28-61

AE-1-61

44

TO: AEC

LTR.

MEMO:

REPORT:

OTHER:

(Form AEC-2)

ORIG.: X

CC: 2

OTHER:

ACTION NECESSARY

CONCURRENCE

DATE ANSWERED:

NO ACTION NECESSARY

COMMENT

BY:

CLASSIF.: U

POST OFFICE

FILE CODE:

40-3558

REG. NO:

DESCRIPTION: (Must Be Unclassified)

REFERRED TO

DATE

RECEIVED BY

DATE

AEC-2 submitted for lic to cover 360 lbs
uranium metal for research & devel't of
fuel elements

~~Business (w/oh for 12-1
Compliance)~~

ENCLOSURES:

~~XXXXXXXXXX~~

REMARKS: M R Distributions AEC PER sy.

41

U. S. ATOMIC ENERGY COMMISSION MAIL CONTROL FORM FORM AEC-3265 (8-60)

U. S. Government Printing Office: 1961 - 590590

E/95

~~XXXXXXXXXX~~

ITEM # 286

COMPLIANCE INSPECTION REPORT

| | |
|---------------------------------|-----------------------|
| 1. Name and address of licensee | 2. Date of inspection |
| 3. Type of inspection | October 15, 1961 |
| 4. 10 CFR Part(s) applicable | 20.240 - 70 |

| 5. License number(s), issue and expiration dates, scope and conditions (including amendments) | EXP. DATE | DOCKET NO. |
|---|-----------|------------|
| 10-771 (initial) | 12/31/60 | 40-3558 |
| 10-57 (reinspection) | 7/1/61 | 70-36 |

(See report details for scope and conditions)

6. Inspection findings (and items of noncompliance)

The inspection of the licensee's fuel fabrication facility of the Westinghouse Materials Plant, Blairsville, Pennsylvania, where special nuclear material had been processed, was made after all material and associated equipment had been transferred and the facility decontaminated. The inspection consisted of (1) a review of the action taken by the licensee to return the facility to a normal status (uncontaminated), (2) a review of the licensee's survey results at completion of their decontamination, (3) a review of records of transfers, and (4) a contamination survey of the facility by the inspector. Contamination of the facility was found to be insignificant. The only licensed material in the possession of the licensee was 364.5 pounds of natural uranium bars which had been in storage since December of 1960. No items of noncompliance were observed as noted by the inspector during the course of the inspection.

7. Date of last previous inspection

8. Is "Company Confidential" information contained in this report? YES NO

October 15, 1961

DISTRIBUTION

Approved by

If additional pages are required for any purpose, the information may be extended to the reverse of this form without leaving sufficient margin for binding. Identify each item by number and title. Continue on the appropriate form.

PART 40 - 70 INSPECTION

WESTINGHOUSE ELECTRIC CORPORATION
Materials Manufacturing Department
P. O. Box 128
Blairsville, Pennsylvania

Date of Inspection: October 18, 1961 (Announced)

Persons Accompanying Inspector:

Mr. G. Brown, Health Physicist, AEC, Region I, Division of Compliance
Mr. Stang, Regional Industrial Hygienist, Pennsylvania Department of Health

Persons Contacted and Titles:

Mr. R. C. Humphrey, Manager of Management and Staff Services
Mr. G. Goodrow, Accountability Representative
Mr. W. C. McKee, Safety Inspector and Radiation Safety Officer
Mr. P. Morrow, Accountability Supervisor of Atomic Fuel Department,
Cheswick, Pennsylvania

DETAILS

Background Information

9. On March 15 and 16, 1960, an inspection of the activities being conducted under License No. SNM-37 was conducted by Mr. John R. Sears of this office. The report forwarded to Inspection Headquarters under memorandum dated March 28, 1960, listed items of noncompliance with Sections 20.201 (b), "Surveys", 20.103 (b) "Concentrations in effluents to unrestricted areas", 20.305 "Treatment or disposal by incineration", and 70.24 (2) "Additional requirements", in that no evacuation drills had been conducted.
10. On January 30, 1961, the Division of Licensing and Regulation informed the licensee of the items of noncompliance with the exception of the item concerning 20.103 (b) "Concentrations in effluents to unrestricted areas".
11. The licensee, by letter of February 28, 1961, informed DL&R that the comments in their (DL&R) letter of January 30, 1961, were no longer applicable in that (1) all manufacturing activities performed under SNM-37 had been discontinued, (2) all nuclear bearing material and associated processing and handling equipment had been transferred to the Corporation's Atomic Fuel Department, located at Cheswick, Pennsylvania, (3) the current quantity of special nuclear material on hand, totalling approximately 46,311 grams of U-235, had been packaged and would be returned to a reclamation site in approximately 60 to 90 days, and (4) the areas in which special nuclear materials had been handled or processed were being decontaminated and renovated.
12. On August 21, 1961, the Division of Compliance, Headquarters, informed this office that Westinghouse Electric Corporation was not renewing their Special Nuclear Material License No. SNM-37 which covered their

fuel fabrication at Blairsville, Pennsylvania and that the license had expired on July 1, 1961. Headquarters requested, in view of the large quantity of special nuclear material that had been processed and used at the licensee's facilities during the past few years, that an appropriate inspection be made to verify that all licensed material had been disposed of in accordance with the regulations and to determine the extent of radioactive contamination, if any, to the premises and equipment.

13. On October 18, 1961, the inspection of SNM-37, as now being reported, was made as requested. Included was an inspection of the activities being conducted under the licensee's source License C-4971.

Facility Decontamination

14. The decontamination of the special nuclear material processing area (60' x 160') was described as follows:
- (1) All of the usable equipment was transferred to the Atomic Fuel Department at Cheswick, Pennsylvania, after removal of loose contamination and after wrapping in plastic. This equipment consisted of water hold up tanks, rolling mills, a press, storage racks, hoods, milling machines, furnaces, delpark filter apparatus, exhaust fans, duct work, and conduit.
 - (2) All non-usable contaminated material which was not combustible and could not be decontaminated, was shipped to Oak Ridge for burial. This material consisted of wall material, metal containers, furnace brick, hand tools, some equipment such as hood structures.
 - (3) All non-usable material which was not contaminated, as determined by direct measurements (Eberline portable scintillation meter) and smear surveys, was disposed of to the licensee's own dump. This material consisted of such items as concrete blocks (painted prior to use of the facility), sheet metal, transite, etc.
 - (4) All contaminated combustible material was incinerated as authorized by SNM-37, amended September 9, 1960. The resulting ash was shipped to Oak Ridge.
 - (5) The entire Nuclear Fuel Area was then vacuumed, beginning with the ceiling.
 - (6) The entire Area was then washed down, starting with the ceiling.
 - (7) The entire Area was then isolated by means of plastic, maintained in a wet condition and the walls removed, brick by brick.
 - (8) The final step was the decontamination of the floor which consisted of:
 - (a) Initial scrub down
 - (b) Paint removal
 - (c) Second scrub down
 - (d) Hot-spots etched with acid
 - (e) Filling of sumps with concrete
 - (f) Removal of some concrete

Licensee's Survey Results

15. A final smear survey of the floor in the Nuclear Fuel Area by the licensee (walls having been removed) revealed levels of 0 to 14 d/m/ft². Of the 75 smears taken, three were greater than 10 d/m.

Inspectors Survey Results

16. A contamination survey was made by the inspector of the area where special nuclear material had been processed, an area approximately 60 feet by 160 feet. The survey consisted of direct radiation measurements of the floor using an end window GM as well as smears. No reading could be detected (less than 0.05 μ rad/hr) with the open window positioned approximately one to two inches from the floor. The smears, which were counted by NYOO, Health and Safety Laboratory for alpha activity, revealed all floor areas to have less than 10 d/m/ft² of removable contamination with the exception of one area of 16 d/m. The maximum amount of removable contamination, 320 d/m/ft², was found on a horizontal surface above floor level in an area which had previously been a storage room. The other smears of horizontal surfaces in this storage area showed loose contamination of 150, 180, 44, and 42 d/m/ft². A sketch of the Nuclear Fuel Area, showing smear locations and results, has been included as Exhibit "A".

Transfer and Inventory Records

17. A review of the licensee's inventory and transfer record indicated that no special nuclear material was in their possession as of June 30, 1961. The licensee's "Material Status Report" showing a beginning inventory of 46,311 grams of U-235 and an ending inventory of zero on 6/30/61 has been included as Exhibit "B". A schedule of receipts and removals, showing the licensee's disposition of the 46,311 grams of U-235 plus an additional 872 grams, has been included as Exhibit "C".
18. Humphrey, Manager of Management and Staff Services, stated that an inventory was made listing all of the equipment used in the Nuclear Fuel Area, which was carefully followed to ensure that each piece shipped was received by the Atomic Fuel Department at Cheswick, Pennsylvania. He added that trucks were rented and Westinghouse personnel performed the transfer which required 20 to 30 truck loads. The transfer records for this equipment consist of L orders. A list of the L order numbers totalling 45 are included in the licensee's file.
19. The record covering the transfer of non-combustible waste to Oak Ridge was reported by Humphrey as being on AEC Shipping Form SF 101-WFP-CYT-48. This shipment required a total of 27 drums.

C-4971

20. The licensee at the time of the inspection possessed a total of 364.5 pounds of uranium in the form of metal bars. Their license authorized possession of 3,500 pounds of source material. The material, which had not been used since December of 1960 was in

C-4971

storage within a locked concrete block building located within a locked security area enclosed by an eight foot fence. This area, designated as the "Contaminated Disposal Area", is under a 24 hour security guard with only the guards possessing keys to the area and building.

21. The initial and only shipment of uranium totaling 998.1 pounds was received in 1957 from National Lead. The material was used for qualifying runs in fuel element production and some development work associated with fuel element fabrication. Records of receipt and use were available.
22. The fence around the "Contaminated Disposal Area" was posted on all four sides with the sign worded, "Caution - Radioactive Material" and showing the prescribed radiation symbol.
23. The wooden box in which the uranium metal was stored was tagged with the sign worded, "Caution - Radioactive Material", displaying the prescribed radiation symbol and showing the kind, quantity, and date of measurement of the quantity of radioactive material it contained.
24. A survey by the inspector revealed the maximum accessible dose rate, as measured 12 to 18 inches from the storage box, was 3 mr/hr.

ITEM # 888

WVX
7/21

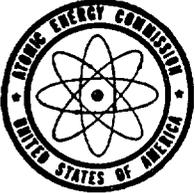
In view of the large quantity of special material
handled at this site for the past few years, it is
that a close-out inspection be made at this site to verify
licensed materials have been transferred from the site
with the regulations and to determine the extent of radiation
contamination, if any, of the packages and equipment

1961.
This location is under the jurisdiction of the
Special Material Material License No. SM-37 - Nuclear
letter dated January 20, 1961, that they will not
to have been transferred to other sites.

BRILL

Donald A. [unclear]
[unclear] [unclear] [unclear]

[unclear] [unclear] [unclear]



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON 25, D. C.

IN REPLY REFER TO:

40-3558
L&R:ND

SOURCE MATERIAL LICENSE

License No. C-4971

Dated:

Westinghouse Electric Corporation
Materials Manufacturing Department
Blairsville, Pennsylvania

Attention: Mr. George W. Goodrow

Gentlemen:

Pursuant to the Atomic Energy Act of 1954 and Section 40.21 of the Code of Federal Regulations, Title 10 - Atomic Energy, Chapter 1, Part 40 - Control of Source Material, you are hereby licensed to receive possession of and title to, at the above stated location, thirty-five hundred (3,500) pounds of source material for use in the preparation of alloys for the fabrication of fuel elements, in accordance with the procedures described in your application for special nuclear material license SNM-37.

You are further licensed to transfer and deliver possession of and title to refined source material to any person licensed by the Atomic Energy Commission, within the limits of his license.

As a condition of this license, you are required to maintain records of your inventories, receipts and transfers of refined source material.

This license is subject to all the provisions of the Atomic Energy Act of 1954 now or hereafter in effect and to all valid rules and regulations of the U. S. Atomic Energy Commission, including 10 CFR 20, "Standards For Protection Against Radiation."

Neither this license nor any right under this license shall be assigned or otherwise transferred in violation of the provisions of the Atomic Energy Act of 1954.

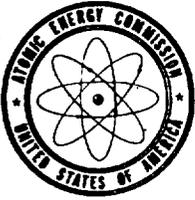
This license shall expire December 31, 1961.

FOR THE ATOMIC ENERGY COMMISSION

J. C. Delaney
Chief, Nuclear Materials Branch
Division of Licensing & Regulation

ITEM # 289

E/198
MAY 1961



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON 25, D. C.

IN REPLY REFER TO:

40-3558
BL-49

SOURCE MATERIAL LICENSE

License No. C-4971

Dated: 11/20/59

Westinghouse Electric Corporation
Materials Manufacturing Department
P. O. Box 128
Blairsville, Pennsylvania

Attention: Mr. George H. Gostrow

Gentle on:

Pursuant to the Atomic Energy Act of 1954 and Section 40.21 of the Code of Federal Regulations, Title 10 - Atomic Energy, Chapter 1, Part 40 - Control of Source Material, you are hereby licensed to receive possession of and title to, at the above stated location, thirty five hundred (3,500) pounds of source material for use in the preparation of alloys for the fabrication of fuel elements, in accordance with the procedures described in your application for special nuclear material license ~~SM-37~~.

You are further licensed to transfer and deliver possession of and title to refined source material to any person licensed by the Atomic Energy Commission, within the limits of his license.

As a condition of this license, you are required to maintain records of your inventories, receipts and transfers of refined source material.

This license is subject to all the provisions of the Atomic Energy Act of 1954 now or hereafter in effect and to all valid rules and regulations of the U. S. Atomic Energy Commission, including 10 CFR 20, "Standards For Protection Against Radiation."

Neither this license nor any right under this license shall be assigned or otherwise transferred in violation of the provisions of the Atomic Energy Act of 1954.

This license shall expire December 31, 1960.

CC: Docket Officer
Document Room
S/H
Insp. w/c appl

FOR THE ATOMIC ENERGY COMMISSION

ITEM # 290

J. C. Delaney
Chief, Nuclear Materials Section
Licensing Branch
Division of Licensing & Regulation

Dictator *W*

Approved *Jed*

E/99
4290

Rev. license C-4915 eff 11/20/59

UNITED STATES GOVERNMENT

Memorandum

TO : Eber R. Price, Assistant Director
Division of Licensing and Regulation

DATE: FEB 15 1962

FROM : Leo Dubinski, Assistant Director *LD*
for Materials
Division of Compliance

SUBJECT: WESTINGHOUSE ELECTRIC CORPORATION, BLAIRSVILLE, PENNSYLVANIA;
LICENSE NOS. SNM-37 AND C-4971

CO:RMN

We have attached a copy of a memorandum dated February 13, 1962, from Region I, Division of Compliance, together with a copy of an inspection report dated February 7, 1962, on the subject licensee.

This inspection was requested by Mr. D. A. Nussbaumer by memorandum dated August 14, 1961, (copy attached) in order to determine that all licensed material had been transferred or disposed of in accordance with the regulations and to determine the extent of radioactive contamination, if any, of the premises and equipment.

This inspection, which included License No. C-4971, revealed no items of noncompliance. Since the licensee was not issued a Form 591, we would appreciate it if you would send the licensee a letter acknowledging the fact that no items of noncompliance were noted.

We are forwarding a copy of the inspection report and transmittal memorandum to Mr. Nussbaumer.

Attachments:

1. Cpy memo fm CO:I to CO
dtd 2/13/62, w/insp.rpt.
2. Cpy memo fm L&R to CO
dtd 8/14/61

cc: D. A. Nussbaumer, L&R, w/attach. No. 1
R. W. Kirkman, CO:I, w/o

CH/DA
E/100

ITEM # 279

Leo Dubinski, Asst. Dir. for Mtls.
Division of Compliance, HQ

EB 13 1962

Robert W. Kirkman, Director
Region I, Division of Compliance

TRANSMITTAL OF LICENSE COMPLIANCE INSPECTION REPORT -
10 CFR 40 - 70

CO:I:PRM

Transmitted herewith is the following clear inspection
report:

WESTINGHOUSE ELECTRIC CORPORATION
Materials Manufacturing Department
P. O. Box 128
Blairsville, Pennsylvania

License No.: C-4971
SMM-37

It should be noted that the inspection of the activities
associated with expired License No. SMM-37 was made as
you requested. The inspection, limited in scope, veri-
fied that all licensed Special Nuclear Material processed
under this license, had been disposed of in accordance
with the regulations and that the extent of radioactive
contamination to the licensee's premises and equipment
was not significant.

Enclosure:
4 cys of Rpt.

MARCH 1962

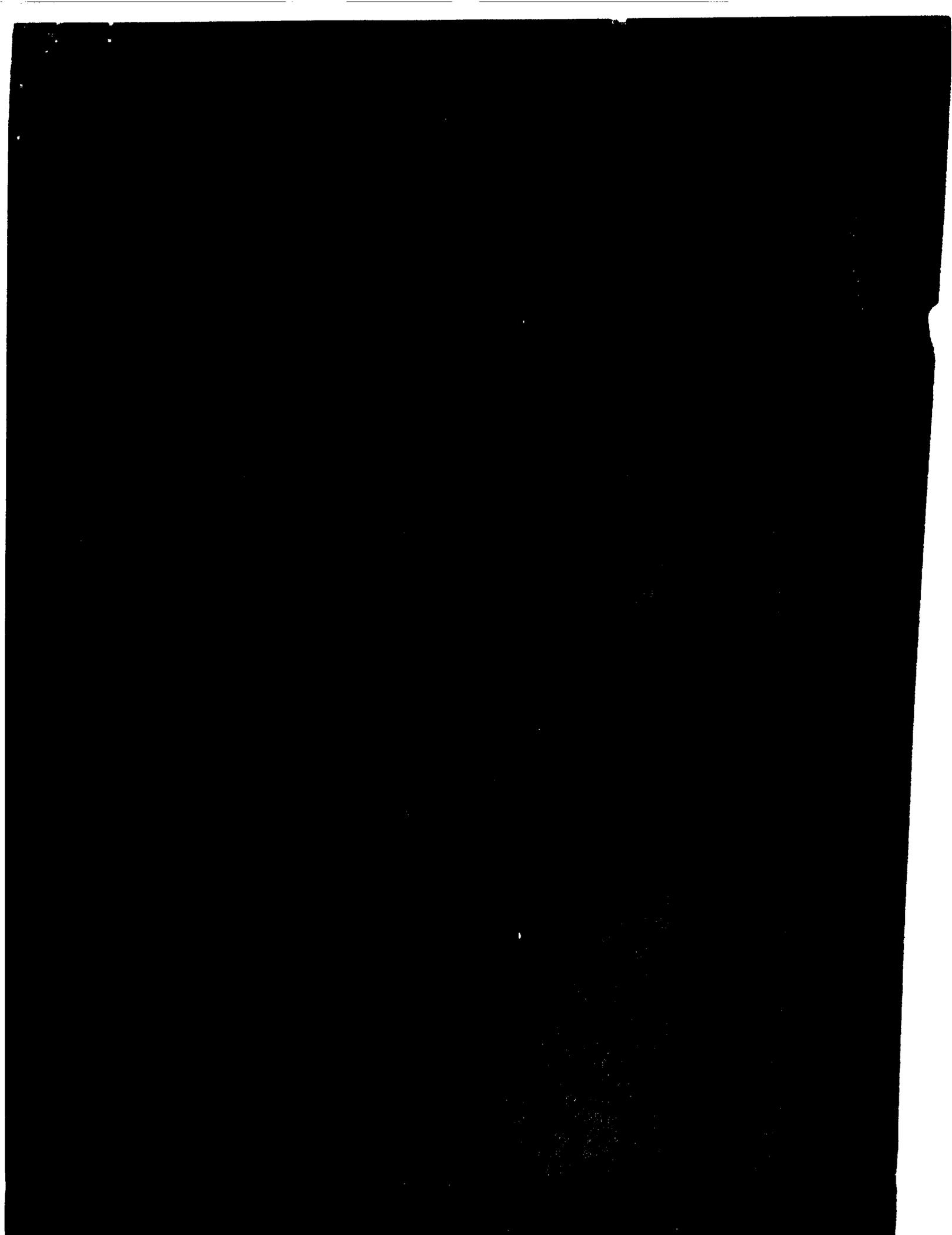
1962

15

DE

E/101
R/280

ITEM # 280



UNITED STATES ATOMIC ENERGY COMMISSION
MATERIAL STATUS REPORT

FOR SPECIAL NUCLEAR MATERIALS HELD UNDER LICENSE
PREPARE A SEPARATE REPORT FOR EACH LICENSE

| | | | |
|--|--------------------------------|--|---------------|
| 1. REPORTING LICENSEE: a. Name Westinghouse Electric Corporation b. Address Blairsville Metals Plant, Blairsville, Pa. | | c. License No. 8004-37 d. Period Ending 6-30-62 | |
| 2. MATERIAL: (Prepare separate report for each material) 725 Enriched Uranium | 3. WEIGHT UNIT Grams | 4. TOTAL QUANTITY AND ISOTOPE DATA | |
| | | a. ELEMENT | b. ISOTOPE |
| | | 49,500 | 46,311 |
| 5. BEGINNING INVENTORY: | | | |
| 6. RECEIPTS: | | | |
| From | | Shipper's License No. | |
| (W) Electric Corp., Chemung, Pa. | | 8004-37 | |
| (W) Electric Corp., Pittsburgh, Pa. | | 8004-37 | |
| Continental Engineering Corp. | | U.S. Atomic Energy | |
| | | 980 | 858 |
| | | 6 | 8 |
| | | 2 | 8 |
| | | 936 | 872 |
| 7. TOTAL RECEIPTS | | | |
| 8. PRODUCTION | | | |
| 9. MATERIAL TO BE ACCOUNTED FOR (Total of lines 5, 7, and 8). | | | |
| | | 50,520 | 47,203 |
| 10. SHIPMENTS: | | | |
| To | | Consignee's License No. | |
| EPSC, Apollo, Pennsylvania | | 8004-115 | |
| (W) Electric Corp., Chemung, Pa. | | 8004-37 | |
| | | 80,267 | 18,988 |
| | | 30,353 | 28,395 |
| | | 50,580 | 47,283 |
| 11. TOTAL SHIPMENTS | | | |
| 12. PROCESSING LOSSES, DISCARDS, ETC.: | | | |
| a. MATERIAL FOR WHICH THE REPORTING LICENSEE IS FINANCIALLY RESPONSIBLE | | | |
| b. MATERIAL FOR WHICH THE REPORTING LICENSEE IS NOT FINANCIALLY RESPONSIBLE | | | |
| 13. BURN-UP | | | |
| 14. ENDING INVENTORY | | | |
| 15. MATERIAL ACCOUNTED FOR (Total of lines 11, 12a, 12b, 13 and 14). | | | |
| | | 50580 | 47,283 |
| 16. DETAIL OF ENDING INVENTORY: | | | |
| a. MATERIAL ON HAND FOR WHICH REPORTING LICENSEE IS FINANCIALLY RESPONSIBLE TO THE AEC UNDER ABOVE LICENSE. | | | |
| b. MATERIAL ON HAND FOR WHICH SOMEONE OTHER THAN REPORTING LICENSEE IS FINANCIALLY RESPONSIBLE TO THE AEC (Detail below) | | | |
| Name | | Licensee No. | |
| | | | |
| | | | |
| c. Total of a. and b. | | | |
| 17. MATERIAL IN POSSESSION OF OTHERS FOR WHICH REPORTING LICENSEE IS FINANCIALLY RESPONSIBLE TO THE AEC UNDER ABOVE LICENSE (Detail below) | | | |
| Name | | Possessor's License No. | |
| | | | |
| | | | |
| TOTAL | | | |

EXHIBIT "B"

ITEM #

282

4222
E103

| | | | | | | | | |
|---------|---------|--------|---------------|---------|--|--|--|--|
| DATE | 3-26-62 | LR: EB | CGM: ljm: REC | ER: ljm | | | | |
| SURNAME | | | | | | | | |
| OFFICE | | | | | | | | |

SIGNED CONCURRENCE COPY IN DOCKET 40-3558

ITEM # 278
E/104

bcc: Compliance Division, HQ
Compliance Division, I
Public Document Room

Dear Mr. Price
Assistant Director
Division of Licensing
and Regulation

Very truly yours,

We appreciate the cooperation given the AEC representative.

This refers to the inspection conducted on October 18, 1961, of your activities authorized under AEC Source Material License No. C-4571 and Special Nuclear Material License No. SNM-37. No items of noncompliance have been noted as a result of this inspection.

Cordellman:

Attention: Mr. R. B. Rowley

Westinghouse Electric Corporation
Nuclear Engineering Department
P. O. Box 128
Knoxville, Tennessee

MAR 28 1962

40-3558
70-20

ITEM # 276

U. S. GOVERNMENT PRINTING OFFICE: 1964 - 725 489

| | | | | |
|--|----------------------|---|----------------------------------|--------------------|
| FROM: WESTINGHOUSE ELECTRIC CORP. BLAIRSVILLE, PA. | | DATE OF DOCUMENT: 1-11-65 | DATE RECEIVED: 1-13-65 | NO.: 133 |
| TO: D. NUSSBAUMER | | LTR. MEMO: REPORT: OTHER: "CERT. OF STATUS" | ORIG.: CC: OTHER: | |
| CLASSIF.: J | POST OFFICE REG. NO. | FILE CODE: 40-3558 | | |
| DESCRIPTION: (Must Be Unclassified) "CERT. OF STATUS" advising of Source Material License No. SUC-909. | | REFERRED TO | DATE | RECEIVED BY |
| ENCLOSURES: (3 complete copies) | | D. NUSSBAUMER | 1-13 | |
| REMARKS: MAIL ROOM DISTRIBUTION: 1 TO PIR ROOM | | 1 cy for file and file FOR ACTION | | |
| | | 1 cy to Compliance | | |

WEP
E/105

EXPERT SYSTEM LICENSE EVALUATION
REPORT FOR LICENSE C-04971

ITEM # 275

NAME OF LICENSEE: WESTINGHOUSE ELECTRIC CORP. MATERIALS MANU.DEPT.
LISTED SITE: LICENSEE'S MATERIALS MANUFACTURING DEPT. AT BLAIRSVILLE, PA.
--- TYPE OF ACTIVITY OR FACILITY: LABORATORY/RESEARCH

DESCRIPTION OF FIRST SITE AT WHICH C-04971 WAS USED
LICENSEE'S MATERIALS MANUFACTURING DEPARTMENT AT BLAIRSVILLE, PA.
THE OPERATIONS OF SNM-37 WERE ALSO AT THIS SITE, BUT THERE IS NO
INFORMATION ON THE ACTUAL AREAS OF THE FACILITY IN USE FOR C-4971.

Description of LICENSEE ACTIVITY UNDER THIS LICENSE

USE IN A RESEARCH AND DEVELOPMENT PROGRAM TO PRODUCE ALLOYS FOR USE
IN FUEL ELEMENT FABRICATION. THERE IS NO INFORMATION ON THE ACTUAL
OPERATIONS IN THIS FILE.

The final score for SITE CONTAMINATION is: 11

----- MATERIALS INFORMATION FOR THIS LICENSE -----
--Information on type and form of materials--
Material-- --Form--

SOURCE MATERIAL-N.O. Loose material

For evaluation purposes, amounts of the following materials were obtained

| ---Material-- | --Form-- | Amount | Unit | Score |
|------------------------|----------|---------|------|-------|
| SOURCE MATERIAL-N.O.S. | LOOSE | 3500.00 | LB | 9.4 |

INITIAL SITE SCORE, based on LOOSE material possession limits: 9

FINAL DECISION FOR LOOSE MATERIALS:
MODERATE PRIORITY FOR REVIEW

The final SCORE for SITE CONTAMINATION is: 11

SEQUENCE OF RECORDED REASONING

1. There was one identifiable site with this license.
2. FIRST SITE: There was insufficient information in file to determine the likelihood of release to atmosphere or to environment from activities at this site.
3. FIRST SITE: Some likelihood that building onsite could have been left with contamination. Score=score*1.0
4. FIRST SITE: There was NO verifiable decontamination of the site at closeout. Score=score*1.2
5. FIRST SITE: There is evidence in the file indicating that turnover of the materials under this license was not frequent. This

E/106
APRS

11

may be due to issuance of the license using limits applicable to a year or to the entire period of the license. Score=score*.8

6. FIRST SITE: Based on previous answers, the license as used at site is a candidate to use protective clothing, glove boxes, hoods, or a hot cell. The reviewer found no evidence that any of the above were used at this site.
7. FIRST SITE: There was possible or limited generation of contaminated material from machinery used in the operation. Score=score*1.2.
8. FIRST SITE: Possible inappropriate disposal or abandonment of contaminated material from machinery (cloths, parts, etc). Score=score*1.1
9. FIRST SITE: There was some documentation of materials disposition, but not complete. Score=score*0.9
10. FIRST SITE: Because the score for this site is below 20 at this point, a closeout survey would not necessarily have been warranted.
11. FIRST SITE: There was no closeout survey for this site. The score will not be altered, since the current score for this site is below 20
12. FIRST SITE: There was NOT an NRC FINAL INSPECTION of the facility. Score not changed.

COMMENTS FOR LICENSE EVALUATION

Description of LICENSEE ACTIVITY UNDER THIS LICENSE

USE IN A RESEARCH AND DEVELOPMENT PROGRAM TO PRODUCE ALLOYS FOR USE IN FUEL ELEMENT FABRICATION. THERE IS NO INFORMATION ON THE ACTUAL OPERATIONS IN THIS FILE.

Reviewer's comments concerning potential TURNOVER OF MATERIALS ALTHOUGH THE LICENSEE DID REQUEST 3500 LBS. OF MATERIAL (APPLICATION OF 11-11-58) FOR THE PRECEDING LICENSE C-4415, LATER APPLICATIONS DID NOT ASK FOR THIS MUCH MATERIAL. THE INSPECTION OF 10-18-61 REPORTS THAT THE INITIAL AND ONLY SHIPMENT OF URANIUM AT 998.1 LBS. WAS RECEIVED IN 1957 FROM NATIONAL LEAD.

Reviewer's comments concerning potential CONTAMINATION ALTHOUGH THE FILE IS LACKING INFORMATION ON THE ACTUAL OPERATIONS FOR THE PROGRAM, THEY DID WORK WITH LOOSE MATERIAL WHICH HAS SOME POTENTIAL TO CONTAMINATE A FACILITY. THERE IS NO EVIDENCE OF A HEALTH PHYSICS PROGRAM BEING IN EFFECT.

--- continued on next page ---

- GENERAL COMMENTS ENTERED BY THE REVIEWER CONCERNING THE EVALUATION -
-- LICENSE C-04971 WAS ISSUED ON 1-4-60 TO COVER A PROGRAM WHICH HAD
-- BEEN CONDUCTED UNDER 2 PREVIOUS LICENSES (C-4415 ISSUED ON 11-12-58 TO
-- EXPIRE ON 11-30-59 AND C-3640 ISSUED ON 1-8-57 TO EXPIRE ON 2-1-58) AT
-- WESTINGHOUSE'S BLAIRSVILLE, PA. FACILITY. THE INSPECTION OF
-- 10-18-61 (FOR THE CLOSEOUT OF SNM-37 AND A BRIEF EXAMINATION OF THE
-- ACTIVITIES CONDUCTED UNDER C-04971) REPORTS THAT USE OF THE MATERIAL
-- STOPPED IN DEC., 60, AND ONLY 364.5 LBS. OF URANIUM WAS IN STORAGE AT
-- THE FACILITY. IT APPEARS THAT SUC-509 WAS LATER ISSUED TO COVER THE
-- STORAGE OF THIS MATERIAL. THE ONLY DISPOSITION FOR THE OTHER
-- MATERIALS (WORK ON THIS PROJECT HAS BEEN TRANSFERRED TO OTHER
-- CORPORATE FACILITIES) WAS STATED IN THE 11-28-61 APPLICATION FOR
-- SUC-509, SO ONLY PARTIAL CREDIT WAS GIVEN FOR THE ACCOUNTING OF
-- MATERIALS. THE INSPECTION REPORT DOES NOT MAKE IT CLEAR IF THE
-- ACTUAL WORK AREA OF C-04971 WAS SURVEYED OR DECONTAMINATED IN THE
-- CLOSEOUT PROCEDURES OF THE SNM LICENSE. CONTAMINATION AT THIS
-- FACILITY CANNOT BE RULED OUT AND THE RECORDS SHOULD BE REVIEWED FOR
-- COMPLIANCE WITH CURRENT STANDARDS. THE DECONTAMINATION ACTIVITIES OF
-- THE SNM LICENSE INVOLVED SOME INCINERATION OF CONTAMINATED
-- MATERIALS (ASH SENT TO OAK RIDGE) AND DISPOSAL IN THE LICENSEE'S DUMP
-- OF MATERIALS NOT THOUGHT TO BE CONTAMINATED BY STANDARDS OF THAT ERA.

END OF COMMENTS FOR LICENSE EVALUATION

--- EXPERT SYSTEM EVALUATION WAS BASED ON THE ---
---- FOLLOWING INVENTORY RECORD -----

Docket Number: 40-03558 REGION RESPONSIBLE: I
LICENSEE NAME: WESTINGHOUSE ELECTRIC CORP. MATERIALS MANU. DEPT.
STREET ADDRESS: P. O. BOX 128 AT BLAIRSVILLE, PA.
FIPS state code (principal operation): PA
Site used: LICENSEE'S MATERIALS MANUFACTURING DEPT. AT BLAIRSVILLE, PA.
Disposition information present: OTHER DOCUMENT PRESENT IN FILE
Contents of other disposition information:
INSPEC. OF 10-18-61 REPORT & APPLICATION OF 11-28-61: SOME TRANSFERRED &
Matl. Transfrd to: 360 LBS. OF U METAL SLUGS TO SUC-509 & OTHERS
License to which transferred: SUC-509 & UNK
This license was listed as expired on 12/31/61
COMMENTS: FOR 3500 LBS. OF SOURCE MATERIAL TO USE IN THE PREP. OF ALLOYS
JOB NUMBER: 1700 BOX NUMBER: 11
OTHER LICENSE NUMBERS IN FILE: C-03640 ; C-04415 ; SUC-00509

Date of last evaluation or revision: 10/12/93

Reviewer: PAB

EXPERT SYSTEM LICENSE EVALUATION
 EVALUATION REPORT FOR LICENSE SUC-00509
 Licensee: WESTINGHOUSE ELECTRIC CORP. MATERIALS MANU. DEPT.
 Site of operation: LICENSEE'S MATERIALS MANUFACTURING DEPARTMENT AT BLAIRSVI

DESCRIPTION OF ACTIVITY OR FACILITY: STORAGE FACILITY ONLY

----- MATERIALS INFORMATION FOR THIS LICENSE -----
 --Information on type and form of materials--
 Material-- --Form--

| Material-- | Form-- | Amount | Unit | Score |
|---|----------------|--------|------|-------|
| NATURAL U/NORMAL U | Loose material | | | |
| For evaluation purposes, amounts of the following materials were obtained | | | | |
| --- | --- | | | |
| NATURAL U/NORMAL U | LOOSE | 360.00 | LB | 1.9 |

 INITIAL SITE SCORE, based on LOOSE material possession limits: 1.85

- License had disposition information which was adequate to disqualify the loose materials.

FINAL DECISION FOR LOOSE MATERIALS:

POTENTIAL SITE CONTAMINATION:
 ELIMINATED FROM CONSIDERATION FOR SITE CONTAMINATION
 Reason for elimination: Disposition info adequate

EXPERT SYSTEM EVALUATION WAS BASED ON THE
 INVENTORY RECORD IN JOB 1700, BOX 11

Docket 40-03558

Licensee: WESTINGHOUSE ELECTRIC CORP. MATERIALS MANU. DEPT.
 Address: P. O. BOX 128 IN BLAIRSVILLE, PA. Zip:
 State of operation: PA
 Site used: LICENSEE'S MATERIALS MANUFACTURING DEPARTMENT AT BLAIRSVILLE, PA.
 Disposition information present: CERTIFICATE
 Text of certificate of disposition:
 1-11-65:TRANS TO WESTINGHOUSE ATOMIC FUEL DEPT. AT CHESWICK, PA.
 Matl. Transfrd to: LICENSEE'S ATOMIC FUEL DEPT. AT CHESWICK, PA.
 License to which transferred: SMB-152
 This license was listed as expired on 12/31/64
 Remarks:FOR STORAGE ONLY OF 360 LBS. OF REJECT URANIUM METAL SLUGS
 JOB NUMBER: 1700 BOX NUMBER: 11

Date of last evaluation or revision: 10/12/93

Reviewer: PAB

EXPERT SYSTEM LICENSE EVALUATION
EVALUATION REPORT FOR LICENSE C-04971

Licensee: WESTINGHOUSE ELECTRIC CORP. MATERIALS MANU.DEPT.

Site of operation: LICENSEE'S MATERIALS MANUFACTURING DEPT. AT BLAIRSVILLE, PA.

The final ranking for SITE CONTAMINATION is: 11

DESCRIPTION OF ACTIVITY OR FACILITY: LABORATORY/RESEARCH

----- MATERIALS INFORMATION FOR THIS LICENSE -----

--Information on type and form of materials--

Material--

--Form--

SOURCE MATERIAL-N.O.

Loose material

For evaluation purposes, amounts of the following materials were obtained

| ---Material-- | --Form-- | Amount | Unit | Score |
|----------------------|----------|---------|------|-------|
| SOURCE MATERIAL-N.O. | LOOSE | 3500.00 | LB | 9.4 |

INITIAL SITE SCORE, based on LOOSE material possession limits: 9

DESCRIPTION OF FIRST SITE AT WHICH C-04971

WAS USED

LICENSEE'S MATERIALS MANUFACTURING DEPARTMENT AT BLAIRSVILLE, PA.
THE OPERATIONS OF SNM-37 WERE ALSO AT THIS SITE, BUT THERE IS NO
INFORMATION ON THE ACTUAL AREAS OF THE FACILITY IN USE FOR C-4971.

Description of THE LICENSEE ACTIVITY AUTHORIZED by this license

USE IN A RESEARCH AND DEVELOPMENT PROGRAM TO PRODUCE ALLOYS FOR USE
IN FUEL ELEMENT FABRICATION. THERE IS NO INFORMATION ON THE ACTUAL
OPERATIONS IN THIS FILE.

-
1. There was one identifiable site with this license.
 2. FIRST SITE: There was insufficient information in file to determine the likelihood of release to atmosphere or to environment from activities at this site.
 3. FIRST SITE: Some likelihood that building onsite could have been left with contamination. Score=score*1.0

--- continued on next page ---

Reviewer's comments concerning potential CONTAMINATION
ALTHOUGH THE FILE IS LACKING INFORMATION ON THE ACTUAL OPERATIONS FOR
THE PROGRAM, THEY DID WORK WITH LOOSE MATERIAL WHICH HAS SOME
POTENTIAL TO CONTAMINATE A FACILITY. THERE IS NO EVIDENCE OF A HEALTH
PHYSICS PROGRAM BEING IN EFFECT.

4. FIRST SITE: There was NO verifiable decontamination of the site at closeout. Score=score*1.2
 5. FIRST SITE: Nature/magnitude of operation should cause small turnover of materials Score=score*0.8
-

Reviewer's comments concerning potential TURNOVER OF MATERIALS

ALTHOUGH THE LICENSEE DID REQUEST 3500 LBS. OF MATERIAL (APPLICATION OF 11-11-58) FOR THE PRECEDING LICENSE C-4415, LATER APPLICATIONS DID NOT ASK FOR THIS MUCH MATERIAL. THE INSPECTION OF 10-18-61 REPORTS THAT THE INITIAL AND ONLY SHIPMENT OF URANIUM AT 998.1 LBS. WAS RECEIVED IN 1957 FROM NATIONAL LEAD.

6. FIRST SITE: Based on previous answers, the license as used at site is a candidate to use protective clothing, glove boxes, hoods, or a hot cell. The reviewer found no evidence that any of the above were used at this site.
7. FIRST SITE: There was limited use of contaminated waste material in the operation. Score=score*1.2.
8. FIRST SITE: Possible inappropriate disposal or abandonment of contaminated waste material. Score=score*1.1
9. FIRST SITE: There was some documentation of materials disposition, but not complete. Score=score*0.9
10. FIRST SITE: Because the score for this site is below 20 at this point, a closeout survey would not necessarily have been warranted.
11. FIRST SITE: There was no closeout survey for this site. The score will not be altered, since the current score for this site is below 20
12. FIRST SITE: There was NOT an NRC FINAL INSPECTION of the facility.

FINAL DECISION FOR LOOSE MATERIALS:
MODERATE PRIORITY FOR REVIEW

| | |
|--|----|
| The final SCORE for SITE CONTAMINATION is: | 11 |
|--|----|

Reviewer's comments concerning license C-04971

LICENSE C-04971 WAS ISSUED ON 1-4-60 TO COVER A PROGRAM WHICH HAD BEEN CONDUCTED UNDER 2 PREVIOUS LICENSES (C-4415 ISSUED ON 11-12-58 TO EXPIRE ON 11-30-59 AND C-3640 ISSUED ON 1-8-57 TO EXPIRE ON 2-1-58) AT WESTINGHOUSE'S BLAIRSVILLE, PA. FACILITY. THE INSPECTION OF 10-18-61 (FOR THE CLOSEOUT OF SNM-37 AND A BRIEF EXAMINATION OF THE ACTIVITIES CONDUCTED UNDER C-04971) REPORTS THAT USE OF THE MATERIAL STOPPED IN DEC., 60, AND ONLY 364.5 LBS. OF URANIUM WAS IN STORAGE AT THE FACILITY. IT APPEARS THAT SUC-509 WAS LATER ISSUED TO COVER THE STORAGE OF THIS MATERIAL. THE ONLY DISPOSITION FOR THE OTHER MATERIALS (WORK ON THIS PROJECT HAS BEEN TRANSFERRED TO OTHER CORPORATE FACILITIES) WAS STATED IN THE 11-28-61 APPLICATION FOR SUC-509, SO ONLY PARTIAL CREDIT WAS GIVEN FOR THE ACCOUNTING OF MATERIALS. THE INSPECTION REPORT DOES NOT MAKE IT CLEAR IF THE ACTUAL WORK AREA OF C-04971 WAS SURVEYED OR DECONTAMINATED IN THE CLOSEOUT PROCEDURES OF THE SNM LICENSE. CONTAMINATION AT THIS FACILITY CANNOT BE RULED OUT AND THE RECORDS SHOULD BE REVIEWED FOR COMPLIANCE WITH CURRENT STANDARDS. THE DECONTAMINATION ACTIVITIES OF THE SNM LICENSE INVOLVED SOME INCINERATION OF CONTAMINATED MATERIALS (ASH SENT TO OAK RIDGE) AND DISPOSAL IN THE LICENSEE'S DUMP OF MATERIALS NOT THOUGHT TO BE CONTAMINATED BY STANDARDS OF THAT ERA.

EXPERT SYSTEM EVALUATION WAS BASED ON THE
INVENTORY RECORD IN JOB 1700, BOX 11

Docket 40-03558

Licensee: WESTINGHOUSE ELECTRIC CORP. MATERIALS MANU. DEPT.

Address: P. O. BOX 128 AT BLAIRSVILLE, PA. Zip:

State of operation: PA

Disposition information present: OTHER DOCUMENT PRESENT IN FILE

Contents of other disposition information:

INSPEC. OF 10-18-61 REPORT & APPLICATION OF 11-28-61: SOME TRANSFERRED &

Matl. Transfrd to: 360 LBS. OF U METAL SLUGS TO SUC-509 & OTHERS

License to which transferred: SUC-509 & UNK

This license was listed as expired on 12/31/61

Remarks: FOR 3500 LBS. OF SOURCE MATERIAL TO USE IN THE PREP. OF ALLOYS

JOB NUMBER: 1700 BOX NUMBER: 11

Date of last evaluation or revision: 10/12/93

Reviewer: PAB

EXPERT SYSTEM LICENSE EVALUATION
EVALUATION REPORT FOR LICENSE C-04415

Licensee: WESTINGHOUSE ELECTRIC CORP. MATERIALS MANU.DEPT.
Site of operation: LICENSEE'S FACILITY AT BLAIRSVILLE, PA.

1. License is nonsuspect because it was superceded by another license

THIS LICENSE WAS ELIMINATED FROM CONSIDERATION
Reason for elimination: SUPERCEDED BY NEW LICENSE

EXPERT SYSTEM EVALUATION WAS BASED ON THE
INVENTORY RECORD IN JOB 1700, BOX 11

Docket 40-03558

Licensee: WESTINGHOUSE ELECTRIC CORP. MATERIALS MANU.DEPT.

Address: P.O. BOX 128 AT BLAIRSVILLE, PA. Zip:

This license was listed as SUPERCEDED BY ANOTHER LICENSE

Contents of the new license field C-4971 ON 1-4-60

State of operation: PA

Site used: LICENSEE'S FACILITY AT BLAIRSVILLE, PA.

Disposition information present: NO DISPOSITION INFORMATION GIVEN

Remarks:FOR 3500 LBS. OF SOURCE MATERIAL TO USE IN PREPARATION OF ALLOYS

JOB NUMBER: 1700 BOX NUMBER: 11

Date of last evaluation or revision: 10/12/93

Reviewer: PAB

EXPERT SYSTEM LICENSE EVALUATION
EVALUATION REPORT FOR LICENSE C-03640

Licensee: WESTINGHOUSE ELECTRIC CORP.

Site of operation: LICENSEE'S FACILITY AT BLAIRSVILLE, PA.

1. License is nonsuspect because it was superceded by another license

THIS LICENSE WAS ELIMINATED FROM CONSIDERATION

Reason for elimination: SUPERCEDED BY NEW LICENSE

EXPERT SYSTEM EVALUATION WAS BASED ON THE
INVENTORY RECORD IN JOB 1700, BOX 11

Docket

Licensee: WESTINGHOUSE ELECTRIC CORP.

Address: BOX 128 BLAIRSVILLE, PA.

Zip:

This license was listed as SUPERCEDED BY ANOTHER LICENSE

Contents of the new license field C-4415 ON 11-12-58

State of operation: PA

Site used: LICENSEE'S FACILITY AT BLAIRSVILLE, PA.

Disposition information present: OTHER DOCUMENT PRESENT IN FILE

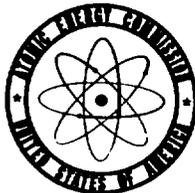
Contents of other disposition information:

LICENSEE LETTER OF 11-11-58:GIVES THE INVENTORY IN THEIR POSSESSION

Remarks:FOR 1,000 LBS. OF REFINED SOURCE MATERIAL TO USE IN PREP.OF ALLOYS
JOB NUMBER: 1700 BOX NUMBER: 11

Date of last evaluation or revision: 10/12/93

Reviewer: PAB



UNITED STATES
ATOMIC ENERGY COMMISSION

WASHINGTON, D.C. 20545

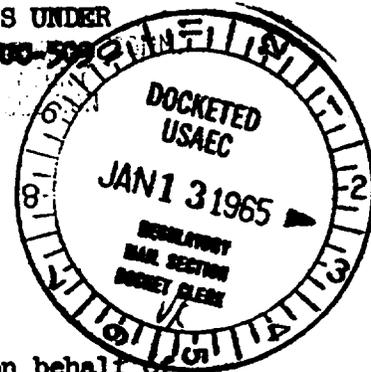
RECEIVED

IN REPLY REFER TO:

40-3558

CERTIFICATION OF STATUS OF SOURCE MATERIAL ACTIVITIES UNDER
UNITED STATES ATOMIC ENERGY COMMISSION LICENSE NO. ~~SUC-509~~

JAN 13 1965



LICENSEE: Westinghouse Electric Corporation

ADDRESS: Materials Manufacturing Division
P.O. Box 128
Blairsville, Pa.

The licensee and any individual executing this certification on behalf of the licensee certify that (check appropriate item(s) below):

 No source materials have been procured and/or possessed by licensee.

All source materials procured and/or possessed by licensee under source material license No. SUC-509

 x (1) have been or will be, prior to expiration of the above license, transferred to Westinghouse Atomic Fuel Dept. - Cheswick, Pa.
(Institution, firm, hospital, person, etc.)

 which has source material license No. SMB-152

 (2) have been or will be disposed of in compliance with 10 CFR 20 prior to expiration of this license.

 (3) will be possessed under the general license of Section 40.22, 10 CFR 40.

 (4) Other

P. E. Dupler / *P E Dupler*

Certifying Official

Security Officer

Date: January 11, 1965

Please return three copies to:
U. S. Atomic Energy Commission
Division of Materials Licensing
Washington 25, D. C.

ACKNOWLEDGED

| | | |
|---|---|---------------------------------------|
| TELEPHONE CONVERSATION RECORD | Date: 12/20/94 | Time: 2:30 |
| Mail Control No.: none | License No.: SNM-37 (Retired) | Docket No.: 070-00026 |
| Person Called: Larry Smith (Initially tried to reach Joe Nardi or Jim Flannigan) | Organization: Westinghouse Electric Corp. | Telephone Number: 412 256-3111 |
| Person Calling: Mark Roberts | | |
| Subject: Health & Safety/Remediation Plan for the Westinghouse Blairsville facility | | |
| <p>Summary: At the SDMP conference in Rockville, MD on 11/29/94, Mr. Nardi informed me that Westinghouse intended to initiate a limited remediation effort at their Blairsville, PA Specialty Metals Plant during a scheduled plant shutdown over the Christmas/New Year holiday period. The license for the facility was terminated in the early 1960s, but subsequent surveys identified residual contamination in a few areas. Their original plan was to complete the characterization of the entire facility prior to initiating remediation; however, the plant shutdown allowed for a remediation opportunity in an occupied area of the plant.</p> <p>On December 13, 1994, I visited the plant to view the areas where remediation was to take place and to see the remainder of the facility. During this site visit, Mr. Nardi and his staff described the characterization that had been completed to date and discussed the upcoming remediation effort. Based on my observations and a limited review of survey data, I concluded that an adequate characterization was in progress and the planned remediation, as described, would adequately protect workers and meet the intents of the NRC's regulations in 10 CFR 19 and 20. I requested that Westinghouse submit a description of their remediation plans and health and safety plan for review by Region I. Westinghouse submitted a plan that was received in Region I on 12/19/91. (next page)</p> | | |
| Action Required/Taken: Confirm by review that the response to the questions are adequate. | | |
| Signature: <i>Mark Roberts</i> | Date: 12/21/94 <i>OK [Signature]</i> | |

12/21/94

ITEM # 274

GLADY
E/107

WESTINGHOUSE BLAIRSVILLE, PA (Cont.)

I reviewed the above referenced plan and had the following comments.

1. The guidelines for decommissioning are not specifically mentioned. The guidelines may be provided in a Westinghouse procedure that has been incorporated by reference. Westinghouse must confirm what decommissioning guidelines, that are acceptable to the NRC, will be used.
2. Section 11 of the Health and Safety Plan discusses records and reports that will be generated and retained. Confirm that records of radiological surveys of the remediated areas will be retained for eventual inspection by the NRC.
3. Section 10 of the Health and Safety Plan discusses the discharge of potentially contaminated water from the facility. Confirm that the release of water will meet applicable portions of 10 CFR 20. This information may also be included in a Westinghouse procedure that is incorporated by reference. If so, confirm what procedure includes this information.

Since both Mr. Nardi and his associate Jim Flannigan were out, I spoke with the lead health physics technician for the project, Larry Smith, who was also present during my site visit. I discussed these items with Mr. Smith. Mr. Smith understood my comments and was to contact Mr. Nardi and Mr. Flannigan for answers.

| | | |
|---|--------------------------------------|--|
| TELEPHONE CONVERSATION RECORD | Date: 1/4/95 | Time: 12:45 |
| Mail Control No.: None | License No.: SNM-37 | Docket No.: 070-00026 |
| Person Called: Mark Roberts | Organization: Westinghouse | Telephone Number: 412 374-4652 |
| Person Calling: Joseph Nardi | | |
| Subject: Results of limited remediation conducted at Westinghouse Blairsville, PA | | |
| <p>Summary: Mr. Nardi provided a summary of the results of the remediation conducted 12/23/94 through 1/1/95. The high priority task, removal of the sump in the gauge laboratory was completed; however, the job took significantly longer than planned due to the conditions found. The sump was much deeper than anticipated and the flyash fill had hardened and was difficult to remove. At the bottom of the sump pit, organic solvent (TCE) contamination was found resulting in the collection of 23 drums of what is likely to be mixed waste. This material has not been moved to the Forest Hills facility as originally planned due to the presence of the TCE. Westinghouse is developing a plan to deal with this material. I confirmed with Mr. Nardi that it should not remain at Blairsville. Measurements of the soil surrounding the excavated sump pit did not reveal any radiological or hazardous material contamination in the soil. Five lines (three were expected) led to/from the sump and all showed some level of radiological contamination. Each line was capped to prevent soil contamination and the sump was filled. A second smaller sump was also found to contain radiological contamination, but was not yet removed. Approximately 75% of the floor area to be remediated was completed. Final surveys and resurfacing were completed since the area had to be returned to use following the holiday break. Mr. Nardi stated he would document the results.</p> | | |
| Action Required/Taken: Maintain surveillance of project. | | |
| Signature: <i>Mark Roberts</i> | Date: 1/5/95 | <i>1/1/95</i> |

ITEM # 273

E1108
MBRB



Westinghouse
Electric Corporation

Energy Systems

Box 355
Pittsburgh Pennsylvania 15230-0355
RA 94-035 AJN

December 28, 1994

Mr. Mark C. Roberts, CHP
Senior Health Physicist
U.S. Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406

Dear Mr. Roberts:

Attached is a revised copy of the "Health and Safety Plan" for the Westinghouse Blairsville Site. The revisions incorporate editorial corrections along with the incorporation of the comments you transmitted by telephone to Larry Smith.

Sincerely,

A. J. Nardi, Supervisory Engineer
Regulatory Affairs

dh

Attachment

E/109
AMM

ITEM # 271



RA 94-034 AJN

**Westinghouse
Electric Corporation**

Energy Systems

Box 355
Pittsburgh Pennsylvania 15230-0355

December 16, 1994

Mr. Mark C. Roberts, CHP
Senior Health Physicist
U.S. Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406

Dear Mr. Roberts:

As per our discussion during your visit of December 13, 1994, the attached Health and Safety Plan is being submitted that will cover work effort to begin December 23, 1994, and conclude January 1, 1995.

Sincerely,


A. J. Nardi, Supervisory Engineer
Regulatory Affairs

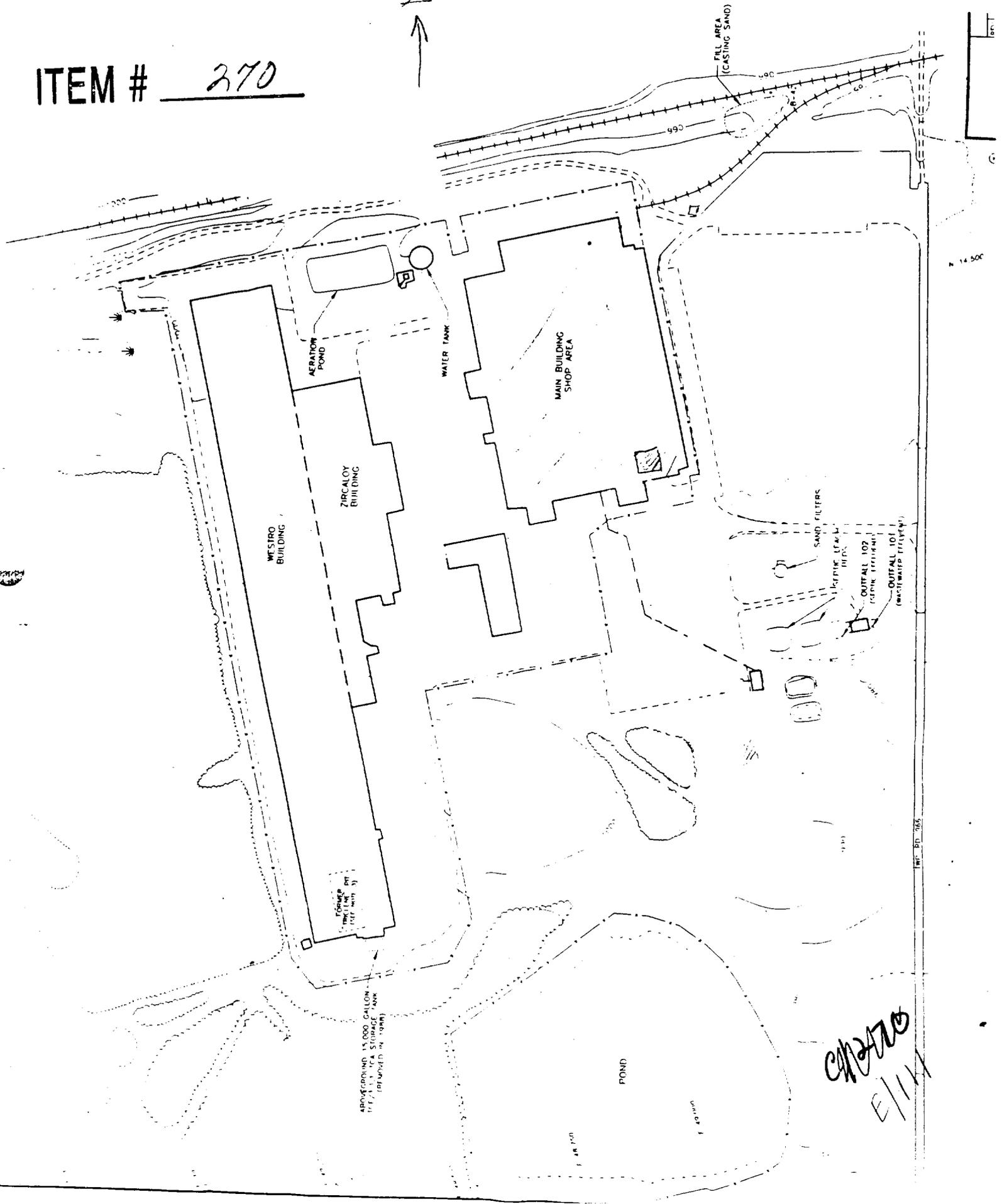
dh

Attachment

E/110
9/27/92

ITEM # 272

ITEM # 270



CHARTER
ELI

ORNL SITES - SUMMARY

License No.: C-04971 ORNL Score: 11
Docket No.: None 040-03558
Licensee: Westinghouse Electric Corporation Review Status: Complete
Site Address(es): Blairsville, Pennsylvania
Site Contact: A. Joseph Nardi, Manager - License Administration
Westinghouse Electric Corporation
Pittsburgh, Pennsylvania
Telephone No.: 412-374-4652
SDMP Site: no
Related License(s): SNM-37
NRC Reviewer: Mark C. Roberts
Review Abstract: The facilities and site identified in this license are common to those of AEC License SNM-37. Separate follow-up actions for this site are not necessary since the follow-up actions identified for License SNM-37 will address these common areas. Further action by the ORNL terminated Sites program is not necessary. File material has been provided to the site Project Manager.
Recommendations: None.

Summary: The license authorized the possession of 3,500 pounds of uranium. Inventory records indicate that one shipment of 1,000 pounds of uranium was received. The material was used for development work associated with fuel element production. The facilities and site covered by License No. C-04971 are common to those of License No. SNM-37.

Radiological characterization of the facility is currently underway at the site and will include surface contamination measurements and sampling and analysis of surface soils. Westinghouse will submit characterization data and remediation plans for the site to Region I for review. Since follow-up actions are underway for this site for SNM-37 license, no further action by the ORNL Sites program is necessary. All file material has been provided to the site Project Manager for reference.

A copy of this summary has been placed in the file.

Reviewed by: Mark Roberts Date 10-20-94

Handwritten notes: 012069 E/112

Approved by: Joe D. K... Date 10-20-94

ITEM # 269

ORNL SITES - SUMMARY

License No.: SNM-37 ORNL Score: 1179
Docket No.: 070-00026
Licensee: Westinghouse Electric Corporation Review Status: File Reviewed
Site Address(es): Blairsville, Pennsylvania
Site Contact: A. Joseph Nardi, Manager - License Administration
Westinghouse Electric Corporation
Pittsburgh, Pennsylvania
Telephone No.: 412-374-4652
SDMP Site: no
Related License(s): C-04971
NRC Reviewer: Mark C. Roberts
Review Abstract: Westinghouse conducted research and development on low-enriched uranium fuel at this site. A preliminary survey of the site covered by License No. SNM-37 has been performed by Westinghouse representatives. These survey results indicate that there are a very few locations where the non-removable contamination levels exceed current NRC guidelines for release for unrestricted use. Westinghouse will submit characterization data and remediation plans for the site to Region I for review.
Recommendations: Review characterization information and remediation plans when submitted by Westinghouse.

Summary: Westinghouse conducted research and development on low-enriched uranium fuel at this site. A preliminary survey of the site covered by License No. SNM-37 has been performed by Westinghouse representatives. These survey results indicate that there are a very few locations where the non-removable contamination levels exceed current NRC guidelines for release for unrestricted use. Approximately 20 areas with a total area of 200 m² (2,000 ft²) were identified with a maximum contamination level of 50,000 dpm/100 cm². Region I has discussed the status of the site with representatives from Westinghouse in a February 22, 1994 meeting. Radiological characterization of the facility is currently underway at the site and will include surface contamination measurements and sampling and analysis of surface soils. Westinghouse will submit characterization data and remediation plans for the site to Region I for review.

Handwritten note: OK John 10-20-94

Handwritten notes: E/1/13 and a signature

Reviewed by: _____ Date _____

Approved by: _____ Date _____

ITEM # 268

| | | |
|---|--|--|
| TELEPHONE CONVERSATION RECORD | Date: 12/20/94 | Time: 2:30 |
| Mail Control No.: none | License No.: SNM-37 (Retired) | Docket No.: 070-00026 |
| Person Called: Larry Smith (Initially tried to reach Joe Nardi or Jim Flannigan) | Organization: Westinghouse Electric Corp. | Telephone Number: 412 256-3111 |
| Person Calling: Mark Roberts | | |
| Subject: Health & Safety/Remediation Plan for the Westinghouse Blairsville facility | | |
| <p>Summary: At the SDMP conference in Rockville, MD on 11/29/94, Mr. Nardi informed me that Westinghouse intended to initiate a limited remediation effort at their Blairsville, PA Specialty Metals Plant during a scheduled plant shutdown over the Christmas/New Year holiday period. The license for the facility was terminated in the early 1960s, but subsequent surveys identified residual contamination in a few areas. Their original plan was to complete the characterization of the entire facility prior to initiating remediation; however, the plant shutdown allowed for a remediation opportunity in an occupied area of the plant.</p> <p>On December 13, 1994, I visited the plant to view the areas where remediation was to take place and to see the remainder of the facility. During this site visit, Mr. Nardi and his staff described the characterization that had been completed to date and discussed the upcoming remediation effort. Based on my observations and a limited review of survey data, I concluded that an adequate characterization was in progress and the planned remediation, as described, would adequately protect workers and meet the intents of the NRC's regulations in 10 CFR 19 and 20. I requested that Westinghouse submit a description of their remediation plans and health and safety plan for review by Region I. Westinghouse submitted a plan that was received in Region I on 12/19/91. (next page)</p> | | |
| Action Required/Taken: | | |
| Signature: | Date: | |

AP/2/94 E/1/14

ITEM # 267



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

*File Westinghouse
Blairsville*

FEB - 8 1995

License Nos. SNM-37 (Retired)
SUC-509 (Retired)

Docket Nos. 070-00026
040-03558

A. Joseph Nardi
Westinghouse Electric Corporation
Energy Center East 268
PO Box 355
Pittsburgh, PA 15230

SUBJECT: NRC REGION I COMBINED INSPECTION NOS. 070-00026/94-001 AND
040-03558/94-001

Dear Mr. Nardi:

As you are aware, the Nuclear Regulatory Commission (NRC) has been reviewing records to ensure that facilities, where activities were authorized by Atomic Energy Commission (AEC) and NRC licenses that have been terminated, are suitable for release for unrestricted use in accordance with current NRC guidelines. The review by ORNL identified License Nos. SNM-37 and SUC-509 as files describing a site that requires additional review. These licenses authorized activities with licensed materials at your Blairsville, Pennsylvania facility. Based on our inquiries, you and your staff began to investigate and characterize the facility.

On December 13, 1994, Mark Roberts of this office conducted an inspection at the Westinghouse Specialty Metals Plant in Blairsville Pennsylvania to examine characterization and remediation activities in progress and planned at the facility. A copy of the inspection report is enclosed with this letter. The findings of this inspection were discussed with William Whitehead, J. Wayne George, James Flanigan and you at the conclusion of the inspection. No violations or safety concerns were identified.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosed report will be placed in the Public Document Room. We will also provide a copy to the Commonwealth of Pennsylvania, Department of Environmental Resources.

RECEIVED

FEB 13 1995

RADIATION PROTECTION

*FE/115
ARBY*

ITEM # 264

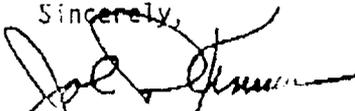


Mr. A. J. Nardi

2

No reply to this letter is required. Your cooperation with us is appreciated. If you have any questions, please contact Mark Roberts at (610) 337-5252 or me at (610) 337-5252.

Sincerely,



John D. Kinneman, Chief
Site Decommissioning Section
Division of Radiation Safety
and Safeguards

License Nos. SNM 37 (Retired)
SUC-509 (Retired)

Docket Nos. 070-00026
040-03557

Enclosure: NRC Region I Combined Inspection Report Nos. 070-00026/01-001 and
040-03557/04-001

cc w/encl:

James Musko, Radiatic Health Physicist
Commonwealth of Pennsylvania
Department of Environmental Resources
Bureau of Radiation Protection
400 Waterfront Drive
Pittsburgh, Pennsylvania 15222-4745

guidelines for release for unrestricted use. Additional characterization measurements are in progress inside the site buildings and in suspect areas on the surrounding property. Outside suspect areas include the site of a former waste processing building, approximately 200 meters south of the main building; a construction material dump east of the main building and an area east of the main building filled with casting sand. A map of the facility is shown in Attachment 1. Westinghouse planned to complete the characterization measurements prior to initiating the remediation phase of the project. However, due to a planned shutdown of the facility at the end of December 1994 into early January 1995, remediation of a normally occupied area on the south end of the building was planned.

3.0 Organization and Staffing

The facility manufactures zirconium alloy tubing, but handles no radioactive material. The Plant Manager directs all manufacturing operations, but his staff is not directly involved in the decommissioning efforts. The Manager, Environmental Affairs reports to the Plant Manager and is the liaison to the decommissioning staff. Decommissioning activities are performed by the environmental group, the corporate office and by contractors. The project is coordinated by the Supervising Engineer who has significant decommissioning experience in similar projects at other Westinghouse facilities. This individual is supported by a health physics engineer, a health physics technical supervisor and several health physics technicians.

Characterization surveys within the facility are being conducted by the Westinghouse health physics staff. An environmental contractor is performing an evaluation for radioactive and hazardous materials contamination outside the buildings. Included in this evaluation is surface and sub-surface soil sampling and the placement of monitoring wells. Soil and water samples are being analyzed for both radiological and non-radiological hazardous parameters. Radiological analyses are being performed at the Westinghouse facility in Pitz Mills, Pennsylvania. The contractor expects to submit a report by the middle of 1995 documenting the results of the sampling and analysis.

A second contractor supplies workers who are scheduled to perform the remediation work. Most of these individuals on this contractor's staff have had previous decommissioning experience at the Westinghouse sites in Large and Forest Hill, Pennsylvania.

No safety concerns were identified.

4.0 Training of Workers

Although there is no current NRC license for the Blair Mill facility, Westinghouse has committed to provide training to all workers in accordance with 10 CFR 17.12. The contractor individuals are to be trained by the Health Physics Supervisor prior to beginning work at the site. A handbook provided to the workers gives information on limits, contamination and exposure control, monitoring instruments and protective clothing. The Westinghouse representative will provide

training will be similar to that provided for the contractors at the Westinghouse Large and Forest Hills sites. The inspector has previously reviewed the training handout for the decommissioning work in progress at the Forest Hills site and determined that the handout appears to address the more important radiological safety aspects of the remediation project. The health physics staff has also met with the plant workers to keep them informed of the status and safety issues of the project.

No safety concerns were identified.

5.0 Characterization and Remediation Activities

In December 1993 characterization and remediation activities were conducted in a few locations at the south end of the main building. A portion of a contaminated sump in the gauge laboratory and numerous anchor bolts in the floor were removed. Characterization measurements conducted during 1994 confirmed additional non-removable contamination remains in the gauge laboratory sump and in a second sump in the manufacturing area, also at the south end of the main building. Blueprints identify five buried pipes that open to the gauge laboratory sump. Contamination is suspected in these buried lines since during licensed activities, contaminated effluents entered the sump and were then directed to two 2,000-gallon above-ground hold-up tanks outside the south end of the main building. Based on discussions with Westinghouse representatives, waste water in the hold-up tanks was sampled and analyzed in order to properly direct the effluent. Effluents with a sufficiently low concentration of licensed material were released directly to a stream that lead to the Conemaugh River. Effluents with too high of a concentration of licensed material for direct release were sent from the above ground tanks, through underground lines, to the waste processing building. Evaporators and an incinerator were used in this building to reduce the waste volume. Waste from these processes was collected in drums for off-site disposal at authorized facilities. The two hold-up tanks and the waste processing building were removed at some time in the past; however, the piping between the two locations remains.

The environmental contractor has collected a number of surface and subsurface soil samples in a systematic grid pattern where the waste processing building had been located. Surface and subsurface samples have also been collected in selected locations in the stream and surface run-off areas leading to the Conemaugh River, in the dump area, and in the casting sand area. Preliminary information indicates that the elevated exposure rates measured in the casting sand disposal area, in excess of the natural background rates, result from the presence of naturally occurring radioactive material in the casting sand, and not from operations with licensed material. Additional characterization measurements within the buildings will be conducted following completion of the scheduled remediation work. Westinghouse has also examined historical aerial photographs to determine if the soil in the vicinity of the facility has been disturbed. An area where the soil had been disturbed could indicate a location of possible undocumented burial of licensed material. Areas where soil disturbances were noted are then

Serial NO. 70-26
File by

WESTINGHOUSE ELECTRIC CORPORATION



Blairsville, Pa.

April 25, 1956

United States Atomic Energy Commission
Division of Licensing
Washington 25, D. C.

APPLICATION FOR LICENSE TO RECEIVE, RETAIN, PROCESS AND
TRANSMIT NATURAL URANIUM, ENRICHED URANIUM, AND THEIR OXIDES

APPENDIX II

Criticality Report

In the determination of standards for use in criticality control we have used the following reference material:

- 1- "Classified Nuclear Safety Report" by J. D. McLinden and T. W. Morfitt.
- 2- Critical Masses of Fissionable Materials as Basic Criticality Data (Report LA 1958).
- 3- "The Reactor Handbook" (Vol. 3) Classified.
- 4- AEC Research & Dev. Report K 1019 Part 3.
- 5- Principles of Nuclear Reactor Engineering by Samuel Glasstone.
- 6- The Elements of Nuclear Reactor Theory by S. Glasstone and M. C. Edlund.

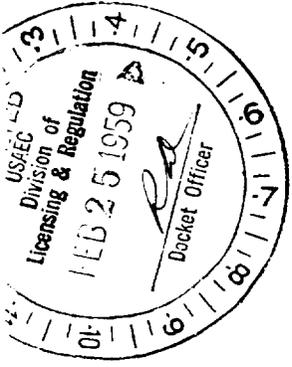


Plate Type Fuel Element Section

The following applies to fabricated fuel elements such as the plate type fuel elements used in the naval-type reactor as spelled out in the original application for a license.

In order to maintain control of the amount of fissionable material that is out of the safety storage vault and to keep it precisely located, the following rules will apply:

ITEM # 386

- 1- The manufacturing area of the fuel element section will be broken into work stations designated by the type of work done therein (such as furnace station, forging station, machining station, etc.). The area enclosed by these stations will be

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marked off by a chain or wire fence, paint lines, and numbers on the floor, with communication lanes to each station.

- 2- There will be one man and one man only (called the Courier) who will be authorized to move fissionable material either to or from the storage vault and work stations or between work stations. There will be one marked off spot in each station where the Courier will deposit the carrier of the fissionable material. This Courier will move old material from a station before bringing new material into the station if necessary to stay below limits set by the criticality specialist. The Courier will turn on a red light to indicate fissionable material in the area. All material in a station will be kept in the one designated spot within the station unless actually being worked on.
- 3- When work is to be done on the fissionable material it will be removed from the carrier for only that time necessary to complete the immediate operation being performed. Upon completion of the operation, the material will be returned to the carrier for temporary storage in the work station or for removal to the next station or storage vault.
- 4- The criticality specialist will give to the Courier or post in each Work Station cards indicating the maximum weight or number of pieces of a particular size or description to be allowed in each work station. These will vary with changes in the type of material or order passing through the station. The Project Engineer will be responsible for maintaining the limit or less of fissionable material in each Work Station.
- 5- Upon completion of fuel elements, the finished product will be returned to the vault for the present time for storage until sufficient quantities are obtained for shipment to the customer. The shipment will be by Courier using a specially designed crate to maintain proper spacing of the finished elements. At some future date an area will be allocated for storage of the finished fuel elements before shipping.
- 6- Materials of good moderation and reflection properties (example, water, beryllium graphite) will not be stored in areas where uranium is stored or processed. Positive separation of different assay material will be maintained by the Courier.

Our main storage vault consists of a steel rack containing 3-5/8" x 6" pigeon holes on 12" and 18" centers respectively. These pigeonholes are covered with cadmium plate with the space between them filled

with magnetite cement. Enclosed you will find a blueprint of the storage vault. For the time being we intend to hold both raw material and finished product in this vault.

In our proposed storage area of finished product, the fissionable material will be so placed that there will be a minimum of two feet between centers of stored elements whose effective diameter is equal to or less than eight inches, and more than two feet between edges of elements with larger effective diameter. (Effective diameter is a function of the interaction between elements and depends on the cross sectional area, the length of the element and spacing between elements. It will have to be computed for each type of stored elements. As a general rule, elements whose cross sectional area is equal to or less than 44 square inches have, with a spacing of 24 inches between centers, an effective diameter of eight inches or less regardless of their length.)

Water pipes and sewers will not pass through or near the vault and will not be contained within the walls, ceiling, or floor.

Ventilation will be provided with fire closures.

Floor elevation will be above outside grade.

Fire protection using means other than water or steam will be provided.

Provision will be made for positive ejection or elimination of water in the event it enters accidentally.

We are including as an enclosure a table (1) which lists the work stations and the functions performed in each in their chronological order. This example table includes among others the container necessary at each operation, the form the material will be in and the limit of material allowed at each station. The criticality specialist will create such tables as needed for production requirements.

Oxide Fuel Element Section

The following applies to pellet type fuel as typified by the manufacture of enriched uranium oxide pellets for use in the Belgium Thermal Reactor Project. Other pellet type operations will be handled in essentially the manner set forth in this example. However, this will not supersede or in any way supplant any requests as set forth in the original application.

Blairsville will engage in the manufacture of uranium oxide ceramic pellets. The uranium dioxide enriched between 4 & 5 per cent will be manufactured in St. Louis by Mallinckrodt Chemical Works from uranium hexafluoride received from the Atomic Energy Commission. The details of this process are spelled out in Mallinckrodt's application for a license, but we can report that the dioxide will be processed in 14 pound batches. Fourteen pounds of UO_2 in the enrichment range of 4% to 5% is an "always safe mass", that is to

(1) "CRITICALITY TABLE by Work Sequence" for Plate Type Fuel Element Section.

say criticality cannot be attained with this amount of UO_2 even under the most favorable conditions of water moderation and reflection. In fact, experiments at ORNL have demonstrated that the minimum critical mass at 5% enrichment is 6.7 times this "always safe mass" or 95 pounds of UO_2 .

The oxide will be received from the processor packaged in bottles, each containing a maximum of 14 pounds of UO_2 . Representatives of Westinghouse Commercial Atomic Power Activity, Forest Hills, Penna., will sample, procure analytical data to verify the composition, and release for manufacture. A maximum of 90 bottles (grossing 1260 pounds of UO_2) will be received by Westinghouse in a single shipment. As received, the individual containers will be arranged in "bird cages" (angle-iron frame structures) in an "always safe geometry", that is to say, criticality cannot be attained even though the entire shipment might be flooded with water.

The uranium dioxide will conform to the following specifications:

Physical form - green powder, unground, approximately 99% retained on #325 Standard Tyler Screen.

Chemical composition - 99 + % uranium dioxide (dry basis); oxygen to uranium ratio shall be 2.0 - 2.05.

Batches shall be identified sufficiently to allow follow of batch identity throughout the manufacturing operation.

At the Blairsville Metals Plant, Oxide Fuel Element Section, the individual containers of 14 pounds of UO_2 each will be stored in a vault in a cell-like structure or "honeycomb" in a geometry which is always inherently safe - even in the event of flooding of the entire vault. Storage will be provided for a maximum of 400 containers or a gross quantity of UO_2 of 5600 pounds.

Where operations involve the use of water, the enriched fuel will be processed in the always-safe batch size of fourteen pounds of UO_2 . A maximum of six 14 pound batches will be in work at any one time in a given process section. The factory set-up will be made inherently safe by selecting equipment which, by virtue of its geometry, will give complete protection against criticality. No equipment will have a drum, hopper, tank or other vessel which can contain a liquid and which has dimensions equal to or greater than those of the always-safe equivalent sphere, infinite cylinder or infinite slab as determined by actual criticality measurements at the ORNL for solutions of 5% enriched uranium with optimum water reflection. If this requirement cannot be met in a particular piece of equipment, suitable baffles of neutron-absorbing material will

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CRITICALITY TABLE

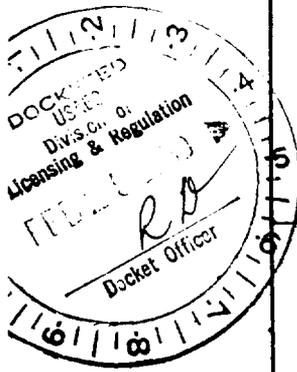
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Work Sequence

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| Process and Work Station | Type of Operation | Container | Class | Mat'l Form | Comments |
|------------------------------|---------------------|---|--|-----------------------------------|--|
| I Storage | Storage | Less than 10 cu. inch glass bottles | Always safe | Enriched (90%) U in Pellet form | Bottles stored in vault with max. of four bottles in each compartment. |
| II Ingot Production | Charge preparation | Cylindrical charge tube 1 3/4" I.D. x 33 1/2" | Always safe | Enriched U Pellets and Zr Pellets | Charge tube loaded in increments with 500 g. of U-235 per increment. Max. of 1000 g. U-235 per charge tube. Work station limit: 4kg U-235. |
| | Melting | Arc Melting Furnace with 2 1/2", 4", or 6" dia. mold. | 2 1/2" - always safe. 4" always safe. 6" dia.-limited. | Melt blended U and Zr pellets | Four operating furnaces on 6 ft centers. Maximum charge 1000 g. per furnace. No limit to height of 2 1/2" or 4" dia. ingot. 6" dia. ingot to be less than 17" high. |
| | Furnace Residue | Bulk metal of less than 200 cu. in. | Always safe | Alloyed U and Zr | May stay in area until 200 cu. inch or area limit of 4 kg. is reached then returned to vault. |
| III Forge and Roll (1st run) | Forging and Rolling | 2 1/2", 4", or 6" dia. billet. | 2 1/2" dia - always safe. 4" dia - always safe. 6" dia - limited safe. | Alloyed U and Zr | Max. of 2 Kg of U-235 in ingot form in forge and roll work station. Each ingot to be kept separated by 2 inches. Billet or strip cross-section to be maintained below always safe parameter of 5" dia. or 4.4" square. |



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|-------------------------------|---|--|--|-----------------------------------|---|
| IV Pickle, Level and Shear | Pickling | 1' x 1' x 6' tank containing H ₂ O, 30% Nitric, 5% HF | Mass build up controlled | Rolled strip 27" x 2.812" x .043" | Max. concentration of U-235 in pickle solution will be 10 g. per gallon. Max. of 1 Kg. U-235 in strips in entire area IV. Billet and strip cross-sectional area to be maintained below 5" dia. and 4.4" square. |
| | Weigh dried fuel alloy strip | | | | Max. of 1 Kg. U-235 in strips in area IV. Cross-section will be maintained under 4.4" square. |
| | Shear and chop hot rolled strip. | Aluminum cylindrical containers less than 5" dia. | Always safe | Chopped 1/4" alloy cubes | Max. of 1 Kg U-235 in strips in area IV. Cross-section of cylindrical container will be maintained under always safe 5" dia. |
| II Ingot Production (2nd run) | Magnetic separation of chopped strip | Aluminum cylindrical containers less than 5" dia. | Always safe | Chopped 1/4" alloy cubes | Max. work station limit of 4 Kg. |
| | Charge preparation, melting, and furnace re-siding. | Same as | Ingot Production (1st Run) | | |
| V Ingot Conditioning | Weld Conditioning | 2 1/2", 4" or 6" dia. ingot. | 2 1/2" - always safe. 4" always safe. 6" - limited safe. | Alloyed U and Zr | Each ingot to be separated by 2" when side by side. No limit on end to end. |

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|--------------------------------------|--------------|--|-----------------------|--|---|
| III Forge and Roll (2nd run) | | Same as Forge and Roll (1st Run) | | | |
| IV Pickle, Level and Shear (2nd run) | | Same as Pickle, Level, and Shear (1st Run) | | | |
| III Rolling | Cold Rolling | | Mass build-up Control | | Strip cross-section tube maintained within always safe parameter of 5" dia. or 4.4" square. |

All other areas such as machining, assembly, reclaiming will have a maximum of 1 Kg. U-235 in each area.

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WESTINGHOUSE ELECTRIC CORPORATION



Blairsville, Pa.

September 6, 1956

70-26

File by

*Declassified (K. C. Cooper)
per the 3-15-60
P. A. Rigo*

United States Atomic Energy Commission
Division of Licensing
Washington 25, D. C.

This document consists of 44
pages and 10 tables.
See

APPLICATION FOR LICENSE TO RECEIVE, RETAIN, PROCESS AND TRANSMIT NATURAL URANIUM, ENRICHED URANIUM, AND THEIR OXIDES

APPENDIX III

Criticality Control

Reference is hereby made to a letter dated August 23, 1956 from Mr. Lyle Johnson, Chief, Licensing Branch, Division of Civilian Application. This letter requested certain additional specific information as to Blairsville's provisions for the avoidance of accidental criticality with fully enriched Uranium 235. We were requested to supply additional information as follows:

1. Provide a detailed description of geometrically safe equipment such as tanks, hoppers, drums, etc.

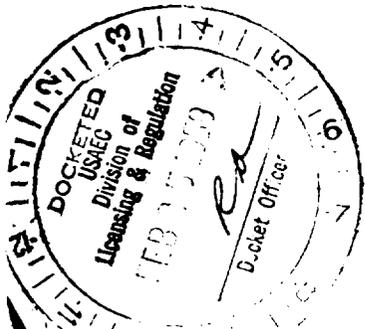
Under this we can split the area into two sections: (A) the Fuel Element Section and (B) the Pellet Grinding Section.

(A) Under Fuel Element we have:

- (1) Aluminum charge buckets
These buckets are a 5 in. dia., 5 in. high bucket in which the alloy charge is brought to the charge tube. Up to this time the pure U235 is handled in the storage bottles which are maintained at less than 10 cu. in. The U235 container is kept at the center of a 24" diameter "birdcage" when out of the vault.
- (2) Charge tubes
These tubes are 1-1/2 in. dia. by 2 ft. or 4 ft. long and are normally stored on a rack on 12 in. centers.

- (3) Ingot molds
The molds that we are concerned with here are the 2-1/2 in. dia., 4 in. dia. and 6 in. dia. molds with the length measuring from 20-24 in. However it must be understood that the 6 in. dia. ingot has to be less than 17 in. high. This size has never been reached or probably never will be reached due to the size of the charge (approximately 320 lbs.) necessary to melt into the 6 in. ingot.

ITEM # 382



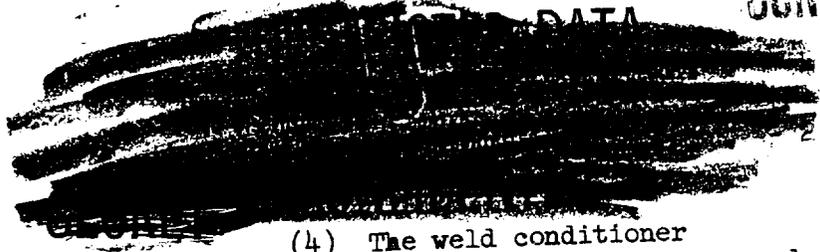
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(4) The weld conditioner
Examining the carriage used in the weld conditioner, it would seem that it would take a maximum of a 6 in. dia. ingot 13-1/2 in. long. This again falls within the criticality specification of 6 in. dia. less than 17 in. long.

(5) The carrier
This is a three shelf buggy approximately 20 in. wide, 38 in. long, 3 shelves high with the shelves on 15 in. centers. By limiting the loading of the carrier to the top and bottom shelves and on either end it would be possible to maintain the 12 in. spacing required for the material and the work station. This is done by the insertion of wooden frames into the shelves that allow only a certain configuration and spacing of the material.

(B) In the Pellet Grinding Section there will be--

(1) The original container
A 6 in. dia. polyethylene bottle.

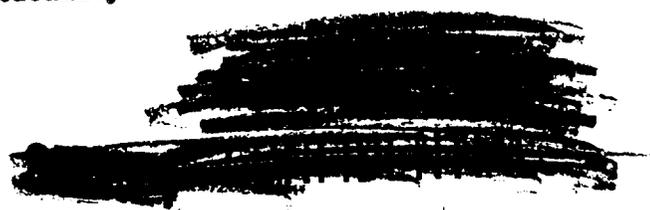
(2) The blender container
This is a mixing bowl 10 in. in dia. and 9 in. high with a hemisphere on one end.

(3) The grinder hopper
This container could not hold water due to the screen in the bottom. It is shaped like a trough 16-1/2 in. wide, 14 in. long, 9 in. deep, to a 5-1/2 in. dia. half-cylinder wire screen that forms the bottom.

(4) The feed hopper to the pellet forming machine
This hopper is approximately 11 in. long, 3-1/2 in. wide, 1-5/8 in. deep. The pellets as they are formed tumble out into a 6 in. square 2-1/2 in. high container. From this point on all the finished pellets are handled on trays. The only piece of equipment now in the Pellet Grinding Area which is not geometrically safe would be the container for the recirculating fluid for the grinder. This water will be circulated through a filter which will remove the uranium oxide with the water-based coolant being returned to the grinder. The tank through which the coolant passes after flowing through the filter is approximately 3 ft. by 7 ft. by 14 in. Present plans call for the bottom to be sliced up by a cadmium egg crate arrangement.

2. Describe in detail the avoidance of external criticality in the pickle tank and how double-batching is avoided.

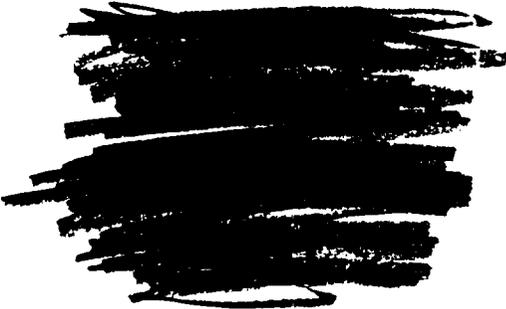
There are five factors that together and individually can help maintain the acid below the criticality level.



- (A) There is a large inherent safety factor in the 10 gram per gallon limit. This is approximately 1/3 as large as the allowable limit according to Bettis criticality personnel.
- (B) If the entire pickling area limit of U235 were put into a bath when the bath was at the maximum of 10 gram per gallon, it would still be safe.
- (C) There will be a daily analysis of the pickle liquors at the end of each working day, more often if thought necessary.
- (D) There will be a running weight kept of all material pickled off. This will be kept by the operator and by the courier. If the load limit, 10 grams per gallon, is approached, the acids will be changed by the operator.
- (E) We will schedule changing of the acids periodically based on the calculated amount of removal, this in turn may be based on an experience factor or average over a period of time.

Double-batching as referred to in the letter is understood to mean the arrival of two batches into one area at the same time. This is covered under the responsibilities of the courier and of the project or area engineer with regard to keeping criticality limits within each work station as described in our Criticality Report, Appendix II, to our license application dated April 23, 1956.

3. The third item of interest was to check the value of 200 cu. in. as an always safe mass. This refers to the limit of 200 cu. in. set forth as the allowable limit of furnace residue. The furnace residue will have a maximum of enrichment in any anticipated work of 6.6% of 93% material. This is equal to 61.9 kilograms of uranium. Due to the alloy effect of the zirconium, 200 cu. in. would be equivalent to 3.8 kilograms of U235. This is within the area limit of 4 kilograms. Our present controls call for the material to be weighed in and out of each work station by the courier with the courier and project engineer jointly responsible for maintaining levels in any work station. Thus the total amount of U235 in any one work station would be apparent to both the courier and the project engineer since a running inventory of the U235 will be maintained for each work station. This is covered by the procedure we have set down for the courier in that he will allow only so much material per station.
4. Define the term "always safe" as regards mass, geometry and concentration. The way we have used "always safe" in our criticality table has been identical to the way it has been used in their letter, using one variable parameter and all the rest unlimited. However, there is one instance in which we use the term limited safe. This concerns the 6 in. ingot where due to the diameter being over the "always safe" dimension the mass as determined by length becomes the limiting factor.



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We feel that the above information should satisfy your requirements as outlined in your letter of August 23. However, if any additional information is required, or if a personal meeting between Blairsville people and Licensing Branch people might expedite this license, kindly notify us and we will comply in any way you require.

W. M. Trigg

W. M. TRIGG, MANAGER
MATERIALS MANUFACTURING DEPARTMENT
BLAIRSVILLE METALS PLANT

Sworn to and subscribed before me
this 10th day of Sept 1956

Anthony F. Strahan

Notary Public, Derry Twp., Westmoreland Co.
MY COMMISSION EXPIRES MARCH 10, 1959

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W & C. (R)*