

ORDER FOR SUPPLIES OR SERVICES

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

1. DATE OF ORDER 2/18/99		2. CONTRACT NO. (if any)		6. SHIP TO:	
3. ORDER NO. DR-99-0149		4. REQUISITION/REFERENCE NO. 50975038		a. NAME OF CONSIGNEE U.S. Nuclear Regulatory Commission Office of Nuclear Mat'l Safety & Safegd.	
5. ISSUING OFFICE (Address correspondence to) U.S. Nuclear Regulatory Commission Division of Contracts and Property Mgt. Attn: Yvette Brown - Mail Stop T-7-1-2 Contract Management Branch 3 Washington DC 20555				b. STREET ADDRESS ATTN: C. Boyle Mail Stop T-8 A23	
7. TO:		c. CITY Washington		d. STATE DC	e. ZIP CODE 20555
a. NAME OF CONTRACTOR ATTN: William Megale				f. SHIP VIA	
b. COMPANY NAME Landauer Inc.				8. TYPE OF ORDER	
c. STREET ADDRESS 2 Science Road				<input checked="" type="checkbox"/> a. PURCHASE	
d. CITY Glenwood		e. STATE IL	f. ZIP CODE 60425-1586	<input type="checkbox"/> b. DELIVERY Except for billing instructions on the reverse, th delivery order is subject to instructions contain on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.	
9. ACCOUNTING AND APPROPRIATION DATA JOB CODE: J5263 B&R No. 95015203110 BOC: 252A FUND SOURCE: X0200 Obligation Amount: \$15,400.00				10. REQUISITIONING OFFICE NMSS Office of Nuclear Mat'l Safety & Safegd.	

11. BUSINESS CLASSIFICATION (Check appropriate box(es))			
<input type="checkbox"/> a. SMALL	<input checked="" type="checkbox"/> b. OTHER THAN SMALL	<input type="checkbox"/> c. DISADVANTAGED	<input type="checkbox"/> d. WOMEN-OWNED
12. F.O.B. POINT Destination		14. GOVERNMENT B/L NO.	15. DELIVER TO F.O.B. POINT ON OR BEFORE
13. PLACE OF		16. DISCOUNT TERMS	
a. INSPECTION	b. ACCEPTANCE	As stated below	
		Net 30	

17. SCHEDULE (See reverse for Rejections) See CONTINUATION Page

ITEM NO. (A)	SUPPLIES OR SERVICES (B)	QUANTITY ORDERED (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)	QUANTITY ACCEPTED (G)
	<p>This is a firm-fixed-price, requirements type purchase order for whole body, thermo-luminescent dosimeters (TLDs) to the U.S. Nuclear Regulatory Commission (NRC). All work shall be performed in accordance with the attached Statement of Work (Attachment 1).</p> <p>The period of performance of this purchase order shall be one (1) year, March 11, 1999 through March 10, 2000. The terms of this order may be extended at the option of the government for an additional 4 one-year option periods at the same firm-fixed-rates as the base year (See Price Schedule for dosimeter/service, quantities and unit price).</p> <p>The amount presently obligated with respect to this purchase order is \$15,400.00. This obligated amount may be unilaterally increased from time to time by the Contracting Officer by written modification to this purchase order. Any work undertaken by the vendor in excess of the obligated amount specified above is done so at the vendor's sole risk.</p>					

SEE BILLING INSTRUCTIONS ON REVERSE	18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		\$.00	17(h) TOT.. (Cont. pages)	
	21. MAIL INVOICE TO:								
	a. NAME U.S. Nuclear Regulatory Commission Office of the Chief Financial Officer							\$15,400.00	17(i). GRAND TOTAL
	b. STREET ADDRESS (or P.O. Box) Attn: GOV/COM Acctng. Section T-9H4								
c. CITY Washington		d. STATE DC	e. ZIP CODE 20555						

22. UNITED STATES OF AMERICA
BY (Signature)

Barbara Neenan

23. NAME (Typed)
for Sharon D. Stewart

TITLE: CONTRACTING/ORDERING OFFICER

A12

**ORDER FOR SUPPLIES OR SERVICES
SCHEDULE - CONTINUATION**

PAGE NO.
2

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER	CONTRACT NO.	ORDER NO. <p align="right">DR-99-0149</p>
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ITEM NO. (A)	SUPPLIES OR SERVICES (B)	QUANTITY ORDERED (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)	QUANTITY ACCEPTED (G)
	PRICE SCHEDULE: Base Year and all Option Years:					
1	Beta-gamma dosimeter Landauer Type P	4,000	EA	2.50		
2	Beta-gamma-neutron dosimeter Landauer Type J	500	EA	6.50		
3	Environmental TLD Type X9	80	EA	25.00		
4	TLD Finder - estimated Landauer Type U	10	EA	1.85		
5	Emergency processing - estimated	10	EA	No Charge		
6	Replacement of lost or damaged dosimeters or holders - estimated	50	EA	2.00		
7	One time set-up charge for 1,000 employees	1	EA	No Charge		
8	Duplicate printouts - estimated per page	260	PG	No Charge		
	<p>This purchase order incorporates the following clause in full text: "Requirements" (Attachment 2)</p> <p>The government may extend the term of this purchase order by written notice to the contractor within sixty (60) days; provided, that the government shall give the contractor a preliminary written notice of its intent to extend at least 60 days before the purchase order expires. The preliminary notice does not commit the government to an extension. If the government exercises the option, the extended purchase order shall be considered to include the option provision.</p> <p>The total duration of this purchase order, including the exercise of all options under this clause, shall not exceed five (5) years.</p> <p>NRC Project Officer: Carolyn Boyle - 301-415-7818</p>					

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H)) 00

**Statement of Work
NRC Personnel Monitoring Program**

1. Background

The U.S. Nuclear Regulatory Commission (NRC) is a Federal regulatory agency with approximately 1000 personnel (mostly inspectors) monitored with personnel dosimeters. Personnel are located in a headquarters office, 4 regional offices, and resident inspectors that are located at large reactor and fuel cycle facilities throughout the U.S. NRC personnel are exposed to a wide variety of radionuclides during inspections and site visits at NRC-licensed facilities and field sites where NRC licensed operations are being conducted. Most dosimeters are exchanged on a quarterly basis with a small number exchanged on a monthly basis.

2. Statement of Work

- (a) **Dosimeter specifications** - The Contractor shall provide a total of 4,500 whole body dosimeters to the NRC. Each dosimeter shall be capable of detecting beta-gamma radiation as specified below. Of the 4,500 dosimeters, 500 shall have the additional capability of detecting neutrons with a fission energy spectrum similar to that found in reactor facilities with energies equal to or greater than 50 keV. Neutron dosimeters shall meet the performance criteria of ANSI N319 (latest revision). Control dosimeters for emergency returns, regular returns, and late returns will be provided with each shipment. Additional control dosimeters shall be provided as requested. The Contractor shall supply the appropriate holders and all necessary instructions for the proper use of the dosimeters. The dosimeters should be designed for "clip-on" attachment to a worker's clothing.

Radiation	Energy Range	Dose Range	Error Limits
x-ray, gamma	0.01 - 10 MeV	0.001 - 500 rems	NVLAP limits
beta	>1.5 MeV	0.01 - 500 rems	NVLAP limits

- (b) **Dosimeter markings and assignment** - Each dosimeter shall be labeled with a unique serial number and the assigned wear period. The label shall have a color code for rapid identification of the wear period and the label shall be resistant to fading/smearing. Both assigned and unassigned dosimeters shall be provided as requested. Assigned dosimeters shall be labeled with the individual employee's name in addition to the serial number and wear period. NRC shall provide the Contractor with the name and social security number of each individual issued an unassigned dosimeter during the wear period in writing by regular mail, facsimile, or electronic mail. The Contractor shall perform one-time assignment of the results of these dosimeters to the appropriate individuals in accordance with the written documentation provided by NRC. Unassigned dosimeters shall remain unassigned unless a permanent assignment is requested by NRC.

- (e) **Return of dosimeters** - Each NRC office shall return dosimeters within fifteen (15) days after the end of the monitoring period. The Contractor shall notify the NRC TM if a return shipment has not been received from an NRC office within twenty (20) days after the end of a monitoring period.
- (f) **Evaluation of dosimeters** - The dosimeters shall be evaluated by the Contractor within ten (10) days after they are received at the contractor's facility. The Contractor shall notify the appropriate RSO by telephone as soon as possible, but not later than one (1) working day after the evaluation of a dosimeter if it exceeds any of the Level I doses specified below. This notification shall be by direct contact with the appropriate RSO or the RSO's designated representative (not a voice mail message). The Contractor shall transmit by overnight mail a report of the results within one (1) working day of the telephone notification. If a dosimeter evaluation exceeds any of the Level II doses or indicates gross contamination, the Contractor shall assign a physicist (or other expert who is experienced in evaluating exposure readings) to conduct a comprehensive evaluation of the dosimeter. This evaluation shall be completed and a written report provided to the appropriate RSO within one (1) working day of the telephone notification.

Investigation Levels	Level I	Level II
Whole Body	125 mrem	375 mrem
Extremity	1875 mrem	5625 mrem
Skin of whole body	750 mrem	2250 mrem

- (g) **Dosimetry reports** - The Contractor shall provide each RSO, with a copy to the NRC TM, a written report of the exposures of individuals in the RSO's office within fifteen (15) days after receipt of the dosimeters. In addition, the Contractor shall provide the NRC TM an electronic report containing the same information transmitted to individual RSO's during the previous calendar quarter within forty-five (45) days after each calendar quarter. The electronic report shall be provided on a 3.5 inch, high density diskette, standard ASCII format, with a fixed length sequential file. The data shall be structured as specified or approved by the NRC TM. The Contractor shall be prepared to change the structure of the file according to NRC specifications within thirty (30) days of receiving a written request from the NRC TM.
- (h) **Quality Assurance Provisions** - Periodically, NRC may expose dosimeters supplied by the contractor to known quantities of radiation from calibrated sources. These shall be sent to the contractor for evaluation as a quality control measure. The Contractor shall read the dosimeters and report the exposures. Failure of the Contractor to indicate the correct doses within the error limits specified shall be investigated by the contractor. The cause of the errors shall be determined and corrective action taken. Consistent disagreement of the dosimeter reading results with the known exposures under this quality control measure shall be grounds for termination of the contract.

4. NRC Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, TX 76011-8064

5. NRC Headquarters, Administrative Services Center, 11555 Rockville Pike,
Rockville, MD 20852

(b) Written dosimetry reports shall be delivered to the appropriate RSO at the addresses specified in section 2(d) above.

(c) The computer disk containing the electronic dosimetry report shall be delivered to the NRC TM, Office of Nuclear Material Safety and Safeguards, Mailstop T8-F5, 11555 Rockville Pike, Rockville, MD 20852.

5. Period of Performance

The period of performance for the work specified in this SOW shall commence with issuance of the purchase order and continue for one year. The term of this P.O. may be extended at the option of the NRC for an additional 4 one-year options.

6. Travel Requirements

There are no travel requirements for the work specified in this SOW.

52.216-21 Requirements.

REQUIREMENTS (OCT 1995)

(a) This is a requirements contract for the supplies or services specified, and effective for the period stated, in the Schedule. The quantities of supplies or services specified in the Schedule are estimates only and are not purchased by this contract. Except as this contract may otherwise provide, if the Government's requirements do not result in orders in the quantities described as 'estimated' or 'maximum' in the Schedule, that fact shall not constitute the basis for an equitable price adjustment.

(b) Delivery or performance shall be made only as authorized by orders issued in accordance with the Ordering clause. Subject to any limitations in the Limitations clause or elsewhere in this contract, the Contractor shall furnish to the Government all supplies or services specified in the Schedule and called for by orders issued in accordance with the Ordering clause. The Government may issue orders requiring delivery to multiple destinations or performance at multiple locations.

(c) Except as this contract otherwise provides, the Government shall order from the Contractor all the supplies or services specified in the Schedule that are required to be purchased by the Government activity or activities specified in the Schedule.

(d) The Government is not required to purchase from the Contractor requirements in excess of any limit on total orders under this contract.

(e) If the Government urgently requires delivery of any quantity of an item before the earliest date that delivery may be specified under this contract, and if the Contractor will not accept an order providing for the accelerated delivery, the Government may acquire the urgently required goods or services from another source.

(f) Any order issued during the effective period of this contract and not completed within that period shall be completed by the Contractor within the time specified in the order. The contract shall govern the Contractor's and Government's rights and obligations with respect to that order to the same extent as if the order were completed during the contract's effective period; provided, that the Contractor shall not be required to make any deliveries under this contract after 2 months after contract expiration.

(End of clause)

TERMS AND CONDITIONS

(APPLICABLE TO OPEN MARKET NON-COMMERCIAL SIMPLIFIED ACQUISITIONS)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make the full text available. (Clauses which are not applicable are self-deleting.)

The following terms and conditions apply to all purchase orders:

- 52.203-3 Gratuities (APR 84)
- 52.211-16 Variation in Quantity (APR 84)
- 52.213-3 Notice to Supplier (APR 84)
- 52.222-3 Convict Labor (AUG 96) (unless precluded by FAR Subpart 22.2)
- 52.222-36 Affirmative Action for Handicapped Workers (APR 84)*
- 52.223-6 Drug-Free Workplace (JAN 97) (Applicable to purchase orders with individuals valued up to the simplified acquisition threshold)
- 52.232-1 Payments (APR 84)
- 52.232-8 Discounts for Prompt Payment (MAY 97)
- 52.232-23 Assignment of Claims (JAN 86)
- 52.232-25 Prompt Payment (MAY 97)
- 52.232-33 Mandatory Information for Electronic Funds Transfer Payment (AUG 96)
- 52.233-1 Disputes Alternate I (OCT 95)
- 52.233-3 Protest after Award (AUG 96)
- 52.242-10 F.O.B. Origin—Government Bill of Lading or Prepaid Postage (APR 84)
- 52.244-6 Subcontracts for Commercial Items and Commercial Components (OCT 95)
- 52.246-1 Contractor Inspection Requirements (APR 84)
- 52.247-29 F.O.B. Origin (JUN 88)
- 52.247-34 F.O.B. Destination (NOV 91)
- 52.249-8 Default (Fixed Price Supply and Service) (APR 84)

NRC Acquisition Clauses - 48 CFR 20

- 2052.209-73 Contractor Organizational Conflict of Interest
- 2052.210-70 Brand Name Products or Equal

Additional Terms and Conditions Applicable to All Purchase Orders for Supplies

- 52.225-1 Buy American Certification (DEC 89)
- 52.225-3 Buy American Act—Supplies (JAN 94)
- 52.243-1 Changes—Fixed Price (AUG 87)

- 52.249-1 Termination for Convenience of the Government (Fixed Price) (Short Form) (APR 84)
- 52.222-20 Walsh-Healey Public Contracts Act (APR 84)*
- 52.222-21 Certification of Nonsegregated Facilities (FEB 84)*
- 52.222-25 Affirmative Action Compliance (FEB 84)
- 52.222-26 Equal Opportunity (APR 84)
- 52.222-35 Affirmative Action for Special Disabled and Vietnam Era Veterans (APR 84)*
- 52.222-37 Employment Records on Special Disabled Veterans and Veterans of the Vietnam Era (JAN 88)

Additional Terms and Conditions Applicable to Purchase Orders for Services

- 52.222-41 Service Contract Act of 1965, as Amended (MAY 89)
- 52.222-42 Statement of Equivalent Rates for Federal Hires (MAY 89) (Applicable to purchase orders valued in excess of \$2,500)
- 52.237-1 Site Visit (APR 84)
- 52.237-2 Protection of Government Buildings, Equipment and Vegetation (APR 84)
- 52.243-1 Changes—Fixed Price (AUG 87) Alternate I (Alternate II & IV, whichever is applicable)
- 52.249-4 Termination for Convenience of the Government (Services) (Short Form) (APR 84)

Additional Terms and Conditions Applicable to Construction Purchase Orders valued in excess of \$2,000

- 52.222-6 Davis-Bacon Act (FEB 95)
- 52.222-12 Contract Termination—Debarment (FEB 88)
- 52.222-13 Compliance with Davis-Bacon and Related Act Regulations (FEB 88)
- 52.222-14 Disputes Concerning Labor Standards (FEB 88)
- 52.222-15 Certification of Eligibility (FEB 88)

*Applicable to purchase orders valued in excess of \$10,000

The following attachments are only applicable to vendors not currently receiving electronic payments authorized by the NRC.

Attachments:

1. Electronic Payment
2. ACH Standard Form 3881