

**memorandum**

DATE: AUG 01 1990

REPLY TO  
ATTN OF: EM-421SUBJECT: Authorization for Remedial Action at the Former Baker and Williams  
Warehouses on West 20th Street in New York, New York, under FUSRAP

TO: L. Price, OR

The site of the former Baker and Williams Warehouses, currently owned by Ralph Ferrara, Inc., located on West 20th Street in New York City (Manhattan), is designated for inclusion in the Formerly Utilized Sites Remedial Action Project (FUSRAP). This designation is based on the results of a radiological survey and other supplemental information provided in the Designation Summary (Attachment 1). The site consists of three adjacent warehouses. Historical information indicates that the site was used during the early 1940s by the Manhattan Engineer District for short-term storage of approximately 219,000 pounds of uranium concentrates. One of the three warehouses, at 521-527 West 20th Street, was found to contain residual radioactive contamination in excess of DOE guidelines on floors and lower walls in the east bay of the basement and on the floor of the west bay of the first floor.

Based on our analysis of site conditions, this site would normally have a low priority. The survey study concluded that all contamination was fixed and that radiation exposure levels were within the DOE guideline values. Therefore, there is currently no significant risk to workers or members of the public from the residual radioactive contamination in the facility. However, the owner is planning extensive renovation of the buildings in the future. This will include smoothing of the floor in the areas with contamination. Such actions could result in individuals receiving doses approaching the dose limits. It could significantly spread the contamination which is presently restricted to two limited areas of this rather large warehouse building. Therefore, in consideration of the planned renovation work, the site has been assigned a medium priority under the FUSRAP protocol.

Because the limited contamination is contained entirely inside the warehouse building, we recommend that cleanup of the site follow the proposed expedited procedure for remedial action at small sites, as described in Attachment 2. Consistent with this procedure, Headquarters will take the lead on the preparation of the necessary environmental compliance documentation. We will work closely with the designation contractor (ORAU), the building owner, and you to assure that remedial action is conducted in an efficient manner. Your staff will be responsible for managing the remedial action effort.

bcc:  
Weston

EM-40 (3)  
EM-42 reader  
Williams reader

EM-421:AWilliams:1b:353-5439:7/24/90:Baker1.aw

*AKL*  
EM-421  
Williams  
7/26/90

EM-42  
Fibre  
7/27/90

EM-42  
Fulmer  
7/30/90

Attachment 1  
Summary Report for Designation of Baker and Williams Warehouses Site

FORMERLY UTILIZED SITES  
REMEDIAL ACTION PROGRAM

SUMMARY REPORT  
FOR DESIGNATION OF  
THE BAKER AND WILLIAMS COMPANY WAREHOUSES SITE

Draft

July, 1990

U.S. Department of Energy  
Office of Environmental Restoration

SUMMARY REPORT FOR DESIGNATION  
OF THE BAKER AND WILLIAMS COMPANY WAREHOUSES SITE

CONTENTS

	<u>Page</u>
INTRODUCTION . . . . .	1
BACKGROUND	
Site Function . . . . .	1
Site Description. . . . .	1
Owner History . . . . .	2
Radiological History and Status . . . . .	2
Authority Review. . . . .	3
DESIGNATION DETERMINATION. . . . .	5
REFERENCES . . . . .	6

## INTRODUCTION

The Department of Energy (DOE), Office of Environmental Restoration, has reviewed the past activities of the Manhattan Engineer District (MED) at the Baker and Williams Warehouses, 513-519, 521-527, and 529-535 West 20th Street, New York (Manhattan), New York and has completed a preliminary survey of the site. DOE has determined that residual radioactive material in certain areas of the site exceed current DOE radiological guidelines for release of facilities to the general public without radiological restrictions. The survey concluded that there is no significant risk to workers or the general public from residual contamination in the facility. Based on a review of the available historical information and the results of the survey, the DOE has concluded that this site be designated into the Formerly Utilized Sites Remedial Action Program (FUSRAP) under a medium priority. The remainder of the report summarizes the site information and the designation decision.

## BACKGROUND

### Site Function

The Baker and Williams warehouses were used by the MED, predecessor of DOE, in the early 1940s to store uranium concentrates produced in Port Hope, Canada, from African ores. The material was received in New York City at Pier 38 and shipped to the site by truck (USDOE, 1989a).

In correspondence dated November 30, 1942, (African Metals Corp., 1942b), African Metals Corporation notified Major Crenshaw of MED of their delivery to the Baker and Williams Company warehouse of approximately 106 tons of orange and yellow sodium uranate under contract no. W-7405-Eng-18. A receipt by Baker and Williams Company to MED indicated that 702 cartons were stored in the facility, for MED. Another document (AEC, 1978) indicates that the warehouse was the destination for purchases of approximately 43 tons of orange and yellow sodium uranate, 11 tons of sodium uranyl carbonate, and 10 tons of black uranium oxide in 1943 from African Metals under contract no. W-7405-Eng-47. Additional materials were available under option.

Shipments were likely delivered to the receiving office located in Building 529-535. However, shipments may have been received and unloaded at either of the adjacent warehouse buildings. Adjoining doorways between Building 521-527 and 529-535 allow easy access between the two buildings, and are currently used for that purpose. Because the uranium concentrates were stored for a short period of time before distribution, it is considered probable that only Buildings 521-527 and 529-535 would have been used. Thus the site visit concentrated only on these two buildings (Cotten, 1990).

### Site Description

The warehouses are located on the west side of central New York City in the Borough of Manhattan. Baker and Williams Company owned three adjacent warehouse buildings at 513-519, 521-527, and 529-535 West 20th Street. The latter two buildings are of interest. The warehouses handled general merchandise.

Each of the two buildings of interest has approximately 9,200 square feet per floor of storage area. The main office space for each building is located on the first floor, as well as loading docks. Truck bays are located in Building 529-535, off of West 20th Street. Building 521-527 consists of nine floors and a basement, while Building 529-535 has eleven floors and a basement. Each building is constructed of fire proof materials, such as steel, concrete, terra-cotta and brick (Cotten, 1990). Elevators service both buildings. Fire protection was provided by automatic sprinklers.

In Building 521-527, the floors, except for the basement are coated with sealant and painted. The north and south walls are re-surfaced with plaster and painted. In Building 529-535, the wall surfaces are covered with a variety of materials, including paint, stucco, plaster, and a black foam material. Most of the wall surfaces on the upper seven floors are not re-surfaced, leaving terra-cotta and masonry brick exposed (Cotten, 1990).

### Owner History

The warehouses were owned by Baker and Williams Company of 126 Leroy Street, New York City, NY, during the time they were used by the DOE predecessor agency. The current owner is Ralph Ferrara, Inc., a LCM-FSW Partnership. Ralph Ferrara Inc. owns and operates the buildings as a warehouse facility. The one warehouse at 513-519, which was determined not to have been used by MED, is leased to Globe Moving and Storage Company (Cotten, 1990). The ownership history between Baker and Williams Company and the current owner has not been obtained.

### Radiological History and Status

From the historical records (AEC; African Metals Corp., 1942a,b; Baker and Williams, 1942), at least 170 tons of uranium ore materials passed through the Baker and Williams Warehouse. The materials were evidently stored for a short period of time until shipment to MED facilities. Based on an initial review of the limited records available, a determination was made that the potential for radioactive material present at the site as a result of the storage activities was low. However, there was not adequate information to verify the site conditions at the termination of MED/AEC use. A preliminary survey was scheduled to determine if additional investigations were warranted under FUSRAP, or if the site could be eliminated from consideration (USDOE, 1989b).

The DOE obtained consent from the property owner and a radiological survey was conducted on August 24-30, 1989 by the Oak Ridge Associated Universities on the warehouses at 521-527 and 529-535 West 20th Street (Cotten, 1990). The radiological survey consisted of surface scans on the floors and lower walls (up to approximately 6 feet) to identify areas with elevated gamma or beta-gamma direct radiation. Direct measurements for total and removable alpha and beta-gamma activity were performed at randomly selected locations. Ten representative locations were selected for exposure rate measurements. Several samples of paint/sealant and construction materials were collected for

analysis. Surveys were conducted in all accessible locations.

The results of the survey indicated that residual contamination exists above DOE guideline levels (DOE, 1987) in the warehouse at 521-527 West 20th Street in two areas. In addition to the other areas of this warehouse, the other warehouse surveyed did not have areas exceeding DOE guidelines. The contamination is largely fixed on floor and lower wall areas in the east bay of the basement and on the floor in the west bay of the first floor.

In the warehouse at 521-527 West 20th Street, the total activity levels ranged from <27 to 400 dpm/100 cm<sup>2</sup> for alpha and from <350 to 100,000 dpm/100 cm<sup>2</sup> for beta-gamma. The residual contamination was detected in the basement on the floor, on the west wall about 6 feet above the floor, and on the top surface of several foundation supports. The maximum total beta-gamma level, 100,000 dpm/100 cm<sup>2</sup>, was detected on the floor in the basement which compares to the DOE uranium guideline of 5,000 dpm/100 cm<sup>2</sup> averaged over 1 square meter with a maximum of 15,000 dpm/100 cm<sup>2</sup> in any 100 cm<sup>2</sup> area. Significant elevated activity levels were found on nearly 85 percent of the floor space in the west bay of the first floor. Removable activity levels of <3 to 34 dpm/100 cm<sup>2</sup> for alpha and <6 to 99 dpm/100 cm<sup>2</sup> for beta-gamma were well below DOE guidelines, which for uranium are (1000 dpm/100 cm<sup>2</sup>).

Analysis of paint and sealant samples confirmed that uranium is the primary contaminant in the areas with elevated gamma activity. In the two samples taken, the U-238 concentration was 3,000 pCi/gm, while the U-235 concentration was 115 and 130 pCi/gm. These values confirm the presence of natural uranium with activity concentration ratio of approximately 1:1:0.046 (U-238:U-234:U-235).

In the warehouse at 529-535 West 20th Street, the total activity levels ranged from <27 to 57 dpm/100 cm<sup>2</sup> for alpha and from <350 to 1,400 dpm/100 cm<sup>2</sup> for beta-gamma, which are below DOE guideline levels. Removable activity levels of <3 to 12 dpm/100 cm<sup>2</sup> for alpha and <6 to 15 dpm/100 cm<sup>2</sup> for beta-gamma were well below DOE guidelines.

Exposure rates were well below DOE guidelines (DOE, 1987) in both warehouse buildings. These exposure rates (including background) ranged from 7.6 uR/h to 15 uR/h, which are well below the DOE guideline of 20 uR/h above background.

#### Authority Review

The Baker and Williams warehouse was contracted by the MED, a DOE predecessor agency, for the short term storage of uranium feed materials. As a result of an investigation of the historical information available on the site, the potential for contamination was considered low, since few records existed and the function of the facility was storage and distribution. However, the historical information indicates that large quantities of materials in cartons passed through the facility over a short period of time in the early 1940s (Baker and Williams, 1942). The radiological survey was initiated due to lack of available information. The results indicate that contamination is present



exceeding DOE guidelines (USDOE, 1987) in two areas in one warehouse building. It is likely that initial contamination of the facility could have occurred from a container leak, which spread over the years, however there is no evidence to substantiate such a scenario. Furthermore, the analysis of paint and sealant samples indicates that the contaminate is natural uranium as expected.

There are five questions used to evaluate authority for remedial action under FUSRAP. These are presented with summary answers below:

Was the site/operation owned by a DOE predecessor or did a DOE predecessor have significant control over the operations or site?

The warehouse was owned by the Baker and Williams Company at the time of use by the MED. There is no evidence that MED had any control over the operations of the site. The facility was used as a delivery point by African Metals Inc. to MED. African Metals Inc. transferred control and custody of the materials in the warehouse to the MED. The materials remained in storage under the risk and responsibility of MED, until the MED made distribution. (African Metals Corp. 1942a,b)

Was the DOE predecessor agency responsible for maintaining or ensuring the health, safety, and environment of the site (i.e., were they responsible for cleanup)?

There is no contractual evidence with Baker and Williams of such responsibility. There is no evidence of any closeout survey or cleanup activity.

Is the waste, residual, or radioactive material on the site the result of DOE predecessor related operations?

It is likely that the natural uranium contamination present at the site is the result of DOE predecessor use of the facility, considering the quantity of material passing through the facility and a potential for contamination. No information was found to suggest that other users could be responsible for the contamination.

Is the site in need of further cleanup and was the site left in an unacceptable condition as a result of DOE predecessor related activities?

Two general areas of the warehouse at 521-527 West 20th Street have contamination in excess of DOE guidelines (DOE, 1987) from natural uranium. No evidence exists that the owners or DOE predecessor agencies surveyed the site or were aware of the possibility for contamination.

Did the present owner accept responsibility for the site with knowledge of its contaminated condition and that additional remedial measures are necessary before the site is acceptable for release without radiological restrictions to the general public?

It is likely that there was no knowledge of contamination or even the potential for contamination by the current user. The survey performed by ORAU (Cotten, 1990) was likely the first radiological survey since MED use.

#### DESIGNATION DETERMINATION

The results of the preliminary radiological survey (Cotten, 1990) indicate that contamination in excess of DOE guidelines exists in two areas of one warehouse building. All surface contamination was determined to be fixed. Removable contamination and external radiation levels are well below the DOE guidelines limits. Therefore, there is currently no significant risk to workers or the general public from the residual contamination in this facility. The extent of the contamination is limited to floor and wall areas within the warehouse at 529-535 West 20th Street.

The DOE has authority to conduct remedial action at the site under FUSRAP, based on the documented use of the facility by MED for storage and distribution of uranium feed materials, with a high probability that natural uranium contamination found at the site resulted from this use.

Current use of the site will not cause doses in excess of guidelines; therefore, the site does not warrant classification as a high priority site on the basis of health effects, using the ranking procedure in the FUSRAP protocol (USDOE, 1986).

The warehouse owners have expressed, during a recent telephone conversation, plans to perform renovation work on the warehouses in the near future. This work would include smoothing of the floor or re-surfacing. In plausible worst-case scenarios, it is possible that such activities could result in doses to workers at or near guidelines levels from the existing contamination. Furthermore, such renovation could cause contaminants to spread from the two areas currently identified to other areas of the warehouse. As a result, the ranking procedure provided in the FUSRAP protocol indicates that this site should be given a medium priority (USDOE, 1986). As indicated in the protocol, this priority is based only on potential health risk considerations and the risk of spread of contamination.

## REFERENCES

AEC, 1978, U.S. Atomic Energy Commission Contract Descriptions, Descriptions of W-7405-Eng-18, W-7405-Eng-47, et.al., Classification Cancelled November 1978.

African Metals Corp., 1942a, Correspondence with Major Thomas Crenshaw of the Manhattan District, November 6, 1942.

African Metals Corp., 1942b, Correspondence with Major Thomas Crenshaw of the Manhattan District, November 30, 1942.

Baker & Williams, 1942, Receipt No. 16507 on Storage in Warehouse of 702 Cartons to the Manhattan District, November 30, 1942.

Cotten, P.R., 1990, Radiological Survey of the Baker and Williams Warehouses, New York, New York, ORAU 89/L-33, Oak Ridge Associated Universities, June 1990.

USDOE, 1986, Formerly Utilized Sites Remedial Action Program, Summary Protocol, Identification - Characterization - Designation - Remedial Action - Certification, U.S. Department of Energy, Office of Nuclear Energy, January 1986.

USDOE, 1987, U.S. Department of Energy Guidelines for Residual Radioactive Material at Formerly Utilized Sites Remedial Action Program and Remote Surplus Facilities Management Program Sites, Revision 2, U.S. Department of Energy, Office of Nuclear Energy, March 1987.

USDOE, 1989a, A Background Report for the Formerly Utilized Manhattan Engineer District/Atomic Energy Commission Sites Program, Volume II, draft, U.S. Department of Energy, Office of Remedial Action and Waste Technology, 1989.

USDOE, 1989b, Correspondence from J.J. Fiore to L. Masucci of Ralph Ferrara, Inc. Concerning Consent to Survey, June 19, 1989.

Attachment 2  
Proposed Expedited Procedure for Remedial Action at FUSRAP Sites

# memorandum

DATE: JUNE 25, 1990

REPLY TO  
ATTN OF: EH-231

SUBJECT: Expedited Procedures for Remedial Actions at Small Sites

TO: J. Fiore, EM-423

## Introduction and Discussion

Current protocol and procedures for implementing the remedial action and associated environmental review process under the Formerly Utilized Sites Program (FUSRAP) were developed with primary consideration given to the larger and higher priority sites. These procedures are designed to ensure that all appropriate engineering and environmental options are evaluated. They also ensure the mitigation of environmental and health impacts, cleanup criteria, disposal options, and so forth, are optimized. These protocol carefully considered and adopted the requirements of the National Environmental Policy Act (NEPA) and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the CERCLA National Contingency Plan (NCP).

While this approach may represent an effective process for larger and higher priority sites, it can be quite wasteful of Federal resources at smaller FUSRAP sites, particularly those most recently designated and those sites to be designated in the future.

Both NEPA and CERCLA offer the Department considerable flexibility in dealing with smaller sites. The purpose of this proposed supplement to the current protocol is to describe in detail a procedure for dealing with such small sites in a cost effective and environmentally acceptable manner that is in compliance with NEPA and CERCLA. This version of the procedures has been revised to reflect comments received on the January 19, 1990 version from your staff and Oak Ridge Operations (March 30, 1990, Memo from Seay to Wallo) and received in discussions with EH/NEPA (EH-25) personnel.

One comment in the Seay to Wallo memorandum was not adopted in these recommendations. Oak Ridge felt the roles of the respective offices were not sufficiently different to warrant having both headquarters and the project office sign the certification for a site remediated under the expedited process. I have no problem with the project office taking this responsibility, if they are willing to do so and it is beneficial to streamlining the overall protocol. However, I believe that under most circumstances, headquarters and its designation contractors will be making the judgments that result in approving the release of the largest

portions of most of the property of concern and it does not seem appropriate to require the field to then accept the responsibility for certifying it. I, therefore, did not adopt this recommendation in this proposed procedure. However, as noted, the following only represent recommendations. EM-40 and the FUSRAP project office should make the final decisions regarding how and if they are included in the DOE FUSRAP protocol.

The adoption of this process is likely to require major modification to existing FUSRAP protocols (1986/1987 versions). If these documents are revised, there are several other sections that might warrant consideration for revision as well. The discussion on the use of the FUSRAP guidelines should be expanded. It should note that criteria should be selected such that current use and likely future use of the property will result in doses to users of the site that are a small fraction of the 100 mrem/year limit (on the order of a few mrem/year). The worst plausible scenario (plausible but not likely) may be permitted to allow doses that are somewhat closer to the limit. Guidance provided since the issuance of the protocol should be considered for inclusion in the revised protocol. An example is the guidance provided regarding the level of survey that is required for release of property when there is varied degrees of historical information available concerning the past use of the property or equipment. The protocol should also be reviewed to determine if it contains an acceptable discussion of the CERCLA and NEPA reviews and documents prepared for non-expedited sites. The FUSRAP prioritization procedure should also be reviewed to ensure that it is still acceptable in light of the new Order DOE 5400.5 and the recommendations of such reports as BEIR V and UNSCEAR 88. Similarly, the QA and sample chain of custody requirements should be reviewed to determine if they are adequate.

The remainder of this memorandum contains the recommendations for the establishment of an expedited remedial action process. These recommendations complete the commitment I made earlier this year to revise the previous version. Any further action regarding implementation (and modification, if needed) of the suggested approach is up to EM-40 and the FUSRAP project office. However, if I can be of assistance in the review of revised protocols or plans for implementation of the process please call me at FTS 896-4996.

#### 1.0 Purpose:

Define a supplemental procedure for the FUSRAP protocol that will allow more expeditious and effective remediation of small sites in a manner that is in compliance with current regulations.

## 2.0 Summary and Applicability:

A detailed description of the "Expedited Remediation Process" and its associated elements is provided in the sections to follow; however, conceptually, the process can be divided into four major activities. They are 1) identification and characterization, 2) evaluation and planning, 3) remediation, and 4) certification. The process is shown schematically in Figure 1. The conditions for using and differences between this procedure and the normal FUSRAP protocol include:

- o The designation survey may be more extensive.
- o The environmental and engineering evaluation process and associated documentation are much less extensive.
- o In most cases, the environmental evaluation is completed or at least initiated at headquarters level with more involvement by the designation contractor.
- o Any remedial action conducted under this procedure should only require a few weeks of field operation and it must be clear that the quantity of waste generated is sufficiently small that it may be sent to an existing DOE disposal site.
- o This procedure is limited to sites having relatively small levels of contamination, particularly those with only indoor contamination or where outdoor contamination is so limited that ALARA actions in the field are likely to result in cleanups that represent background levels of radionuclides in the soil.
- o There is virtually no potential for any measurable ground water contamination.
- o The survey data must have been reasonably current or verified and the survey contractor (who will also serve as the verification contractor during remedial action) must have personnel assigned to the project that are familiar with the site. Preferably those involved in the original designation survey or more recent surveys conducted to verify past data.
- o The data collection and analyses must be consistent with CERCLA requirements.

## 3.0 Identification and Characterization:

The first activity is the identification of the contaminated site. This process is generally consistent with the current protocol and basically involves the radiological survey of the facility to identify the extent

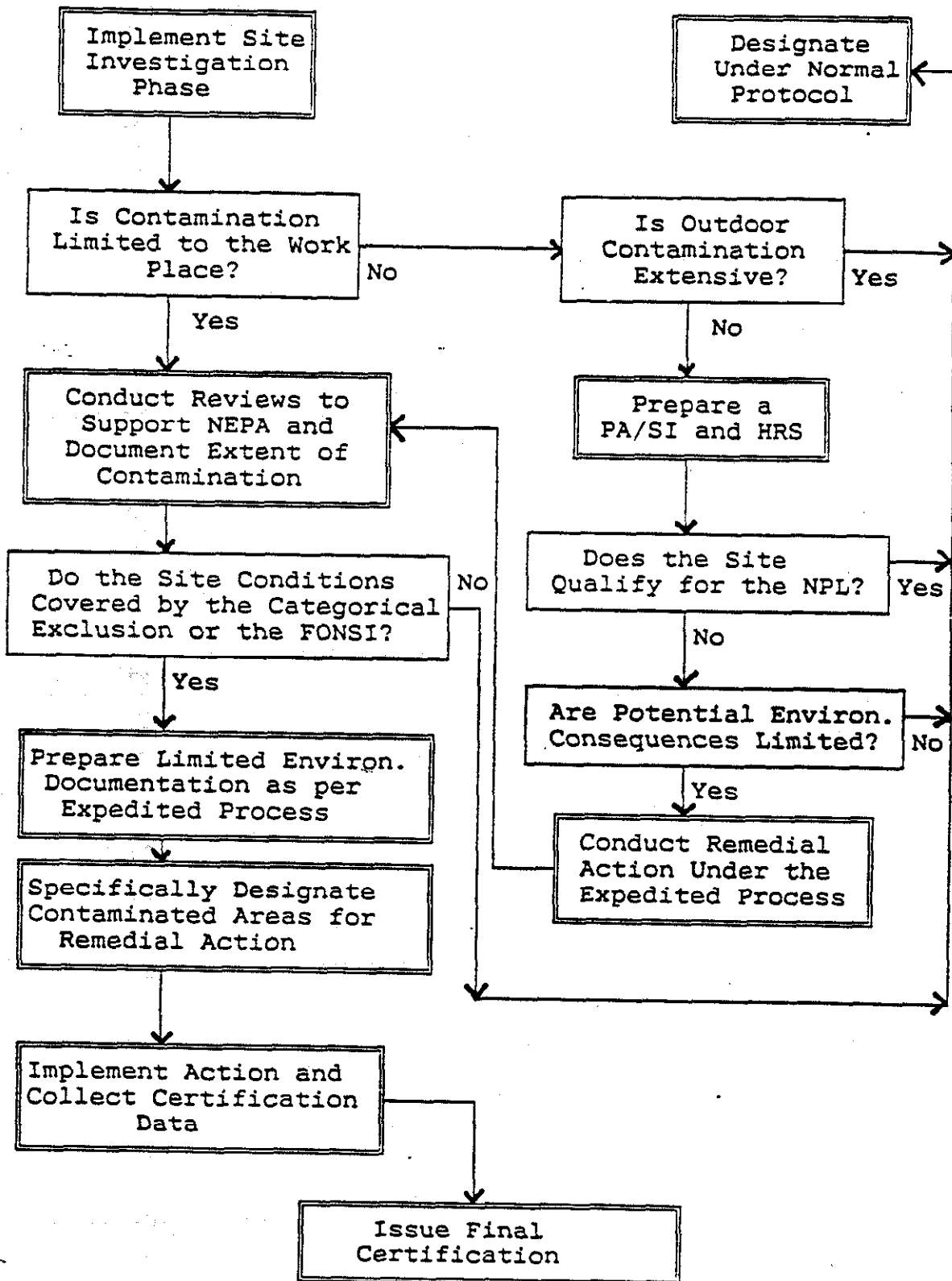


Figure 1. Basic Follow Diagram of Expedited Remedial Action



of contamination. The only difference is the level of detail required for the survey.

Under the current protocol this effort is typically terminated as soon as there are sufficient data to demonstrate the site contains residual radioactivity in excess of guidelines. The complete characterization of the site is then completed after designation of the site for remedial action. When it is anticipated that a site may be remediated under the expedited procedures it is necessary that the designation survey be conducted in a manner that ensures that there is reasonable certainty that the extent of the contamination has been defined.

If the results indicate the extent of the contamination is very limited (i.e., contained within the work place (the building), and/or outdoor contamination is very minor) then this process may be used to conduct the remedial action. In some cases, survey results may be supported by historical data.

It is the responsibility of the DOE designation manager and the designation contractor to identify sites that have potential for utilizing this expedited process and ensuring adequate data are collected to complete the evaluation. If this is determined in the field or before the survey, the survey may be extended by the survey team leader or the onsite DOE representative to collect the required data. If it is determined after the completion of the survey during the review process, the designation manager may send the survey contractor back to the site to collect any necessary data. If the latter occurs, the remedial action contractor should be directed to send an engineering representative onsite during the supplemental survey.

The DOE designation manager should notify and involve the project office and remedial action contractor in this effort as soon as it is suspected that the site may be appropriate for the expedited procedure. Under certain conditions, where resources are available, this will allow the remedial action contractor or the project office the option to have personnel on site for at least the final part of the designation survey. This should only be done, however, when use of the expedited process is reasonably certain.

### 3.1 Special Consideration for Designated Sites

Under certain circumstances, the DOE remedial action managers at the project office may identify sites that warrant consideration for use of the expedited process. These might include sites that were designated

prior to the inclusions of this procedure in the FUSRAP protocol. In some cases, sites that were believed to contain extensive contamination as a result of limited designation survey data may be determined to be eligible for the expedited process on the basis of characterization survey data if it clearly demonstrates that the conditions at the site comply with the requirements set forth for use of the expedited process.

In both these instances, the project office should submit a request to DOE headquarters to include the site in the expedited process. The designation manager and knowledgeable designation survey contractor representatives should review the request and justification and meet with the project office remedial action manager and the characterization survey contractor to ensure that the subject site meets the conditions required under NEPA or CERCLA for the expedited process to be used. In these cases, the evaluation and planning process will proceed as noted in section 4.0; however, the project office and characterization/remedial action contractor will have the lead for preparing the necessary documentation.

#### 4.0 Evaluation and Planning:

If after review of all the data, it is determined that the contamination is limited to the indoor portions of the site only, the expedited process may be used. The DOE headquarters technical support contractor should be tasked to prepare the environmental documentation.

Normal NEPA procedures would only require a memorandum to file for projects of such limited scope, however, DOE policy (SEN 15) no longer permits the use of this option for complying with NEPA. The DOE NEPA office (EH-25) has prepared a request for a categorical exclusion that should cover these limited scope remedial actions. EM-40 should coordinate directly with EH-25 to determine the status and applicability of the specific categorical exclusion. If the categorical exclusion is approved, the protocol should be revised to reflect the level of environmental documentation that is required to demonstrate the site specific action is subject to the exclusion.

If the categorical exclusion approach is not acceptable, EM-40 should immediately begin the preparation of a generic Environmental Assessment (EA) and if appropriate, issue a Finding of No Significant Impact (FONSI) to cover the NEPA requirements for these projects. It may be found that this approach will produce the most timely results. As with the categorical exclusion, some minimal environmental documentation should still be prepared to demonstrate that the conditions of the generic EA and associated FONSI are met by the proposed remedial action. Because the primary goal of the proposed process discuss below is to expedite remedial actions at sites where such actions clearly cause

insignificant environmental impact (small sites), if the environmental analysis indicates that a FONSI cannot be issued, then the scope of the sites and actions covered under the expedited process must be reduced, otherwise the primary goal of insignificant impact is not met.

For those sites where the contamination is limited to the work place, CERCLA documentation should not be necessary; however, it may be desirable to use the format and the data requirements in the CERCLA PA/SI for the data requirements under this process. In addition to the normal FUSRAP priority ranking done on each site, it is also suggested that a CERCLA type Hazard Ranking System (HRS) report be done, even though it is not directly applicable. This will result in consistent documentation with similar actions (discuss below) where outdoor contamination is involved. The field office responsible for remedial action and their contractor should be involved in this process as much as possible to ensure an adequate evaluation and to aid in the remedial action process.

If outdoor contamination exists or there is significant potential for contaminating the environment, the site cannot be directly included in the expedited process. In such cases, an evaluation must be conducted to verify that the contamination poses no significant threat to the environment. Technically, the site must be considered under CERCLA. However, if the Department can ensure that there is no significant environmental impact, the expedited process can still be used. At a minimum a PA/SI and HRS scoring must be done. The process must verify that the site will not qualify for the national priorities list and that the action is not a significant environmental action under NEPA. If the contamination is so limited that cleanup of the outside contamination under the guidelines plus ALARA is likely to result in the soil concentrations after remedial action being equal to background and the volume of waste is such that it can clearly be shipped to an existing DOE disposal site, the expedited process may be utilized. However, if these criteria cannot be met and/or it is determined that the remedial action may be extensive (months rather than weeks) the process should be avoided and the normal protocol used.

It is important that this process be applied over a relatively short period in time (a few years between designation survey and remediation). Otherwise, the Department may be at risk. The process depends significantly on the availability of survey personnel who conducted the initial designation surveys to assist the remedial action contractor in identifying and characterizing the contamination. Use of older survey data may result in poor communication of this data if the principals involved in the survey are not available at the time of the remedial action. This could result in contamination being found during the remedial action or determined to be unclearly defined and, hence, halt the process and force the use of the normal procedures. Such actions would waste rather than conserve resources.

Once it is determined that the expedited process will be used, the remedial action contractor and the designation contractor should visit the site together to clarify the planned remediation. Once the remedial action plans are final, the remedial action can proceed.

The designation contractor is responsible for identifying the contaminated areas for the remedial action contractor so that he can make appropriate plans. The designation contractor should supply drawings that clearly identify the extent and location of the contamination to be remediated and/or where possible, should clearly mark the contaminated areas for the remedial action contractor. It is critical to the success of these projects that the two contractors are in close and frequent communication. It should be the DOE designation manager's and the project office site manager's responsibilities to verify that there is an adequate exchange of information.

#### 5.0 Remedial Action:

The remedial action team under the expedited process is different in that it is made up of the remedial action contractor and his health physics personnel (for certifying the remedial action) and the verification contractor (the designation contractor personnel who conducted the survey). Unlike the normal protocol, the remedial action contractor is only responsible for remediating those areas identified by the designation survey as requiring remedial action and he is responsible for certifying the conditions of these areas. The designation contractor is responsible for supplying sufficient information to allow certification of the rest of the site. He also provides verification services for the remediated areas.

Because the scope of these projects is limited, it is anticipated that disputes between the remedial action certification team and the designation/verification contractor will be rare. In most cases, considering ALARA requirements and the small size of the actions involved, the most conservative results should be used. However, if disputes do arise, they must be resolved by DOE personnel. This should be done by either the DOE headquarters designation manager or the DOE project office site remedial action manager. Because the time frame of the remedial action is relatively short, one or the other should be on call at all times either by phone or if necessary on-site. The protocol should be revised to allow either of the DOE managers to take this responsibility; however, before the remedial action team goes into the field, the DOE staff responsible for dispute resolution must be identified. The name and procedure for contacting the specific DOE manager responsible for dispute resolution for a specific action should be listed in the remedial action plan.

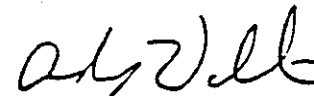
Depending on the site specific conditions, and the magnitude of the former operations, the DOE designation manager or the DOE remedial

action manager may direct the remedial action contractor or the designation contractor to make additional measurements or take additional samples to further verify the condition of the unremediated areas. In most cases, the need for such measurements should be anticipated from the preremedial action survey data. In general, these measurements should be small scale and confirmatory in nature. There should not be any significant characterization survey effort necessary during the remedial action. Such a requirement is indicative of insufficient preremedial action characterization and would indicate that there was not sufficient information available to determine if the site should be remediated under the expedited process.

If during the survey significant new contamination is identified or the contamination is significantly more extensive than anticipated, DOE must be notified to determine if 1) the action should continue and the new material removed, 2) the action should continue as planned and the new areas will be evaluated later, or 3) the action halted and the site reevaluated. Sufficient data should be collected to support these determinations. These decisions should also be the responsibility of the DOE manager on call for the project and identified in the remedial action plan.

#### 6.0 Certification:

Preparation of Certification Documentation as in the normal protocol is the primary responsibility of the field office. However, the survey contractor and headquarters technical support contractor must provide the field office and the remedial action contractor with sufficient information to certify the radiological condition of the site as the remedial action contractor was only responsible for the remediated portions of the site. Similarly, DOE headquarters and the field office should jointly sign the certification statement because of the combined responsibility. The remainder of the process is handled as it is in the normal protocol.



Andrew Wallo  
Environmental Guidance

**Attachment 3**  
**Reference Information on the Baker and Williams Warehouse Site**

17-267-4  
Contract W-7405-Eng-18

# AFRICAN METALS CORPORATION

41 BROAD STREET  
NEW YORK, N.Y.

(In duplicate)

November 30, 1942.

~~SECRET~~

The District Engineer,  
U. S. Engineer Office,  
Manhattan District,  
P. O. Box 42,  
Station F.,  
New York, N.Y.

CLASSIFICATION: UNCLASSIFIED  
OR OTHER: .....  
BY: .....  
DATE: 11/28/78

11/28/78 eng 18

Attention: Major Thomas T. Crenshaw.

Gentlemen:

Re: Contract No. W-7405-eng-18

Complying with the request of your Mr. Kaplan, we are enclosing three letters addressed to Baker & Williams, 529 West 20th Street, New York City, instructing them to deliver to your order the following material:

	<u>Net</u>	<u>Gross</u>
Orange Sodium Uranate	20,000 lbs.	21,470
Yellow Sodium Uranate	125,998	137,394
Orange Sodium Uranate	64,020	
Yellow Sodium Uranate	<u>2,000</u>	<u>69,019</u>
	<u>212,018 lbs.</u>	<u>227,883</u>
	-----	-----

These letters have been issued to cancel and replace our letter to Baker & Williams dated November 24th, which you are returning to us.

Since these orders on our warehouse place the control of this material in your hands, we wish to state that we consider these goods as no longer in our custody and that they are henceforth held at your risk and responsibility.

Very truly yours,  
AFRICAN METALS CORPORATION

*Henry*  
President

3 enclosures

~~SECRET~~

# Baker & Williams

U. S. Bonded and Free Warehouses No 16507 T

NEW YORK, Nov 30 1912

RECEIVED ON STORAGE IN WAREHOUSE 513/35 WEST 20TH STREET  
ACCOUNT AND RISK OF Dist. Engin. Office, Manhattan District  
THE FOLLOWING PACKAGES, CONTENTS AND CONDITION UNKNOWN, SAID TO CONTAIN MERCHANDISE HEREIN DESCRIBED.

MARKS:

A0 - 395/413 = 19	Carton
A0 - 414/493 = 80	"
A0 - 494/529 = 36	"
B0 - 199/200 = 2	"
ELO - 315/349 = 35	"
ELO - 381/440 = 60	"
C0 - 51/150 = 100	"
C0 - 1/50 = 50	"
C0 - 151/200 = 50	"
C0 - 201/250 = 50	"
D0 - 1/100 = 100	"
E0 - 1/100 = 100	"
DY - 217/236 = 20	"

BOND FREE

*Seven hundred & two*  
702  
*Cartons*  
48

AGE \_\_\_\_\_  
**Not Negotiable**

**Baker & Williams**

*W. Williams* VICE PRES. ASST. SEC.

ABOVE STORE IS EQUIPPED WITH AN AUTOMATIC SPRINKLER SYSTEM. NOT RESPONSIBLE FOR SPRINKLER LEAKAGE.

sent us.

As arranged, you will amend this Contract so as to exclude the clauses referring to the Walsh-Healey Act and Discrimination Act; also amend the paragraph added to clause "Payment", under Article 23.

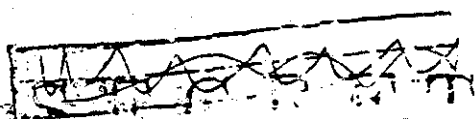
Thanking you before-hand,

Very truly yours,

AFRICAN METALS CORPORATION

*W. Williams*  
President

3 enclosures





TO FILE

AUG 29 1945

AFRICAN METALS CORPORATION

41 BROAD STREET

NEW YORK, N.Y.

(In duplicate)

November 6, 1942

The District Engineer,  
U. S. Engineer Office,  
Manhattan District,  
P. O. Box 42,  
Station F.,  
New York, N.Y.

Classification Cancelled

~~Changed to~~  
By Authority Of OGE  
By Jed Davis Date 11/1/42

Attention: Major Thomas T. Crenshaw.

Gentlemen:

Following our conversation of yesterday, we hereby confirm giving you option, valid up to the end of November 1942, for the purchase of:

MATERIAL: About 42 short tons of Sodium Uranate Orange, holding about 83-1/2% of U<sup>238</sup>; packed in boxes.

About 64 short tons of Sodium Uranate Yellow, holding about 82-1/2% U<sup>238</sup>; packed in boxes.

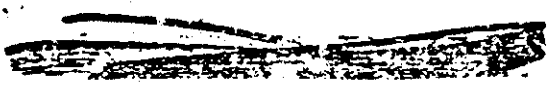
DELIVERY: In Baker Williams Warehouse, New York, promptly upon receipt of purchase order.

PRICE: \$1.55 per lb. of product, less an allowance of \$1.24 per 100-lbs. for freight.

PAYMENT: Promptly upon release of the Sodium Uranate.

We also confirm that we would be willing to sell to you promptly for treatment at Port Hope, a further parcel of about 100 short tons of M-31, out of the tonnage now being shipped to a U. S. Government Reservation, on the same terms and conditions as per Contract W-7405-eng-4, except:

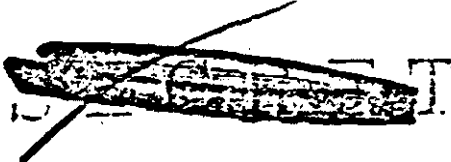
- 1) that the percentage of M<sup>308</sup> to be paid for be based on the actual recovery as per sworn production statement to be supplied in accordance with Article V, sub-section 1) of the above Contract but with a minimum guaranty recovery of 80%.



TO

The District Engineer,  
New York, N.Y.

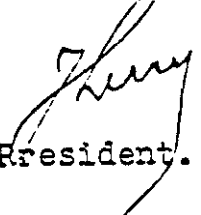
PAGE 2.



2) that in respect of the R-1 to be recovered, this corporation be authorized, at its discretion, to dispose of the whole or part of the R-1, in Great Britain and/or its Dominions, or to return the whole or part of R-1 to the United States of America.

Yours faithfully,

AFRICAN METALS CORPORATION

  
President.



part B0538

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W-7405-ENG-18

3-1-43

The U. S. Government contracted to buy 42 short tons of orange sodium uranate, 83%  $U_3O_8$  and 64 short tons of sodium uranate at about 82.5%  $U_3O_8$ , both at \$1.55/lb. The material was to be shipped to the Baker & Williams Warehouse, New York, one day after receipt of notice.

CLASSIFICATION CANCELLED

OR CHANGED TO BY AUTHORITY OF DEC

W-7405-ENG-24

12-8-42

BY KAW DATE 11/8/78

Under this contract, the U. S. Government arranged to buy the  $U_3O_8$  content of approximately 1100 short tons of 65% uranium ore, 750 tons of 65% ore, 250 tons of 65% ore and 1,000 tons of 20% ore. The Government agreed to pay for 85% of the uranium contained in the above lots. The Government also acquired title to the lead content of the 250 ton lot of 65% ore. African Metals agreed to have the radium refined in the first two lots of 65% ore mentioned and of the second two lots of ore to a point where the radium could be refined. AfriMet agreed to return 50% of the radium in the ore to the U. S.. Ore deliveries under the contract were to be completed prior to October 1, 1943.

Under Supplement No. 2 to the contract, the Government agreed to have the radium in the 1,000 tons of 20% ore refined for the account of the contractor and agreed to return to the contractor 90% of the radium in the ore processed as radium bromide and as much of the precious metals as

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possible. The Government agreed to start deliveries of radium not later than November 1, 1944 and to continue at the rate of  $3\frac{1}{2}$  grams per month until completed.

Under Supplement No. 4 to this contract, the radium content of the 65% ores was returned to the contractor in the form of a wet sludge containing 50% moisture f.o.b. Mt. Kisco, N.Y., (International Rare Metals Refinery Inc.) AfriMet agreed to recover for the Government a minimum of 70% of the lead (which contained radioactive lead) that was included in the actual amount of radium bearing sludge generated through processing the 250 ton lot of 65% ore.

Note: Two ships transporting material under this contract, the "Besholt" and "Tamesis" were lost to enemy action.

W-7405-ENG-30

5-4-43

Under this contract the Government acquired the  $U_3O_8$  content of 150 long tons of 70% uranium ore at a cost of \$1.045 per pound for 85% of the contained uranium and the total contents of approximately 100 long tons of 70% uranium ore at a cost of \$1.045 per pound for 85% of the uranium and \$12,000/g for the contained radium. Delivery of the ore was to be made f.o.b. Pier 38 New York. Title to the radium content of the 150 ton lot remain with African Metals.

African Metals negotiated a separate contract with Eldorado for recovery of the radium contained in the 150 ton lot. They were required under the contract to return at least 50% of this radium to the U. S. This ore was to be processed at Port Hope by Eldorado.

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The 100 ton lot of ore (entire contents owned by the U.S.) was to be processed at Cannonsburg, PA by Vitro Manufacturing Co. The Government retained the option to recover the radium contained in this lot as radium bromide and resell it to African Metals at a price of \$15.70/mg. The Government had to exercise this sale option within 10 months after delivery of the ore. This option was exercised by the Government and the radium resold to AfriMet.

W-7405-ENG-47

3-29-43

The Government contracted to buy the following amounts of material which were to be delivered immediately f.o.b. Baker-Williams Warehouse, N.Y., NY. in containers furnished by AfriMet.

<u>Material</u>	<u>Approx. Amount</u>	<u>Assay (%U<sub>3</sub>O<sub>8</sub>)</u>	<u>Price/lb.</u>
(1) Orange Sodium Uranate	22.67 short tons	82	\$1.55
(2) Yellow Sodium Uranate	20.72 short tons	81	\$1.55
(3) Sodium Uranyl Carbonate	10.86 short tons	48	\$0.75
(4) Black Uranium Oxide	9.81 short tons	98	\$2.05
(5) Yellow Sodium Uranate	147.96 lbs.	72	\$1.37

In addition to these materials the Government retained the option to buy any additional amounts of the above materials received by AfriMet over the following 1-year period. It was expected that AfriMet would receive another 40 short tons of Black Uranium Oxide during the following year and the price to be paid for this material (should the Government exercise their option) was predetermined under the contract as \$2.05/lb. No price was set under the contract for any other materials (items 1-3 and 5) which might become available under the option.

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W-7405-ENG-94

5-27-43

Concerns L30 & L50 Residues

The Government contracted to buy the  $U_3O_8$  content of the following lots of ore from African Metals under this contract. In addition, they also had an option on the lead content of the ores. As was often the case, title to the contained radium remained with African Metals.

<u>Material</u>	<u>Amount *(Short-Tons)</u>	<u>Price/lb.</u>
(1) 65% uranium ore	530	\$1.25 (for 93% of contained U)
(2) 20% uranium ore	1,075	\$1.25 (for 90% of contained U)
(3) 10% uranium ore	10,250	\$1.25 (for 90% of contained U)
(4) 6% uranium ore	2,000	\$1.25 (for 90% of contained U)

\*Final revised tonnages of material as per Supplemental Agreement F.

The Government guaranteed the recovery of (in the form of a radium-bearing sludge) 98% of the radium in the 65% ore and 95% of the radium in the other three lots of ore. The Government agreed to pay AfriMet \$12.00 for each milligram they were deficient in radium. This penalty was later reduced to \$9.70/mg by Supplemental Agreement F.

Under the contract the Government also received prior rights to purchase the  $U_3O_8$  content of all similar materials stored in the Belgian Congo and mined prior to May 27, 1943.

Shipment of the ores under this contract was to begin as soon as practical and it was estimated that delivery would be completed by fifteen months from the effective date of the contract.

The Government originally agreed to store all of the residues at its own risk until shipping facilities to Antwerp were free and unoccupied.

Information as to the ultimate disposition of the residues from the first two lots of ore has not been located. However, under Supplemental

Agreement G to this contract the Government agreed to pack, in non-returnable,

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OR CANCELLED TO  
BY  
KAW  
DEC 11/8/78

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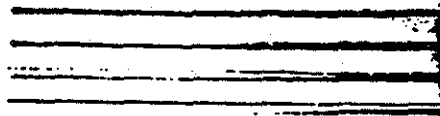
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Government furnished containers, all radium bearing residues from the processing of the 10% (L30) and 6% (L50) ores and return them (f.o.b. New York) at the Government's risk on or before June 30, 1957 upon 6 month's written notice to the Government to do so. If AfriMet failed to give such notice prior to that date, title to the residues passed to the Government.

W-7405-ENG-94 expired on June 30, 1958 and was superseded by the current lease agreement with AfriMet for storage of the residues. African Metals gave up the right to abandon title to the residues under the current agreement.



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WORK COPY

W-7405-ENG-259 10-15-43

The Government purchased for immediate delivery approximately 40,000 pounds of 10% African ore in its entirety which included title to the radium content as well as the U<sub>3</sub>O<sub>8</sub>. The price paid for the material was based on \$1.125/lb contained uranium and \$11.40/mg contained radium. The uranium content of this ore was originally contracted for under W-7405-ENG-94 and this lot was purchased for experimental purposes.

W-7405-ENG-279 12-5-43 R-10 Residues

The Government arranged to buy 2.6% uranium ore in its entirety from African Metals under this contract. The initial amount contracted for was 5,500 short tons which was increased under several Supplemental Agreements up to 12,000 short tons. The ore was paid for on the basis of \$1.125/lb of contained uranium and \$9.00/mg for the contained radium.

Shipments of ore under the contract from the Belgian Congo were to begin in the first half of 1944 and deliveries f.o.b. New York were to be completed prior to March 15, 1946.

In the event the Government decided to resell any or all of the radium in R-10 material at any time during the five year period following payment of the final invoice, African Metals had the prior right to purchase the material at the following prices: \$9.00/mg contained radium if the material is offered by the Government in the form of a radium bearing sludge containing approx. 50% moisture or \$15.00/mg contained radium if the material had been further refined by the Government and offered for sale in the form of radium bromide.

FROM: FROM CANCELLED  
TO: TO  
BY: KAW  
DATE: 11/8/78

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The R-10 radium bearing residues generated through the processing of these ores is still owned by the Government and is currently stored in the open at LOOW.

\*NOTE: The amount of radium contained in the R-10 was to be determined as follows under the contract.

2.9mg Ra/22.046 lbs. contained  $U_3O_8$

12,000 short tons X 2,000 lbs X 0.027(% $U_3O_8$ ) = 648,000 lbs  $U_3O_8$

648,000 lbs contained  $U_3O_8$  X  $\frac{1 \text{ mg Ra}}{7.602 \text{ lbs contained } U_3O_8}$  = 85,239.6mg Ra  
or 85.24g Ra

This amount is assumed to still be present in the residues stored at the site.

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W-7405-ENG-280

12-5-43

F32 residues

The Government agreed to purchase the uranium concentrated from all of the uranium ore to be mined from the open cut at the Shinkolobwe Mine.

It was originally estimated that this would amount to between 200 to 250 <sup>(actual was 181 tons)</sup> short tons of 50 to 60% uranium ore. This contract was later modified under Supplemental Agreement No. 2 to reflect the purchase of an additional 275 tons of 20% ore. The price paid for the ore was determined as follows: \$1.40/lb for 100% of the U<sub>3</sub>O<sub>8</sub> content of <sup>181</sup>~~250~~ ton lot of 50% ore and \$1.35/lb for the U<sub>3</sub>O<sub>8</sub> content of the 20% ore.

African Metals retained title to the radium, lead and precious metals although the Government had an option for purchase of the lead content. The Government agreed to recover 98% of the radium in the 50% lot of ore and 95% of the radium in the 20% lot as a radium bearing sludge. The Government agreed to pay AfriMet \$9.70 for each mg they were deficient in radium.

Shipments under the contract were to begin in the latter half of 1944 and were to be completed prior to May 15, 1946.

The Government originally agreed to store the radium bearing residues at its own risk until such time as shipping facilities to Antwerp, Belgium, were free and unoccupied by the enemy or until they became available to the contractor. The following passage from Supplemental Agreement No. 7 to the contract gave AfriMet the right to abandon title to the residues on June 30, 1957. This right was eliminated when the current LOOW lease agreement was negotiated.

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HEREIN IS UNCLASSIFIED  
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OTHERWISE  
BY AUTHORITY OF Doc  
BY KAW DATE 11/8/78

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"Notwithstanding the provisions of Article III, Recovery and Disposition of F-30 or of any other article of this contract, it is agreed by and between the parties that

- a. All F-32 in the possession of the Government at the Middlesex Warehouse, New Jersey, and subject to this contract will be loaded on freight cars and shipped to the Lake Ontario Ordnance Works in New York by the Government where it will be unloaded from the freight cars, unpacked for bulk storage and dumped into a fenced area by the Government. All such shipping, unloading, unpacking, and dumping will be at the Contractor's sole risk and expense. The Government, however, will assume the expense of loading of said F-32 on freight cars at the Middlesex Warehouse as aforementioned but shall not be responsible for any damage or loss of such material which occurs during the loading operations.
- b. The Government agrees to retain said F-32 in bulk storage within such fenced area and under guard until June 30, 1957 or until it has been removed by the Contractor as hereinafter set forth, provided, however, that such storage of F-32 will be at the Contractor's sole risk without liability being imposed upon the Government for loss, shrinkage, destruction, damage or other cause during such storage period.
- c. The Contractor at its option may repossess said F-32 at any time up to June 30, 1957 by written request to the Government, received by the latter not later than December 30, 1956. Within six months after receipt of such request, the Government will repack, load and ship said F-32 to the Contractor at the sole risk and expense of the Contractor. In the event that said F-32 is not removed from the storage area by June 30, 1957, pursuant to an exercise of the above mentioned option by the Contractor, the parties agree that title thereto will, upon said date, automatically pass to the Government without further action by either party unless they, in the meanwhile, shall have reached a contrary agreement."

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**STORAGE WAREHOUSES**  
(For general shipping - not household storage)

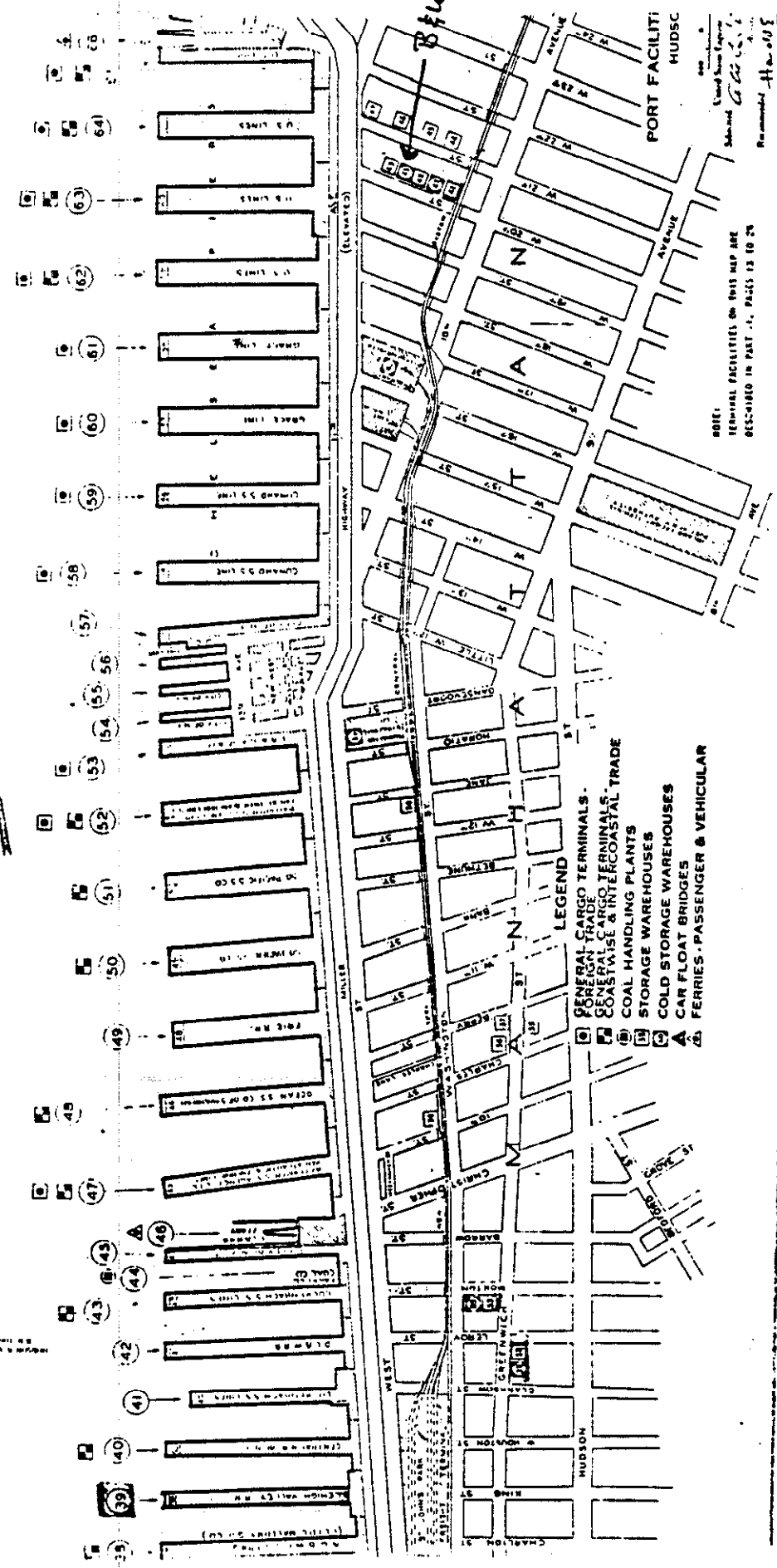
81

PCRT New York

WAREHOUSE REFERENCE NO. ON MAP	42, Map No. 2		41, Map No. 2		66, Map No. 16	
	NAME OF WAREHOUSE		NAME OF WAREHOUSE		NAME OF WAREHOUSE	
	Baker & Williams		Baker & Williams		Baltimore & Ohio Stores, Inc.	
FACT LOCATION	521-527 West 20th Street, New York City		520-514 West 20th Street, New York City		Pier 21, East River, east of Dover Street on South Street, New York City	
OWNER AND ADDRESS	Baker & Williams 126 Leroy Street, New York City		Baker & Williams 126 Leroy Street, New York City		Baltimore & Ohio Railroad Co. Baltimore Md.	
OPERATOR AND ADDRESS	do		do		Irwin V. Mead Pier 21, East River, New York City	
KIND OF STORAGE	General merchandise		General merchandise		Public merchandise	
COMMODITIES USUALLY STORED	Dry goods, wine, liquor, furs, and tobacco		Dry goods, wine, liquor, furs, and tobacco		New furniture, building supplies, canned goods, crabs, general merchandise	
OLD STORAGE FACILITIES	None		None		None	
<b>DESCRIPTION OF WAREHOUSE:</b>						
TYPE OF CONSTRUCTION	Fire-proof construction, steel, brick and masonry		Fire-proof construction, steel, brick and masonry		Steel with mill constructed floors	
NUMBER OF FLOORS	10		12		1	
HEIGHT BETWEEN FLOORS (FT.)	8 feet 3 inches to 11 feet 8 inches		9 feet 6 inches to 10 feet 6 inches		11 feet 9 inches to 18 feet	
ALLOWABLE FLOOR LOAD (LBS. PER SQ. FT.)	First floor 400; other floors 200		First floor 400; other floors 200		250	
	GENERAL MERCHANDISE	COLD STORAGE	GENERAL MERCHANDISE	COLD STORAGE	GENERAL MERCHANDISE	COLD STORAGE
OCCUPIABLE FLOOR SPACE (SQ. FT.)	61,133		73,500		70,133	
CAPACITY, OCCUPIABLE SPACE (CU. FT.)	491,500 at 7 1/2 feet clear height		553,500 at 7 1/2 feet clear height		772,997	
LEASED FLOOR SPACE (SQ. FT.)					8,000	
CAPACITY, LEASED SPACE (CU. FT.)					72,000	
ROOFTOP SPACE (SQ. FT.)						
UNITED STATES						
STATE						
PRIVATE						
METHOD OF TRANSFER BETWEEN SHIP AND WAREHOUSE	Truck		Truck		Railroad car float	
<b>EQUIPMENT IN WAREHOUSE, INCLUDING ELEVATORS</b>						
	1 24-ton and 2 18-ton elevators; hand trucks, platforms, jacks and gravity rollers		1 1-ton and 2 2-ton elevators; hand trucks, platforms, jacks, and gravity rollers		1 2-ton electric elevators; chutes; 15 flat tracks, also 7 hand trucks	
<b>DISTANCE TO NEAREST WATER TERMINAL</b>						
<b>TRUCK PLATFORM (length in feet)</b>						
<b>RAILROAD SIDINGS (name of line)</b>						
Baltimore & Ohio E. R.						
	SURFACE	DEPRESSED	SURFACE	DEPRESSED	SURFACE	DEPRESSED
NUMBER OF TRACKS (FT.)						
<b>FIRE PROTECTION</b>						
	Automatic sprinklers		Automatic sprinklers		Non-sprinklered	
<b>HEATING</b>						
	10,350 square feet of occupiable space is air conditioned for cooling 40 to 60 degrees. Also some heated space		10,350 square feet of occupiable space is air conditioned for cooling 40 to 60 degrees. Also some heated space			

H U D S O N R I V E R

SCALE 1" = 100'



- LEGEND**
- GENERAL CARGO TERMINALS
  - FOREIGN TRADE
  - GENERAL CARGO TERMINALS
  - COASTWISE & INTERCOASTAL TRADE
  - COAL HANDLING PLANTS
  - STORAGE WAREHOUSES
  - COLD STORAGE WAREHOUSES
  - CAR FLOAT BRIDGES
  - FERRIES - PASSENGER & VEHICULAR

NOTE:  
 TERMINAL FACILITIES ON THIS MAP ARE  
 DESCRIBED IN PART I, PAGES 13 TO 24

Approved: [Signature]  
 Prepared: [Signature]

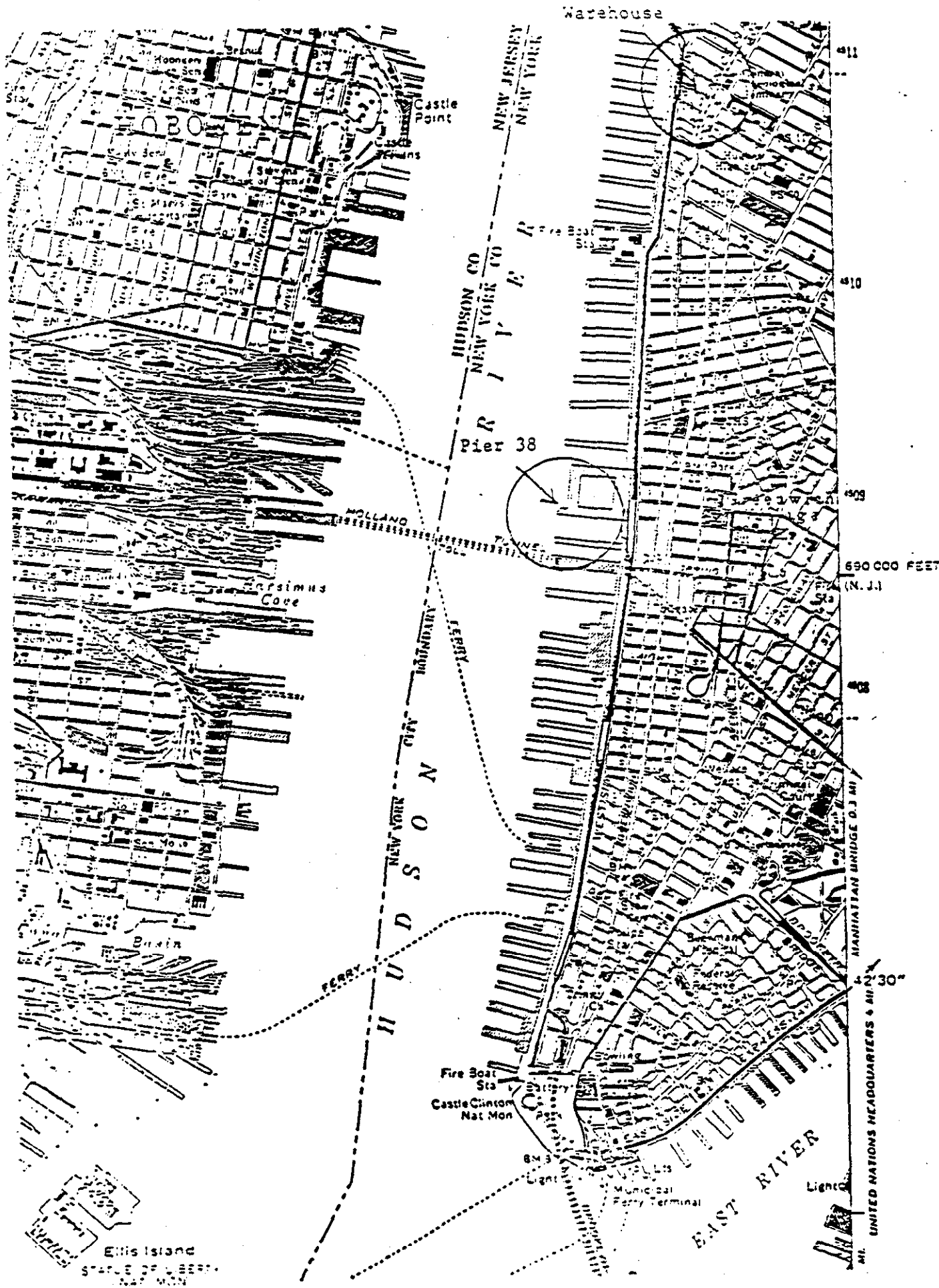


Figure 1. Baker and Williams Warehouse



Department of Energy

Washington, DC 20545

*U.S. Dept. of Energy*

*NY  
NY.61  
NY.30  
NY.22*

Dr. L. R. Solon, Director  
Bureau of Radiation Control  
New York City Department  
of Health  
111 Livingston Street  
New York, New York 11201

Dear Dr. Solon:

As you are aware from our previous correspondence and from your recent (October 1, 1987) telephone conversations with Mr. Wallo of my staff, the Department of Energy has been investigating several properties in the New York City vicinity under our Formerly Utilized Sites Remedial Action Program (FUSRAP). My previous correspondence with you has summarized our investigations for two of these sites, the former Staten Island Warehouse and the former Wolff-Alport sites. We have identified a third possible site known as the Baker & Williams Warehouse at 529 West 20th Street in Manhattan. This warehouse was used by the Atomic Energy Commission in the early 1940's to store uranium concentrates produced in Port Hope, Canada, from African ores. We believe the material was received in New York City at Pier 38 (see enclosed maps) and shipped to the subject warehouse by truck.

Based on the limited data we presently have, it is anticipated that any residual contamination at this site would be limited and if it did exist, potential for exposures would be small. However, if the structure (a 12-story steel, brick, and cement building) still exists, we would like to have our contractor, the Oak Ridge National Laboratory, visit it to determine if it warrants a radiological survey. It is my understanding that you have agreed to have your personnel check to determine if the structure exists and who the owner is so that the Department could take steps to complete any required radiological investigations at the site.

I am enclosing some background material that will help you identify the location of the site. I would appreciate any help you can provide the Department in identifying the status of this building. Please call Andrew Wallo at 301 353-5439 with any information you may obtain or any questions you may have regarding the site.

Sincerely,

151

James J. Fiore, Director  
Division of Facility and Site  
Decommissioning Projects  
Office of Nuclear Energy

Enclosures

bcc:  
W. Cottrell, ORNL  
J. Baublitz, NE-20  
G. Turi, NE-23  
Aerospace

NE-20 RF  
NE-23 RF  
Wallo RF  
NE-13 (4)

NE-23:Wallo:cb:353-5439:10/5/87:IBM278/57:

CONCURRENCES		
RTG SYMBOL	NE-23	
INITIALS/SIG.	Wallo <i>[Signature]</i>	
DATE	10/9/87	
RTG SYMBOL	NE-23	
INITIALS/SIG.	Fiore <i>[Signature]</i>	
DATE	10/13/87	
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Department of Energy  
Washington, DC 20545

POSTED

*Fairly*  
*Posted*  
*N.Y. 61*

JUL 08 1988

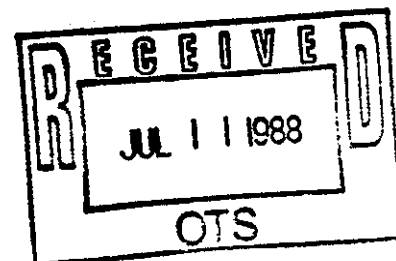
Mr. Abraham Fruchthandler  
237 Park Avenue  
12th Floor  
New York, New York 10017

Dear Mr. Fruchthandler:

As you are aware from discussions with Mr. Andrew Wallo of my staff, the Department of Energy (DOE) is implementing a program to reevaluate facilities that were used by our predecessor agencies, the Manhattan Engineer District and the Atomic Energy Commission in the early years of the development of nuclear energy. The purpose of the investigation is to be sure that facilities used in those earlier years are in compliance with present-day guidelines for radiological protection.

One such facility was the former Baker Williams Warehouse located at 529-535 West 20th Street, Manhattan, New York. This warehouse was used to store certain uranium products being shipped into this country for use in the atomic energy program. Due to the nature of the operation, short-term storage, any residual contamination is highly unlikely. However, because we have very limited records regarding this operation, it has been included in the DOE survey program.

Because you are presently the owner of this facility, we are requesting your consent to conduct a radiological survey of the subject property to verify that it meets guidelines. I am enclosing two copies of a consent form for your signature. If you consent to this survey, please sign both copies and return them to Mr. Andrew Wallo, NE-23, at the above address, and we will return a signed copy to you.



In your discussion with Mr. Wallo, you suggested that we coordinate the survey with your tenant. If this is your desire, please provide us with the name and telephone number of the individual you wish us to work with on this matter. If you have any questions regarding this activity, please contact Mr. Wallo at (301) 353-5439.

NE-23  
Wallo  
7/8/88  
*AW*

Sincerely,

NE-23  
Fiore  
7/8/88  
*JF*

151

James J. Fiore, Director  
Division of Facility and Site  
Decommissioning Projects  
Office of Nuclear Energy

NE-23:Wallo:pm:7/8/88  
IBM: 190/03

Enclosure:  
Consent Form (2)

bcc:  
W. Cottrell, OR  
~~OTS~~  
G. Turi, NE-23

DIST  
Subject  
NE-23 ref  
NE-13 (4)  
Wallo:rdr

CONSENT FOR PROGRAM ACCESS  
SURVEYS AND ENGINEERING STUDIES

The undersigned persons (hereinafter individually and collectively referred to as "Owner") represent that they own the following property:

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The following matters are understood by the Owner:

The United States of America (the "Government"), acting through the U.S. Department of Energy (DOE), will provide or contract for radiological surveys and engineering assessments for the following purposes: (1) DESIGNATION - determining if there is radiological contamination on the property for which DOE has authority and sufficient to require remedial action. If the property is designated for remedial action, the next step will be (2) CHARACTERIZATION - accurately defining the extent of contamination in order to design remedial action.

DOE shall be responsible for loss or destruction of, or damage to, the Owner's real and personal property caused by the activities of DOE, their authorized representatives, agents, contractors and subcontractors, in exercising any of the rights granted in this Agreement; PROVIDED, that such responsibility shall be limited to restoration of such real and personal property to a condition comparable to its condition immediately prior to the conduct of any activities on the Property by techniques of backfilling, seeding, sodding, landscaping, rebuilding, repair or replacement.

If the property is not designated for remedial action, this agreement will terminate upon completion of the designation survey. If the property is designated for remedial action, this agreement will remain in effect until completion of the characterization.

Nothing in this document shall be deemed to obligate the Owner to enter into an agreement for the performance of remedial action. No remedial action shall be performed until and unless (1) DOE shall have determined the need for and selected the appropriate remedial action, and (2) the DOE and Owners have entered into a written agreement providing for the performance of such remedial action.

By signing this document and sending it to the DOE, the Owners grant, effective \_\_\_\_\_, to the DOE and its contractors and subcontractors, such access to the Property as is reasonably required, and at times satisfactory to the Owners, for the performance of the radiological surveys and engineering studies.

The radiological surveys and engineering studies will involve some or all of the following activities:

Reviewing existing building, structural, and site plans available to the Owner. Such plans shall be provided to DOE and its contractors, at no cost to the Owner. If such plans are not in the possession of the Owner but are available, the Owner agrees to permit the DOE and its representatives to borrow or acquire, at no cost to the Owner, those plans deemed necessary to facilitate the performance of these reviews.

Performing land surveys and placing survey stakes as required to characterize the premises, including any light clearing of vegetation that may be required.

Determining the location and extent of actual radioactive material on the premises through measurements by various techniques and/or removing samples of contaminated materials by digging or core drilling.

Measuring and examining the premises and structures thereon.

Documenting through photographs the existing conditions of the Property and structures thereon.

Taking radiation measurements and performing core drilling inside structures, in such a manner as is agreeable to the Owner; placing a small radiation monitor in the structures, and collecting a sample from the monitor periodically.

THE UNITED STATES OF AMERICA  
DEPARTMENT OF ENERGY

\_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Printed name of Property Owner(s))

\_\_\_\_\_  
(Signature of Owner)

\_\_\_\_\_  
Signature of Owner (if multiple)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(phone)

If the signator is a corporation or a company, please complete the following:

CORPORATE CERTIFICATE

I, \_\_\_\_\_, certify that I am the duly qualified  
\_\_\_\_\_ of the corporation named herein as the  
consentor; that \_\_\_\_\_, who signed this consent form on  
behalf of the consentor, was then \_\_\_\_\_ of said  
corporation by authority of its governing body and is within the scope of  
its powers. Witness my hand and the seal of said corporation.

SEAL

\_\_\_\_\_  
Name

\_\_\_\_\_  
Date

**POSTED**

**JUN 19 1989**

*[Handwritten signature]*  
NE-23  
Wallo  
6/16/89

NE-23  
Fiore  
6/19/89

Mr. Lenard Masucci, President  
Ralph Forrara, Inc.  
601 West 26th Street  
New York, New York 10001

Dear Mr. Masucci:

As you are aware from discussions with Mr. Andrew Wallo of my staff, the Department of Energy (DOE) is implementing a program to reevaluate facilities that were used by our predecessor agencies, the Manhattan Engineer District and the Atomic Energy Commission in the early years of the development of nuclear energy. The purpose of the investigation is to be sure that facilities used in those earlier years are in compliance with present-day guidelines for radiological protection.

One such facility was the former Baker Williams Warehouse located at 529-535 West 20th Street, Manhattan, New York. This warehouse was used to store certain uranium products being shipped into this country for use in the atomic energy program. Due to the nature of the operation, short-term storage, any residual contamination is highly unlikely. However, because we have very limited records regarding this operation, it has been included in the DOE survey program.

Because you are presently the owner of this facility, we are requesting your consent to conduct a radiological survey of the subject property to verify that it meets guidelines. I am enclosing two copies of a consent form for your signature. If you consent to this survey, please sign both copies and return them to Mr. Andrew Wallo, NE-23, at the above address, and we will return a signed copy to you.

If you have any questions regarding this activity, please contact Mr. Wallo at 301-353-5439.

Sincerely,

bcc:  
J. Berger, ORAU  
G. Turi, NE-23  
OTS

NE-23 RF  
Wallo RF  
NEG (4)

*151*  
James J. Fiore, Director  
Division of Facility and Site  
Decommissioning Projects  
Office of Nuclear Energy

Enclosure (2)

NE-23:AWallo:ph:353-5439:6/16/89:IBM:167/9



Department of Energy  
Washington, DC 20545

JUL 6 1990

Mr. Nick Proto  
Ralph Ferrara, Inc.  
601 West 26th Street  
New York, New York 10001

Dear Mr. Proto:

This is to transmit to you and to Ralph Ferrara, Inc., a copy of the radiological survey report of your company's property at the Former Baker-Williams Warehouses at 521-527 and 529-535 West 20th Street in New York City. The field work for the survey was performed in August 1989, and the report was published in June 1990. A copy of the report is enclosed.

The survey was performed by the Department of Energy (DOE) as part of its Formerly Utilized Sites Remedial Action Program (FUSRAP). The purpose of the program is to: (1) identify sites that were used by predecessor agencies; (2) evaluate the radiological condition of these sites to determine if they contain contamination from past activities of predecessor agencies; and (3) clean up sites, as needed, to conform with current radiological guidelines. The Manhattan Engineering District, a DOE predecessor, used the Baker-Williams warehouses for the short-term storage of radioactive materials during the early 1940s. The survey indicates that radioactive material was left in some portions of the property.

The survey included all nine floors and the basement of Building 521-527 and all eleven floors and the basement of Building 529-535. The results of the survey show that there is no radioactive contamination above DOE's guidelines in Building 529-535. (See page 5 of the survey report.) Building 521-527 has contamination present in the east bay of the basement and the west bay of the first floor. (See page 5 and Figures 3, 4, and 5 on pages 9, 10, and 11 of the survey report.) Table I on page 32 reports in summary form the laboratory measurements of the radioactive contamination. The remaining floors of Building 521-527 do not show radioactive contamination above DOE's guidelines.

The radioactivity is not readily removable because it is fixed in the paint and sealant of the building walls and floor. For this reason, there is no significant risk to workers or members of the public. However, the site is a candidate for remedial action by

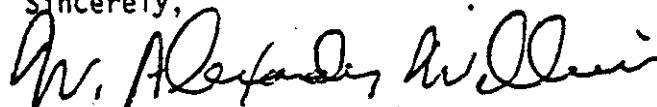
DOE to ensure that the building meets current radiation protection guidelines and to provide unrestricted use of the building. (Renovation, sanding, or removal of the paint and sealant on the floors and walls could spread contamination.)

We discussed the survey findings by telephone on July 3, 1990. I described in general terms the survey findings and the portions of the building that are contaminated. You explained that your company had recently leased the building and planned to renovate the building to meet your tenant's needs. This renovation will include grinding, sanding, and smoothing the floors. You also offered to perform the removal of the radioactivity from the building and back bill DOE for the costs. The time constraints of clean up are of concern because of your company's planned renovation. I offered to try and expedite the remedial process to meet this concern. I also indicated that DOE does not have the consent of Ralph Ferrara, Inc., for further work at the property and that there was little point to planning further action if consent would not be granted. You told me that consent would not be a problem.

After consultations, we have decided that it will not be possible for Ralph Ferrara, Inc. to remove the contamination and back bill DOE. This is because of DOE's need to make certain that the radioactivity is completely removed and that the contaminated materials are properly disposed. We will do our best to expedite DOE's action. We will designate the site for remedial action, and we have notified DOE's Oak Ridge Operations Office of this. The Oak Ridge Operations Office will be responsible for the remedial actions, and a representative of that office will contact you.

I appreciate very much your interest and assistance, I want to re-emphasize our conclusion that there is no significant health risk at present to workers in the building or to the general public. However, to avoid any possible future problems, DOE believes that some further action is needed. If I can give you any assistance, please call me at 301-353-5439.

Sincerely,



W. Alexander Williams, PhD  
Designation and  
Certification Manager  
Off-Site Branch  
Division of Eastern Area Programs  
Office of Environmental Restoration

Enclosure:  
ORAU 89/L-33



bcc:  
Weston

EM-40 (3)  
EM-42 reader  
Williams reader

EM-421:AWilliams:1b:353-3543:7/5/90:proto.aw

3  
WAW  
EM-421  
Williams  
7/5/90

~~EM-42~~  
Fiore  
7/5/90

EM-42  
Fulmer ~~AW~~  
7/5/90