File
40-00672

Docket No. 40-00672

30 DEC 1981

Dr. John B. Hursh
34 Woodland Road
Pittsford, New York 14534

Dear Dr. Hursh:

This letter is to confirm the telephone agreement between yourself and Mr. F. Costello of my staff on December 15, 1981 that you will assist this office by serving as a consultant with respect to the incident described in the enclosure to this letter.

We require an analysis of the health significance of this uptake and an estimate of the most likely initial intake of depleted uranium. We would also appreciate your comments on the appropriate models to use for analyzing similar intakes and the threshold at which kidney damage from uranium exposure occurs.

Also enclosed are claim forms for use in reporting your expenses. We understand that the licensee's medical consultant Dr. Japp will soon contact you to discuss this matter.

Thank you for your assistance in this matter. J. Kinneman is the Regional Office contact for this investigation. He can be reached by telephone at (215) 337-5252.

Sincerely,

Original Signed By:

Ronald C. Haynes
Regional Administrator

Enclosures:
Description of Incident
Guidance for Consultant

ENCLOSURES ATTACHED HEREWITH
CONTAIN 10 CFR 2.790 INFORMATION

bcc w/encl:
L. Higginbotham, IE:HQ

RIDS:

Costello/at	Rowe	Kinneman	Joyner	Martin	Allan	Haynes
12/23/81	12/23/81	12/23/81	12/23/81	12/29/81	12/27/81	12/28/81

5

8201070110

XA Copy Has Been Sent to PDR

DESCRIPTION OF INCIDENT

Region I Date: April, 1981 CONSULTANT: Dr. Hursh

Name and address of organization involved:

Nuclear Metals, Incorporated
Concord, Massachusetts

NRC License No. SMB-179 NRC Docket No. 40-00672

Incident:

Probable overexposure of individual to airborne concentration of depleted uranium. Problem was first recognized by the high urinary concentration of depleted uranium in a urine sample taken on April 6, 1981. Attached is a record of the licensee's urinanalysis data for this individual. In addition to the urinanalysis, a whole body count made in October 1981 indicated a lung burden of 8 milligram of depleted uranium. A copy of the individual's work schedule is also attached. This individual has been a machinist for many years. Recently he was hired by Nuclear Metals. After initial training, he has been working grinding and polishing depleted uranium. Apparently the ventilation on the grinding machine he was using was not working properly for some period of time prior to the April 6, 1981 sample. We are interested in: 1) The initial total uranium inhaled. 2) The health significance to the individual of this occurrence.

Individual's Name: [redacted]

10 CFR 2.790 INFORMATION

DATE: _____

BREATHING MODE: _____

URINALYSIS HISTORY FORM

ug/L	3.0	17.0	10.0	935.0	800.0	58.0	57.0	58.0	51.0	47.0	6
DATE	2-13-81	3-16	3-30	4-6	4-13	4-15	4-16	4-16	4-17	4-21	4-
TIME	—	6:45	11:05	10:00	3:45	10:50 AM	1:00 PM	8:15	8:00	7:45	7:
ug/L	70.0	78.0	46.0	58.0	76.0	94.0	85.0	62.0	50.0	77.0	3
DATE	4-23	4-24	4-27	5-1	5-4	5-5	5-6	5-7	5-11	5-15	5-
TIME	9:00	—	9:00	10:10	—	11:00	10:05	10:00	—	—	1
ug/L	44.0	38.0	48.0	40.0	68.0	42.0	30.0	33.0	29.0	28.0	3
DATE	5-19	5-20	NO DATE	5-22	5-26	5-27	5-28	5-29	6-1	6-3	6
TIME	9:45	11:30	10:00	10:00	9:45	10:00	11:45	2:30	10:00 AM	12:00	
ug/L	28.0	52.0	30.0	63.0	29.0	27.0	19.0	20.0	19.0	15.0	2
DATE	6-3	6-5	6-9	6-10	6-11	6-12	6-15	6-16	6-22	7-13	7-
TIME	—	10:00	2:00 PM	12:00	3:30	4:15	12:30	4:00 PM	2:00	11:30	
ug/L	20.0	20.0	12.0	15.0	13.0	14.0	14.0	20.0	19.0	15.0	1
DATE	7-17	7-20	7-22	7-27	7-30	7-31	8-3	8-10	8-17	8-24	8
TIME		10:00	10:30	11:30	3:30	10:15	11:30	10:00	12:00	11:15	
ug/L	25.0	22.0	[illegible]	30.0	14.0	8.0	23.0	29.0	16.0	7.0	
DATE	9-8	9-14	9-21	9-28	10-9	10-9	10-10	10-10	10-11	10-11	
TIME	—	7:00 AM	7:00	11:30	7:00 AM	7:00 AM	10:00 AM	10:00 PM	9:30 AM	9:30 AM	
ug/L	57.0	7.0	28.0	22.0							
DATE	10-5	10-26	10-18	11-2							
TIME	4:00	10:00		5:30 PM							

Date	Operation	Hours Worked	Comments
2-17-81	5084	8	Training and
2-18-81	5084	8	Set Up John
2-19-81	5084	8	Brown Centerless
2-20-81	5084	8	Grinder
2-21-81	7120	4	
2-23-81	7120	12	
2-24-81	7120	12	
2-25-81	7120	12	
2-26-81	708P	6	
	7120	2	
2-27-81	708P	10	
3-2-81	708P	2-0	1819-2.00 Repair
	7120	5-0	
3-3-81	7120	12	
3-4-81	7120	12	
3-5-81	7120	9	
3-6-81	7120	12	
3-9-81	7120	12	
3-10-81	7120	12	
3-11-81	7120	12	
3-12-81	7120	12	
3-13-81	7120	9	
3-14-81	7120	14	
3-15-81	7120	12	
3-16-81	7120	12	
3-17-81	7120	12	
3-18-81	7120	10.5	
3-19-81	7120	13	
3-20-81	7120	12	
3-22-81	7120	8	
3-23-81	7120	12.5	
3-24-81	7120	13	
3-25-81	7120	12.5	
3-26-81	7120	8	
3-28-81	7120	4.5	
3-30-81	7120	1	
	1819	1	
	708P	8	
3-31-81	708P	5	
	7120	5	
4-1-81	7120	13	
4-2-81	7120	12	
4-3-81	7120	12	
4-6-81	7120	12	
4-7-81	7120	12	
4-8-81	7120	12	
4-9-81	7120	10	
4-10-81	7120	8	
4-13-81	7120	12	
4-14-81	5060	8	Taken off work with
4-15-81	5060	8	uranium

Date	Operation	Hours-Worked	Comments
4-16-81	5060	8	
4-17-81	5060	4	
	LWOP	4	
4-20-81	3207	8	Holiday
4-21-81	5060	8	
4-22-81	5060	8	
4-23-81	5060	8	
4-24-81	5060	8	
4-27-81	5060	5	RETURNED TO WORK
	712P	3	
4-28-81	712P	12	
4-29-81	712P	9	
4-30-81	712P	9	Taken off work with urainium
5-1-81	712P	12	
5-2-81	712P	7	
5-4-81	712P	8	
5-5-81	712P	5	
	3825	3	
5-6-81	ON		Health Safety Department

AUG. 27, 1981 returned to work

Attachment 4

U. S. NUCLEAR REGULATORY COMMISSION
INSTRUCTIONS FOR CONSULTANTS AND ADVISORS
FOR OBTAINING REIMBURSEMENTS FOR
PERSONAL SERVICES, TRAVEL AND MISCELLANEOUS EXPENSES

I. Purpose

This document provides instructions for NRC consultants and advisors relative to obtaining reimbursement for personal services, travel and miscellaneous expenses. Adherence to the procedures stated herein will insure prompt and accurate reimbursement to those individuals performing services for NRC.

II. Categories of Reimbursement

Consultants and advisors are reimbursed under three categories of costs: personal services (salary), travel (per diem, transportation and associated travel expenses), and miscellaneous expenses. Obtaining reimbursement within each of these categories requires the completion and proper processing of three different types of forms. Instructions for completing the forms and their processing are given below and examples of the forms are provided as exhibits.

III. Personal Services (salary), Use NRC Form 148, "Voucher for Professional Services," see Exhibit A.

A. Instructions for Completing Form, by Block

1. From: Give full name of claimant.
2. Street Address: Give full address including zip code.
3. Social Security Number: Give full social security number.
4. Attention: The NRC division or office that serves as the primary contact to the consultant.
5. City, State, Zip Code: The full address of the division or office shown above.
6. Contract: Provide the full contract number and beginning and expiration dates.
7. Period Covered: The dates of service covered by the voucher.
8. Services Performed: May be described in days, hours, or a combination of both; however, the total hours must agree with the total hours shown on the reverse of the form. Rates of pay may be given per hour or per day as appropriate.
9. Retired Annuitant: Check yes if claimant is receiving an annuity from the Civil Service Commission or Department of Defense.
10. Amount Claimed: Indicate the amounts claimed on a daily or hourly basis and the total amount being claimed.
11. Certification: The claimant must manually sign and date the claim prior to submission to the approving official.
12. Approval: This area is to be manually signed and dated by the NRC official who is cognizant of the services performed by the claimant. Approval date must not precede certification date.
13. Services Performed: This section must reflect the date, time, and total hours for each day worked during the period covered by the claim.

B. Instructions for Submitting Form NRC-148

A signed original and two copies of the form should be sent to the responsible NRC division or office shown in the "Attention" box. This office will obtain the

required approval signature and forward the form to the Office of the Controller. Claimants should not submit the form directly to the Payroll Office as this will only delay processing.

IV. Travel Costs (Per Diem, Transportation and Related Travel Costs). Use NRC Form 64 and 64A, "Travel Voucher," see Exhibit B.

A. Instructions for Completing Form NRC-64

Detailed instructions for completing this form are contained in NRC Manual Appendix 1501. Consultants and advisors should contact the administrative officer of the cognizant NRC division for assistance in completing the travel voucher.

B. Instructions for Submitting Form NRC-64

This form should be submitted to the NRC division or office having cognizance of the activities of the consultant. After approval the form is forwarded to the Office of the Controller for payment.

V. Miscellaneous Expenses. Use SF-1034, "Public Voucher for Purchases and Services Other Than Professional," see Exhibit C.

A. Use

This form is used to claim reimbursement for expenses other than those associated with salary and travel; for example, secretarial services, copying services, office facilities. The costs to be claimed must be authorized in the consultant agreement issued by the Division of Organization and Personnel before they can be paid by the Office of the Controller.

B. Instructions for Completing Form SF-1034, By Block

1. Voucher Number: Vouchers should be numbered sequentially beginning with 1.

2. U. S. Department, etc.: Address form to U. S. Nuclear Regulatory Commission, Division of Accounting, L-306, Washington, DC 20555.

3. Date Voucher Prepared: Must be completed.

4. Contract Number and Date: Indicate personal services contract number effective date.

5. Payee's Name and Address: Indicate full name and address, including zip code, of claimant.

6. Articles or Services: Describe the items for which reimbursement is being claimed and give unit cost amount and total cost.

Note: Receipts for all goods and/or services in excess of $15 must be attached to the SF-1034.

C. Instructions for Submitting the Form

This form should be submitted directly to the Division of Accounting at the address given in the instructions above.

VI. Questions

Questions relative to employment dates, conditions of employment, items covered by the agreement, etc., should be directed to the Director, Division of Organization and Personnel, ADM. Questions concerning preparation and submission of the attached forms should be directed to the Director, Division of Accounting, COM.

NRC FORM 148
14-161
NRCM 4139

U.S. NUCLEAR REGULATORY COMMISSION

UNIT (OC use only)

VOUCHER FOR PROFESSIONAL SERVICES

INSTRUCTIONS

This form shall be completed by all NRC consultants for claiming compensation for official authorized personal services. A signed original and two copies should be submitted to the NRC office authorizing the service.

TO: U.S. Nuclear Regulatory Commission	FROM: NAME OF CLAIMANT (1)
ATTENTION: NRC OFFICE AUTHORIZING THIS SERVICE (4)	STREET ADDRESS (2)
	CITY (2) / STATE (2) / ZIP CODE (2)
CITY (5) / STATE (5) / ZIP CODE (5)	SOCIAL SECURITY NUMBER (3)

DESCRIPTION OF CLAIM
(All blocks must be completed)

CONTRACT:	NUMBER (6)	DATE (6)	AMOUNT CLAIMED	
			DOLLARS	CENTS
PERIOD COVERED: *(Dates)*	FROM (7)	TO (7)	(10)	
SERVICES PERFORMED: (8) *(Itemize on reverse)*	NUMBER OF DAYS	PER DAY @ $		
	NUMBER OF HOURS	PER HOUR @ $		
RETIRED ANNUITANT: (9) YES ☐ NO ☐	TOTAL AMOUNT CLAIMED			

CERTIFICATION

I CERTIFY that the above account is just and true in all respects; that my statement of services correctly sets forth the services on official business, that the payment therefore has not been received; and that no compensation for any of the time shown above is payable from or will be claimed from any other source of the Federal Government or its cost reimbursable contractors.

(11)

(Claimant's Signature)

(Date of Certification)

OFFICE OF THE CONTROLLER USE ONLY

DIFFERENCE		
AMOUNT VERIFIED CORRECT		
SIGNATURE		

APPROVAL

I CERTIFY that the above claim is just; that the above services were officially requested and performed; and that the expenses claimed are authorized.

(12)

(Approving Officer's Signature)

(Date Approved)

NRC FORM 148 REPLACES FORM AEC 148 WHICH IS OBSOLETE AND EXISTING STOCK SHOULD BE DESTROYED

Exhibit A

13

SERVICES PERFORMED			
RATE OF COMPENSATION		PLACE(S) OF WORK PERFORMED	
PER DAY $	PER HOUR $		
DATE	TIME WORKED OR IN AUTHORIZED STATUS (Indicate whether a.m. or p.m.)		
	FROM	TO	TOTAL HOURS

PRIVACY ACT STATEMENT

Pursuant to 5 U.S.C. 552a(e)(3), enacted into law by section 3 of the Privacy Act of 1974 (Public Law 93-579), the following statement is furnished to individuals who supply information to the Nuclear Regulatory Commission on Form NRC-148. This information is maintained in a system of records designated as NRC-20 and described at 40 Federal Register 45341 (October 1, 1975).

1. AUTHORITY 31 U.S.C. 21, 22, 24, 49, 54, and 66a. Solicitation of the social security number is authorized under Executive Order 9397 dated November 22, 1943.

2. PRINCIPAL PURPOSE(S) Information entered on this form is used to secure payment for authorized claims for compensation.

3. ROUTINE USES Information on this form is used for transmittal to the U.S. Treasury for payment. The information may also be disclosed to an appropriate Federal, State, or local agency in the event the information indicates a violation or potential violation of law and in the course of an administrative or judicial proceeding. In addition, this information may be transferred to an appropriate Federal, State, and local agency to the extent relevant and necessary for an NRC decision or to an appropriate Federal agency to the extent relevant and necessary for that agency's decision about you.

4. WHETHER DISCLOSURE IS MANDATORY OR VOLUNTARY AND EFFECT ON INDIVIDUAL OF NOT PROVIDING INFORMATION The supplying of this information is voluntary on your part. Failure to supply the information, however, may result in the denial of your claim for compensation. Your social security number is used as an identifier and its use is necessary because of the large number of present and former Federal employees with similar names and birth dates.

5. SYSTEM MANAGER(S) AND ADDRESS Controller, Office of the Controller, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555

Form Approved
Comptroller General, U.S.
May 2, 1972

TRAVEL VOUCHER (Part 1)

(See Appendix I Sill for instructions for completing ... form)
(Do Not Remove Carbons)

1 Amended ☐	2 Division/Office Code A Fac B Sub Unit	3 Voucher No (leave blank)	4 Address Code ☐ Home ☐ Office ☐ Special	5 Name of Traveler (First Initial and Last Name)

6. a Mailing Address (P.O. Box, Street or Office) | b. City, State | c. Zip Code

7 Remittance if Different from Item 6 (City, State) | 8. Official Duty Station (City, State) | For Travel and Other Expenses: 9 From (MM DD YY) | 10. To (MM DD YY)

NRC TO BE BILLED:

11 Number Each Page (Consecutively)	Page for	12 Number Each Item Consecutively Beginning with "1"	Item	13 Enter Appropriate Type Code Here	14 Identification TR No., Invoice No., Bill Line Number (Item)	15 Carrier or Rental Car (Name or Initials)	16 Points of Travel Covered by TR or Period of Car Rental (MM DD YY) From	To	17 Mode and Class of Service	18 Amount to be Billed
				TYPE CODES: A = TR Round Trip; B = TR One Way; C = Rental Car; D = GEBAT; E = Other						

19 Number of Billing Items Listed on this Page ▶

If more space is required for additional billing items, use another Form NRC64, and complete items 1 thru 5, and items 11 thru 20

20 Total amount to be billed on this page ▶

21. Authorization No | 22 Traveler's Social Security No

23 For Change of Duty Station—Individuals Included in this Claim:

☐ Employee
☐ Employee and Spouse
☐ Spouse

No. of Children Ages 12 to 20, and Parents ____
No. of Children Under 12 ____

24 Read Carefully (If voucher includes any of the following, mark the appropriate boxes)

☐ Voucher Includes Shared Cost (Explain in Part 2)
☐ Consultant Travel Expenses Claimed
☐ Abandonment of Travel (Explain in Part 2)
☐ Comparative Cost Statement Included
☐ Leave Taken in Conjunction with Trip (Explain in Part 2)
☐ Local Travel
☐ Additional Vouchers will be Submitted
☐ Refund Due on Unused Ticket and/or Refund Slip (Explain in Pt. 2)
☐ Remittance Attached in Amt. of $ ____
☐ Marine Hunting

25 Travel Advance (For Office of CONTROLLER Use)
Outstanding balance $ ____
Amount to be applied $ ____
Balance to remain outstanding $ ____

26 (For Office of CONTROLLER USE) Examiner's Deductions
$ ____
$ ____
$ ____
Examined by ____ Date ____

27 Actual Time in Travel for Per Diem Calculation: Days ____ Quarters (Mark one box for any fraction of a day) ☐ 1 ☐ 2 ☐ 3

28 Schedule No. (For Office of CONTROLLER Use)

29 Total Amount Claimed | 30 Total Foreign Costs Included in Item 29 | 31 Net to Traveler (For Office of CONTROLLER Use)

32 Certified Correct Payment or Credit has not been received*

(Signature of Traveler) (Date)

33. Approved. Long distance telephone calls are certified as necessary in the interest of the Government

34 Certified Correct and Proper for Payment

(Signature of Approving Officer)** (Date) | (Authorized Certifying Officer) (Date)

35 Accounting Classification (For Office of CONTROLLER Use)

	Object Class	Detail	B & R Class	Amount		Object Class	Detail	B & R Class	Amount		Object Class	Detail	B & R Class	Amount
A					B					C				
D					E					F				

*Fraudulent Claim—Falsification of an item in an expense account works a forfeiture of the claim (72 U.S.C. 2514) and may result in a fine of not more than $10,000 or imprisonment for not more than 5 years or both (18 U.S.C. 287, 18 1001)

**If Long Distance telephone calls are included, the approving officer must have been authorized in writing by the head of the Department or Agency to so certify (31 U.S.C. 686a)

SEE REVERSE OF PAYEE COPY FOR PRIVACY ACT STATEMENT

ORIGINAL

SCHEDULE OF EXPENSES AND AMOUNTS CLAIMED

Do Not Remove Carbons

PAGE NO.	PAY OFFICE ID DIV.	SUB-UNIT	VOUCHER NO.	Name	DEPART FROM OFFICE (DATE) MM	DD	YY	(HOUR) AM / PM

DATE	NATURE OF EXPENSE	AUTHORIZED MILEAGE	NUMBER OF OF MILES	AMOUNT CLAIMED
19		Rate ____ ¢		

Supersedes 1933
Form 1 Revised 1-1-54

SERVICES OTHER THAN PERSONAL

(1)

U. S. DEPARTMENT, BUREAU, OR ESTABLISHMENT AND LOCATION

DATE VOUCHER PREPARED (3)

SCHEDULE NO.

CONTRACT NUMBER AND DATE (4)

PAID BY

REQUISITION NUMBER AND DATE

PAYEE'S NAME AND ADDRESS (5)

DATE INVOICE RECEIVED

DISCOUNT TERMS

PAYEE'S ACCOUNT NUMBER

SHIPPED FROM | TO | WEIGHT

GOVERNMENT B/L NUMBER

NUMBER AND DATE OF ORDER	DATE OF DELIVERY OR SERVICE	ARTICLES OR SERVICES (Enter description, item number of contract or Federal supply schedule, and other information deemed necessary)	QUANTITY	UNIT PRICE COST	UNIT PRICE PER	AMOUNT
		(6)				(6)

(Use continuation sheet(s) if necessary) (Payee must NOT use the space below) TOTAL (6)

PAYMENT:
- ☐ COMPLETE
- ☐ PARTIAL
- ☐ FINAL
- ☐ PROGRESS
- ☐ ADVANCE

APPROVED FOR = $

EXCHANGE RATE = $1.00

DIFFERENCES

BY

TITLE

Amount verified; correct for

(Specify or initials)

Pursuant to authority vested in me, I certify that this voucher is correct and proper for payment.

(Date) (Authorized Certifying Officer) (Title)

ACCOUNTING CLASSIFICATION

PAID BY

CHECK NUMBER | ON TREASURER OF THE UNITED STATES | CHECK NUMBER | ON (Name of bank)

CASH $ | DATE | PAYEE

PER

TITLE

* If not stated in foreign currency, insert name of currency.
* If the duties of certifying and authority to approve are combined in one person, one signature only is necessary, otherwise the approving officer will sign in the space provided, over his official title.
* When a voucher is prepared in the name of a company or corporation, the name of the person signing the company or corporate name, as well as the capacity in which he signs, must appear. For example: John Doe Company, per John Smith, Secretary, or Treasurer, as the case may be.