MA.13-2

OTS NOTE

DATE: April 24, 1991

TO: Alexander Williams

FROM: Dan Stout DS

SUBJECT: American Potash and Chemical Company Elimination Recommendation

The attached memorandum and supporting documents are the basis for our recommendation to eliminate the former American Potash and Chemical Company site from further consideration under FUSRAP. The site is located in West Hanover, Massachusetts.

Documents discovered to date indicating use or handling of radioactive material by American Potash consist of a National Lead Company of Ohio (NLO) internal memorandum which discusses tests American Potash performed for Union Carbide Nuclear Corporation (Oak Ridge), an Atomic Energy Commission (AEC) prime contractor. The site predecessor, National Fireworks Ordnance Corporation, possessed a permit in 1955 for access to classified AEC material; however, there is no evidence that radioactive materials were processed by National Fireworks.

The NLO memorandum indicates that American Potash conducted uranium metal shaping and uranium-magnesium explosive forming studies for Union Carbide. The quantity of material used during the tests is unknown. Based upon the description of operations in the NLO memorandum, test quantities were involved. Union Carbide was responsible for accountability, and it is reasonable to assume that the material was removed from the site by Union Carbide in accordance with AEC accountability procedures in place at the time.

In view of the limited quantity of radioactive material involved, the potential for residual radioactive contamination in excess of current DOE guidelines is considered remote. Therefore, we recommend that this site be eliminated from further consideration as a candidate for remedial action under FUSRAP and be removed from the FUSRAP considered sites list.

cc: C. Young
E. Mitchell
file FUSRAP MA.13

MEMORANDUM

TO: FILE DATE 4/23/91

FROM: D. Stout

SUBJECT: Elimination Recommendation For American Potash

SITE NAME: American Potash & Chemical Co. ALTERNATE NAME: National Northern Divisio

CITY: West Hanover STATE: MA

OWNER(S)
Past: American Potash Current: Unknown
Owner contacted ☐ yes ☒ no; if yes, date contacted _____

TYPE OF OPERATION
☒ Research & Development
- ☐ Production scale testing
- ☐ Pilot Scale
- ☒ Bench Scale Process
- ☐ Theoretical Studies
- ☐ Sample & Analysis

☐ Production
☐ Disposal/Storage

☒ Facility Type
- ☒ Manufacturing
- ☐ University
- ☐ Research Organization
- ☐ Government Sponsored Facility
- ☐ Other _____

TYPE OF CONTRACT
- ☐ Prime
- ☒ Subcontractor
- ☒ Purchase Order

☒ Other information (i.e., cost + fixed fee, unit price, time & material, etc) Research contract from Union Carbide, Oak Ridge

Contract/Purchase Order # _____

CONTRACTING PERIOD: 1961

OWNERSHIP:

	AEC/MED OWNED	AEC/MED LEASED	GOVT OWNED	GOVT LEASED	CONTRACTOR OWNED	CONTRACTOR LEASED
LANDS	☐	☐	☐	☐	☒	☐
BUILDINGS	☐	☐	☐	☐	☒	☐
EQUIPMENT	☐	☐	☐	☐	☐	☐
ORE OR RAW MATL	☒	☐	☐	☐	☐	☐
FINAL PRODUCT	☒	☐	☐	☐	☐	☐
WASTE & RESIDUE	☒	☐	☐	☐	☐	☐

AEC/MED INVOLVEMENT AT SITE

Control
- ☐ AEC/MED managed operations
- ☒ AEC/MED responsible for accountability
- ☐ AEC/MED overviewed operations
- ☐ Contractor had total control
- ☐ unknown

☒ Health Physics Protection
- ☐ Little or None
- ☒ AEC/MED responsibility
- ☐ Contractor responsibility

(Union Carbide supplied Health Physics consultant)

MATERIALS HANDLED:

Type (on basis of records reviewed)

- ☐ No Radioactive
- ☒ Natural Radioactive from Feed Materials Production
  - ☐ Ore
  - ☒ Refined Source Material
  - ☐ Residue
- ☐ Natural Radioactive Material from Non-Nuclear Activities
- ☐ Man-Made
- ☐ Other _____

Comment Uranium metal and green and sintered uranium-base powders

Quantities (on the basis of records reviewed)

- ☐ None
- ☐ Production Quantities
- ☒ Small Amounts

Comment Record discusses laboratory studies and small diameter die forming.

OTHER PERTINENT FACTS:

☒ Facility was Licensed (Access Permit)
- ☐ During AEC/MED-Related Operations
- ☐ For Similar Activities
- ☒ For Other Activities

Comment The National Northern Technical Division of the National Fireworks Ordnance Corp., West Hanover, held an access permit in 1955.

☐ Commercial Production Involving Radioactive Material during AEC/MED Operations

☐ Facility was Decontaminated and Released

☒ Availability of Close Out Records

☒ None ☐ Some ☐ Sufficient

☐ Radioactive Status:

	YES	MAYBE	PROBABLY NOT	NOT
Contaminated	___	___	X	___
Potential for Exposure (accessible)	___	___	X	___

QUANTITY OF RECORDS AVAILABLE:

☒ Very Little ☐ Some ☐ Sufficient

PROBABILITY OF FINDING ADDITIONAL RECORDS:

☒ Low ☐ Possible ☐ High

RECOMMENDATIONS:

☒ Eliminate
☐ Consider for Remedial Action
☐ Collect More Data

Comment Based on small quantities of material handled, radioactive contamination is unlikely.

REFERENCES: - NLO Internal Memorandum from H. Davis to C. Polson of May 1, 1961

- AEC List of Access Permit Holders, Dec 23, 1953

SUMMARY American Potash conducted explosive forming studies for Union Carbide in Oak Ridge. National Lead of Ohio (NLO) expressed interest in the research, but there is no indication of a subsequent contract to American Potash from NLO. Studies for Union Carbide appear to be small scale research activities with little potential for contamination.