

NOV 5 1987

IMUF:WSP
40-7102
SMB-743

Shieldalloy Corporation
ATTN: Mr. Michael R. Morgenstern
Environmental Manager
West Boulevard
Newfield, New Jersey 08344

Gentlemen:

The staff has reviewed your renewal application dated June 19, 1985, and determined that additional information is needed to proceed with the renewal process. Enclosed are the staff's comments and questions regarding your application as well as additional environmental questions. Within 90 days of the date of this letter, please submit your response (six copies) as a revision to the entire application or as a supplement. The requested information should be appropriately indicated as being license conditions or descriptive information. Enclosed is a draft copy of "Guide for the Preparation of License Renewal Applications for Processors of Source Material for Elements other than Uranium or Thorium" which should assist you in your response.

If you should have further questions or problems in meeting the scheduled submittal date, please do not hesitate to call me at (301) 427-4510.

Sincerely,

Original Signed By:

W. Scott Pennington
Uranium Fuel Section
Fuel Cycle Safety Branch
Division of Industrial and Medical
Nuclear Safety, NMSS

Enclosures: As stated

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Docket 40-7102
IMUF R/F
WSPennington
LFriedman, RI

PDR
IMSB R/F
Region I

NMSS R/F
VLTharpe
MLHorn

OFC:IMUF	:IMUF	:IMUF	:IMUF	:
NAME:WSPennington:ht:VLTharpe	:MLHorn	:JJSyft	:	:
DATE:11/5/87	:11/5/87	:11/5/87	:11/6/87	:

OFFICIAL RECORD COPY

COMMENTS AND QUESTIONS RE SHIELDALLOY CORPORATION RENEWAL APPLICATION
FOR LICENSE NO. SMB-743

1. Clearly describe the positions of your organization and their reporting channels.
2. State the minimum qualification requirements for positions (e.g., RSO, Safety Review Committee Members, Department 111 Supervisor) responsible for the radiation safety program. Also, include the names and resumes of individuals filling these positions to demonstrate their qualifications.
3. Who is responsible for the selection of personnel for safety-related positions?
4. State the locations that are routinely inspected by the SRC Chairman and RSO during the monthly plant inspections.
5. Describe the type of radiation survey which is performed quarterly. Provide current survey data by location.
6. State commitment to ensure that exposures will be maintained ALARA. Describe implementation of ALARA policy.
7. Who reviews the findings of the SRC monthly plant inspections?
8. When are new permanent and temporary employees scheduled for radiation safety training?
9. Describe the material covered in the initial radiation safety training and retraining for radiation and non-radiation workers.
10. Describe methods employed to assess each individuals understanding of training material.
11. State commitment to conduct activities involving licensed materials with written procedures. Describe review and approval process of these procedures. State frequency of procedure reviews to determine adequacy and include positions of those performing reviews.
12. Describe audit and inspection program to determine if operations are being conducted in accordance with written procedures and regulations. (Audits are formal examinations of records to verify that operations are being conducted in accordance with established criteria. Inspections are reviews of operations to verify that activities are conducted according to approved procedures.)

13. Who is responsible for performing audits and inspections, documentation of findings, and taking corrective actions for deficiencies? Who receives copies of audit and inspection reports?
14. State the types of records generated and their retention periods.
15. What is the minimum air velocity allowed at the blending hood face and at what frequency is it checked? What corrective measures are taken if the velocity drops below the minimum?
16. Confirm that your respiratory protection program complies with 10 CFR 20. Describe the types of respirators utilized, protection factors for each, and locations of required use.
17. Indicate all ore storage locations and their postings.
18. What are the highest measured radiation levels at 18 inches from the fence surrounding the slag piles and from the exterior of Warehouse "D"?
19. What are the highest measured radiation levels at 18 inches from the ferro-columbium slag piles, ferrovandium slag piles, and dust collector residues?
20. Are you requesting an exemption from 10 CFR 20.203(c)(2) to validate the posting of signs stating "Any Area Within This Plant May Contain Radioactive Materials"?
21. Describe provisions to assure compliance with 10 CFR 20.203(f)(3)(vi).
22. Radiation survey instruments should be calibrated in accordance with ANSI N323-1978.
23. What is leak tested on the Victoreen Radgun Survey Meter?
24. Update the requested possession limits to correctly reflect the quantities of uranium and thorium present in the slag and ore storage areas, processing areas, and anticipated additional inventories.
25. Clearly define those locations in Department III where air samples are collected and state air concentration action levels. Provide air sampling data by location.
26. Describe your bioassay program including criteria for initiation, technique used, and frequency, as well as interpretation of results, action levels, and actions to be taken.
27. Describe your program for surface contamination control including frequency of contamination surveys, removable and fixed contamination action levels, corrective actions, and time interval allowed before commencing decontamination.

28. Describe measures taken to eliminate or reduce radon-progeny concentrations in poorly ventilated source material storage areas. Provide current measurement data by location.
29. Update personnel exposure data.
30. Has Shieldalloy determined the respirable fraction of suspended particles in Department 111 and the percentages of thorium and uranium including progeny in that fraction? If yes, state fraction and percentages.
31. Describe posting on dust collector baghouse, if appropriate.
32. The RSO should establish a checklist and frequency for verification of current postings.
33. Clearly state air sampling frequency and confirm that records of sampling locations are retained.
34. Describe procedure to ensure film badges are worn by workers in Department 111, Warehouse "D", as well as the ore and slag storage areas.
35. Confirm compliance with appropriate sections of 10 CFR 20.407.
36. Describe procedure to verify adequate air flow at openings to the Department 111 building.
37. With regard to operations at the Newfield, New Jersey site other than Department 111, identify any fire, explosion, or toxic chemical hazards that could possibly pose a threat to the safety of operations with licensed material.

ADDITIONAL ENVIRONMENTAL QUESTIONS RE
SHIELDALLOY CORPORATION RENEWAL

1. Provide the distance and direction of nearby residents within a 1 mile radius (i.e., 300 m SW of D111, 200 m W of slag area). The figure provided did not identify either homes or the plant; provide direction indication; or provide a scale for determining distance.
2. Provide the basis for stating only 1 percent of the charge goes to the dust collector. Also, provide the basis for stating all dust generated goes to the dust collector and not to the room atmosphere.
3. Only one baghouse efficiency was provided. Was this value for the old or new baghouse or for the system as a whole?
4. What happens to the non-contact cooling water? Has it ever been analyzed for radioactive components? If yes, provide the results. What is cooled with the water?
5. What are the expansion plans for the next 5 years? What are the additional estimated emissions from the facility due to expansion?
6. Explain the discrepancy between the results of the two leach tests presented in Appendix D. The ASTM results (leach - 55,430 pCi/l) seem to challenge your position that the slags are insoluble, and therefore, runoff would not be a problem.
7. What is the final disposition of the solids from basins 6 and 7?