



DEFENSE LOGISTICS AGENCY
DEFENSE NATIONAL STOCKPILE CENTER
8725 JOHN J. KINGMAN ROAD, SUITE 3229
FT. BELVOIR, VIRGINIA 22060-6223

IN REPLY REFER TO **DNSC-C**

March 10, 2006

**AMENDMENT NUMBER 010
DLA-FERROMANGANESE-003
SOLICITATION OF OFFERS FOR HIGH CARBON FERROMANGANESE**

The above referenced solicitation for the sale of HC Ferromanganese is hereby amended to announce a solicitation of offers as follows:

1. Amendment Nos. 001 through 009 are hereby deleted in their entirety.
2. The next offering time and date will be **10:30 AM**, local time, Ft. Belvoir, VA , **Tuesday, March 28, 2006**. Accordingly, Section **A.1 Introduction (JUL 05)** is hereby deleted in its entirety and replaced with the following:

Section A.1 Introduction (MAR 06)

- a. The Defense Logistics Agency (DLA), Defense National Stockpile Center (DNSC), is soliciting offers for the sale of approximately 85,000 short tons (bulk weight) of high carbon ferromanganese in Fiscal Years 2006 and 2007 as follows:

<u>Commodity</u>	<u>FY 2006</u>	<u>FY 2007</u>
Ferromanganese	60,000 ST	25,000 ST

In the event a contract with options for future years is awarded, quantities will be set by execution of supplemental agreements. The execution of supplemental agreements under this solicitation is dependent upon sales authority for the commodity and quantities for those fiscal years.

- b. The initial offering will be held at 10:30 AM, local time, Fort Belvoir, VA on **Tuesday, March 28, 2006**. Offers must be received at the address in Section **B.2.a.** by 10:30 am, local time, Ft. Belvoir, VA. In the event DNSC is closed at the time set, offers at that time will be received at 10:30 am, local time, Ft. Belvoir, VA on the next DNSC business day.
 - c. This Solicitation supersedes Solicitation of Offers for Ferromanganese, DLA-FERROMANGANESE-001, which is hereby cancelled in its entirety.
 - d. Handling and outloading will be by and at the expense of the Contractor. (See Section **F.1.a.**).
 - e. Offers to purchase material under this Solicitation may be made for unrestricted use (Category U) or for restricted use-for export only (Category R). Offerors submitting an offer for material for export only must complete the certification at Section **I.10 Export Certification (AUG 04)**. By submission of Section **I.10**, the Offeror certifies that any material awarded for export only will not be consumed in the United States of America, Mexico, or Canada. Offers for material for unrestricted use only and for restricted use-export only will be evaluated separately. See Section **B.8**. Offerors awarded material for export use will be required to furnish a copy of the Marine Bill of Lading documenting that shipment of the material took place to other than the United States of America, Mexico, or Canada.
 - f. The Government intends to award approximately 75 percent of the total 85,000 short tons bulk weight offered for sale under Category **U (Unrestricted)**, and approximately 25 percent under Category **R (Restricted-For Export Only)**. In the event that the Government does not award the total quantity in either Category **U** or **R**, the Government will have the option to award the remaining amount in the other category if this is determined to be in the best interest of the Government.
3. Delete Section **B.3** Minimum Quantity (JAN 95) and insert the following:

Section B.3 Minimum Quantity (NOV 04)

For items greater than 4,000 short tons, the minimum offer shall be for 2,000 short tons. For items less than or equal to 4,000 short tons, the minimum offer shall be for the entire item. An offer for less than the minimum quantity may render the Offeror ineligible for award.

4. Section **B.4 Unit Pricing-High Carbon Ferromanganese (OCT 02)** is hereby deleted in its entirety and replaced with the following:

B.4 Unit Pricing-High Carbon Ferromanganese and Monthly Declaration (MAR 06)

- a. Offerors may submit a fixed price or formula price offer for either category (Unrestricted or Restricted-for Export Only). Prices for high carbon ferromanganese shall be expressed on a dollar per short ton basis.
- b. The contract period for fixed price offers shall not exceed 60 days.
- c. Formula priced offers shall be based on a set of published price quotations as set forth below. The formula selected must be used for an entire line item. Offerors shall use the following guidelines when submitting a formula price.
 - (1) A pricing formula shall be stated either as a percentage of the base price or as a base price plus or minus a specified premium or discount.
 - (2) The published quotations which establish the base price for a pricing formula shall be from only one of the following sources: *Platts Metals Week Ferromanganese MW US Standard 78% S/gt*, or *Ryan's Notes Ferrous and Nonferrous News and Prices for Ferromanganese RN 78% Imported NA Transaction*.
 - (3) The base price in the formula shall be determined by the average of the published high and low quotations from *Platts Metals Week* or *Ryan's Notes Ferrous and Nonferrous News and Prices*. The average will be calculated by adding the prices, which are effective for the calendar month, and dividing by the number of those prices. The determination as to which prices are used in calculating a monthly average will be based on the date on which the price is effective, not the date the price is published.
 - (4) The pricing date shall be the date the Contractor's monthly declaration for a specified quantity of ferromanganese is received by the Government as follows: The actual price for the material shall be determined on the pricing date and will be based on the monthly average, as determined in paragraph c.(3), above, for the previous calendar month, plus or minus any premium or discount. The Contractor shall identify each calendar month the quantity of ferromanganese to be priced for that month and confirm the calculation of the price, as specified above. The Contractor shall submit this declaration no later than the 15th calendar day of each month (see Section **E.1.b.** of this Amendment). Shipping instructions (Section **J.3** of the solicitation) for the material on a monthly declaration must be forwarded to the Contracting Officer within (5) calendar days of the pricing date. In accordance with Section **F.1.g.**, shipment must commence within ten (10) calendar days from the date the Government receives the Contractor's shipping instructions for a quantity of material.

5. Section **B.8 Evaluation of Offers-High Carbon Ferromanganese (OCT 02)** is hereby deleted in its entirety and substituted with the following:

B.8 Evaluation of Offers-High Carbon Ferromanganese (FEB 06)

a. **Unrestricted Offer Category (Category U)** - The evaluation factors are listed below in descending order of importance:

- (1) Unit price
- (2) Payment terms
- (3) Removal Schedule

b. **Restricted Offer Category (Category R) For Export Only** - The evaluation factors are listed below in descending order of importance. Offerors awarded material for export use only will be required to furnish a copy of the Marine Bill of Lading documenting that shipment of the material took place to other than the United States, Mexico, or Canada.

- (1) Unit Price
- (2) Payment Terms
- (3) Removal Schedule
- (4) Export related costs

For both categories, all evaluation factors other than unit price, when combined, are significantly less important than unit price.

c. To be considered, offers must meet the following minimum requirements:

- (1) Submission of the information requested in Section **B.1**;
- (2) Submission of pricing which complies with the provision of Section **B.4**;
- (3) Compliance with Section **B.7.d.**; and
- (4) Submission of a removal schedule which meets or exceeds the provisions of Section **E.1**.

d. The maximum acceptable payment terms are net thirty (30) calendar days from DNSC's receipt of each monthly declaration. (See Sections **B.4**, **F.1.g.** and **J.3**.)

6. Delete Section B.10 Disclosure of Information (DEC 97) and insert the following:

Section B.10 Disclosure of Information (AUG 04)

Proprietary or confidential information provided in offers/discussions/BAFOs will not be disclosed to the public or used by the Government except for evaluation purposes, unless required by law.

7. **SECTION D – PAYMENT** is hereby deleted in its entirety and replaced with the following:

SECTION D-PAYMENT

D.1 Payment (OCT 05)

- a. Payment shall be made in U.S. dollars.
- b. Payment *for material* shall be made *only* by wire transfer (Fedwire). Payment for *adjustments for variations in quantity or weight of material shipped*, storage charges, interest, penalty charges, or administrative charges may be made by wire transfer, electronic funds transfer, or company or bank check. If payments for material (other than payments for adjustments for variations in quantity or weight) are made by electronic funds transfer or check, delays in shipment will result, and the payment may be returned to the sender.
- c. Payment by wire transfer (Fedwire).
 - (1) Wire transfer payment shall be made in accordance with instructions in **Section J.4**. Fees for wire transfers are the responsibility of the Contractor. Payment shall be accompanied by **identifying information including the contract number, invoice number (if applicable), and a description of the material purchased**.
 - (2) If wire transfer payment is not made in accordance with the instructions in **Section J.4**, or if identifying information is not provided, shipment of material may be delayed by up to one week, the wire transfer may be returned to the sender or a Contractor may incur charges if payments are delinquent.
- d. Payment by electronic funds transfer.
 - (1) Electronic funds transfer payment shall be made in accordance with instructions in **Section J.4**. Any fees for electronic funds transfers are the responsibility of the Contractor. Payment shall be accompanied by **identifying information including the contract number, invoice number, and a description of the material purchased**.

(2) If payment by electronic funds transfer is not made in accordance with the instructions in **Section J.4**, or if identifying information is not provided, payment may be returned to the sender and the Contractor may incur charges if payments are delinquent.

e. Payment by company or bank check.

(1) All checks must be drawn on a U.S. domestic bank or on the United States branch of an acceptable foreign bank and must be payable in United States currency. **A service charge of \$100.00 will be applied to all returned checks.**

(2) Payment shall be made to the **Defense Finance and Accounting Service - Columbus (DFAS-Columbus)**. If a check is not made payable to DFAS-Columbus, the check may be returned and the \$100.00 fee stated in **D.1.e.(1)** charged. Payment shall be accompanied by **identifying information including the contract number, invoice number, and a description of the material purchased**. Check payments which do not have the required identification may be returned and the Contractor may incur charges if payments are delinquent. Check payments shall be sent to:

ATTN: DNSC-R, Accounts Receivable
Defense National Stockpile Center
8725 John J. Kingman Road Suite 3229
Fort Belvoir, VA 22060-6223

f. Invoices issued for adjustments for variations in quantity or weight, storage charges, interest, penalty charges, or administrative charges shall be paid promptly.

g. If payment is not made in full within 30 calendar days of issuance of an invoice as specified in **D.1.f.**, the Contractor will be considered delinquent and any outstanding charges will be reduced by any subsequent payments. No material will be released until all delinquent charges are paid. (See Sections **F.1.a.** and **G.10.**)

D.2 Payment Due Date (OCT 05)

a. Payment due dates will be applied as follows:

(1) If payment terms are not extended, payment will be made before shipment of material and before the end of the contract period specified in the executed **Section I.1 Sale of Government Property Negotiated Sales Contract (MAR 06) Unrestricted or Restricted-for Export Only**, as applicable.

(2) If payment terms are approved, the Contractor shall pay the Government the full amount of **each** shipment no later than **30** calendar days after DNSC receives current, accurate and complete Shipping Instructions. Shipping Instructions must be submitted on or before the final day of the contract period. Notwithstanding any other provision of the contract, payment is due with or without the issuance of an invoice by the Government. If the Contractor fails to make payment timely, the Contractor will be considered delinquent (see Section **D.1.g.**, **F.1.a.**, and **G.10**), and the Government, at its sole discretion, may revoke payment terms and take other appropriate action in accordance with Section **G.7**. If the Contractor fails to submit current, accurate and complete Shipping Instructions on or before the final day of the contract period, the Government will revoke payment terms and payment must be made **before** shipment of material.

b. If payment is not received by 2:00 p.m., local time Fort Belvoir, VA, on the payment due date, payment will not be credited until the next Government business day. Interest and penalty charges will accrue accordingly.

c. In the event the payment due date falls on a Saturday, Sunday, or holiday, then the payment due date will be extended to the next Government business day.

D.3 Interest (MAY 04)

- a. All amounts that become payable by the Contractor to the Government under this contract shall bear simple interest from the date due until paid. The interest rate shall be the interest rate established by the Secretary of the Treasury as provided in 41 U.S.C. 611, which is applicable to the period in which the amount becomes due, as provided in paragraph **b.**, below.
- b. Amounts shall be due at the earliest of the following dates:
- (1) The final day of the contract period specified in Section **I.1 Sale of Government Property Negotiated Sales Contract (MAR 06) Unrestricted or Restricted-for Export Only**, as applicable (with or without the issuance of an invoice by the Government);
 - (2) The date of the first written demand for payment under the contract, including any demand resulting from a default termination, unless paid within 30 days of becoming due; or
 - (3) If payment terms have been approved, **30** calendar days after the date that DNSC receives current, accurate and complete Shipping Instructions provided that Shipping Instructions are submitted on or before the final day of the contract period. If Shipping Instructions are not submitted on or before the final day of the contract period, amounts shall be due in accordance with the provisions of Section **D.3.b.(1)**.

D.4 Penalty and Administrative Charges (MAY 04)

In addition to interest charges specified in Section **D.3**, above, a penalty charge of 6 percent per annum shall be assessed on any debt principal that is delinquent more than 90 calendar days. Penalty charges shall accrue from the date the principal amount due becomes delinquent until paid. Additional administrative charges may be assessed, if needed. Administrative charges relate only to delinquent debts and will be assessed to cover expenses incurred by the Government in the recovery of such debts.

8. Section **E.1 Removal of Material (JAN 02)** is deleted in its entirety and is substituted with the following:

E.1 Removal of Material (MAR 06)

a. The following pertains to fixed price contracts:

- (1) The contract period begins on the date of contract award and shall expire 60 calendar days from the date of contract award.
- (2) If the Contractor fails to pay for and remove the material on or before the last day of the contract period, Contractor will be considered delinquent and no material will be shipped until payment for all remaining material has been received. (See paragraph **b.(3)** below).
- (3) The contract period includes Saturdays, Sundays and holidays. If the last day of the contract period is a Saturday, Sunday or holiday, or the storage location is otherwise closed that day, the period of contract performance will be extended to the next Government workday.

b. The following pertains to formula price contracts:

- (1) The contract period is based on the quantity of material awarded and begins on the date of contract award. The contract periods are as follows:

<u>Quantity Awarded in ST</u>	<u>Removal Period in Calendar Days</u>
Less than 6,000 ST	60 Days
6,001-9,000 ST	90 Days
9,001-12,,000 ST	120 Days
12,001 ST and above	180 Days

(2) The contract period begins on the date of contract award and shall expire as outlined in Section **E.1.b.** No later than the fifteenth (15th) calendar day of each calendar month, the Contractor shall furnish the Contracting Officer, in writing, a declaration of the quantity of material to be priced for that month. This quantity declared shall be for at least the minimum and not more than the maximum as detailed in the contract removal schedule. The Contractor shall have 45 calendar days from the date the declaration is received by the Government to remove the declared quantity of material except that all material under the contract must be removed within the contract period. The schedule of these minimum and maximum monthly quantities shall be contained in the completed Section **I.3 Offeror's Proposed Removal Schedule-High Carbon Ferromanganese (MAR 06)** which shall be a part of this contract. Should a Contractor be awarded a quantity different than proposed in the schedule, the Government reserves the right to establish a monthly minimum and maximum 1/6th of the contract quantity +/- 10%.

(3) If the Contractor fails to: (1) submit the monthly declaration by the 15th calendar day of the month and make payment in accordance with Section **D**; or (2) remove the minimum quantity in accordance with Section **I.3** and **paragraph b.(2)** above, the Contractor shall be considered delinquent and no material will be shipped until payment has been received for either the minimum monthly quantity or the declared quantity, whichever is greater. If the Contractor has failed to complete removal of all of the material on or before the last day of the contract period, the Contractor will be considered delinquent and no material will be shipped until payment for all remaining material has been received.

(4) The contract period and the 45-calendar day period following the submission of a declaration include Saturdays, Sundays and holidays. If the last day of either period is a Saturday, Sunday or holiday, or the storage location is otherwise closed on those days, the period of contract performance or the 45-calendar day period will be extended to the next Government workday

9. Section **E.2 Storage Charges (JUL 97)** is hereby deleted and substituted with the following:

E.2 Storage Charges (MAR 06)

- a. Storage charges shall be assessed on (1) all material remaining unshipped from a monthly declaration after the 45-calendar day period following the receipt of the declaration by the Government and/or (2) any and all material remaining unshipped after the last day of the contract period, as applicable. The Government reserves the right to remove any remaining material to a commercial storage facility and be reimbursed by the Contractor for any expenses incurred. Storage charges continue to accrue until all the material has been removed in accordance with the monthly declaration or the end of the contract period, as applicable, or the contract is terminated for default, in which case the Contractor will be liable for damages, as set forth in Section **G.7 Default** of Solicitation.
- b. The storage charge is the greater of the following: (1) \$0.005 per ST or (if a fraction of a ton remains, the charge will be for a full ton) per 30 day period regardless of whether the material remains in storage a period of 30 days or less than 30 days; or (2) commercial storage charges, if applicable.
- c. Storage charges will be invoiced upon shipment. Payment shall be made promptly.
- d. Payment of storage charges shall not relieve the Contractor of its obligation to remove the material in a timely manner. Acceptance of storage payments by the Government is not a waiver of the Government's right to default the Contractor for failure to remove the material (See Section **G.7 Default**.)

10. Add the following as Section F.7 Accident Reporting (AUG 04).

F.7 Accident Reporting (AUG 04)

In the event of an accident involving the Contractor, its employees, subcontractors or any person subject to the Contractor's control, that results in the preparation of an accident report by the Contractor, its subcontractors or any person or entity subject to the Contractor's control, a copy of the accident report shall be forwarded to the Contracting Officer no later than 10 calendar days after the day the accident occurred.

11. Section **G.10 Setoff of Funds (JUL 98)** is hereby deleted in its entirety and replaced with the following:

G.10 Setoff of Funds (MAY 04)

The Contractor agrees that the Government may use all or a portion of any monies received by the Government to satisfy, in whole or in part, any debt (e.g., delinquent payments, interest, penalty charges, administrative charges, or storage charges), arising out of this or any other transaction.

12. Delete Section **I.1 Sale of Government Property Negotiated Sales Contract (OCT 02)** and replace with attached Section **I.1 Sale of Government Property Negotiated Sales Contract (MAR 06) UNRESTRICTED**, and Section **I.1 Sale of Government Property Negotiated Sales Contract (MAR 06) RESTRICTED—FOR EXPORT ONLY**.

13. Delete Section **I.2 Item Offer Page – DLA FERROMANGANESE-003 (OCT 02)** and replace with the attached Section **I.2 Item Offer Page – DLA-FERROMANGANESE-003 (MAR 06)**.

14. Section **I.3 Anticipated Removal Schedule-High Carbon Ferrromanganese (OCT 02)** is hereby deleted and replaced with the attached Section **I.3 Offeror’s Proposed Removal Schedule-High Carbon Ferrromanganese (MAR 06)**.

15. Delete Section **J.1 Analyses (OCT 02)** and add the attached Section **J.1 Analyses (MAR 06)**.

16. Delete Section **J.2 Storage Location (OCT 02)** and add the attached Section **J.2 Storage Locations (MAR 06)**.

17. Section **J.4 Fedwire Procedures (JAN 95)** is hereby deleted in its entirety and replaced with the attached Section **J.4 FEDWIRE AND ELECTRONIC FUNDS TRANSFER PROCEDURES (OCT 05, Rev.)**.

18. Delete Section **J.5 Material Safety Data Sheet (OCT 02)** and add the attached Section **J.5 Material Safety Data Sheet (JUN 05)**.

19. Offerors shall acknowledge receipt of this Amendment by signing in the space provided below and returning a copy of this Amendment along with their offer to: ATTN: DNSC-R/Bid Custodian, Defense National Stockpile Center, 8725 John J. Kingman Road, Suite 3229, Fort Belvoir, VA 22060-6223. Facsimile number is (703)767-5541.

20. Failure to acknowledge receipt of this Amendment may result in an Offeror being ineligible for award. Except as provided herein, all other terms and conditions of DLA-FERROMANGANESE-003 remain unchanged and in full force and effect.

<u>NAME OF FIRM</u>	_____
<u>ADDRESS</u>	_____
<u>TELEPHONE</u>	_____
<u>FACSIMILE</u>	_____
<u>COMPLETED BY</u>	_____
<u>SIGNATURE</u>	_____
<u>TITLE</u>	_____
<u>DATE</u>	_____
<u>EMAIL</u>	_____

COMPLETE AND RETURN ALL OF THE FOLLOWING WITH YOUR OFFER, UNLESS ANNUAL REPRESENTATIONS, CERTIFICATIONS, AND IDENTIFICATIONS HAVE BEEN SUBMITTED THIS FISCAL YEAR, THEN SUBMIT I.1, I.2, I.3, I.4, and I.5 ONLY:

*Note: I.10 should be submitted with offers to be considered for Category (R) Restricted-for Export Only.

- I.1 Sale of Government Property Negotiated Sales Contract (MAR06) UNRESTRICTED
- I.1 Sale of Government Property Negotiated Sales Contract (MAR 06) RESTRICTED-FOR EXPORT ONLY
- I.2 Item Offer Page - DLA-FERROMANGANESE-003 (MAR 06)
- I.3 Offeror's Proposed Removal Schedule (MAR 06)
- I.4 Certificate of Independent Price Determination (JAN 01)
- I.5 Certification Regarding Debarment, Suspension, Proposed Debarment, Environmental Compliance, and Other Responsibility Matters (JUL 97)
- I.6 Type of Business Organization (APR 96)
- I.7 Authorized Negotiators (JUN 95)
- I.8 Persons Authorized to Request Shipment of Material (FEB 98)
- I.9 Offeror's Billing Address (JUL 95)
- I.10 Export Certification (AUG 04)

I.1 Sale of Government Property Negotiated Sales Contract (MAR 06) UNRESTRICTED

SALE OF GOVERNMENT PROPERTY NEGOTIATED SALES CONTRACT		CONTRACT NUMBER	PAGE 1 OF		
<p>This contract is entered into by and between the United States of America, hereinafter called the "Government," represented by the Contracting officer executing this contract and the Contractor below identified. The Government agrees to sell and the Contractor agrees to buy the material described below in accordance with the terms and conditions of DLA-FERROMANGANESE-003. In the event of a conflict between the terms of the Solicitation and the Negotiated Sales Contract, the terms of the Negotiated Sales Contract shall govern.</p>					
ITEM	PROPERTY DESCRIPTION AND LOCATION	QUANTITY (No. of Unit(s))	UNIT	UNIT PRICE	AMOUNT
EXECUTION BY CONTRACTOR			EXECUTION BY GOVERNMENT		
DATE (Day, Month, Year)			UNITED STATES OF AMERICA BY:		DATE:
NAME OF CONTRACTOR					
ADDRESS (Street, City, State & Zip Code) (Type or Print)			NAME AND TITLE OF CONTRACTING OFFICER		
Telephone Number:					
Facsimile Number					
Email Address:					
SIGNATURE AND TITLE OF PERSON AUTHORIZED TO SIGN THIS CONTRACT (Type or print name and title under signature)					

I.1 Sale of Government Property Negotiated Sales Contract (MAR 06) RESTRICTED— FOR EXPORT ONLY

SALE OF GOVERNMENT PROPERTY NEGOTIATED SALES CONTRACT		CONTRACT NUMBER	PAGE 1 OF		
<p>This contract is entered into by and between the United States of America, hereinafter called the "Government," represented by the Contracting officer executing this contract and the Contractor below identified. The Government agrees to sell and the Contractor agrees to buy the material described below in accordance with the terms and conditions of DLA-FERROMANGANESE-003. In the event of a conflict between the terms of the Solicitation and the Negotiated Sales Contract, the terms of the Negotiated Sales Contract shall govern.</p>					
ITEM	PROPERTY DESCRIPTION AND LOCATION	QUANTITY (No. of Unit(s))	UNIT	UNIT PRICE	AMOUNT
EXECUTION BY CONTRACTOR			EXECUTION BY GOVERNMENT		
DATE (Day, Month, Year)			UNITED STATES OF AMERICA BY:		DATE:
NAME OF CONTRACTOR					
ADDRESS (Street, City, State & Zip Code) (Type or Print)			NAME AND TITLE OF CONTRACTING OFFICER		
Telephone Number:					
Facsimile Number					
Email Address:					
SIGNATURE AND TITLE OF PERSON AUTHORIZED TO SIGN THIS CONTRACT (Type or print name and title under signature)					

I.3 Offeror's Proposed Removal Schedule - High Carbon Ferromanganese (MAR 06)

Offerors must specify both a minimum and maximum removal weight per 30-day period based on the percentage of the offer (or subsequent award) weight.

Minimum Removal Weight Percentage	Maximum Removal Weight Percentage	Monthly Removal Month & Year

*Note: Offerors must enter a quantity greater than zero minimum weight.

I.4 Certificate of Independent Price Determination (JAN 01)

a. The offeror certifies that:

- (1) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other Offeror or competitor relating to (i) those prices, (ii) the intention to submit an offer, or (iii) the methods or factors used to calculate the prices offered;
- (2) The prices in this offer have not been and will not be knowingly disclosed by the Offeror, directly or indirectly, to any other Offeror or competitor before bid opening (in the case of a sealed bid solicitation) or contract award (in the case of a negotiated solicitation) unless otherwise required by law; and
- (3) No attempt has been made or will be made by the Offeror to induce any other concern to submit or not to submit an offer for the purpose of restricting competition.

b. Each signature on the offer is considered to be a certification by the signatory that the signatory:

- (1) Is the person in the Offeror's organization responsible for determining the prices being offered in this bid or offer, and that the signatory has not participated and will not participate in any action contrary to subparagraphs a.(1) through a.(3) above; or
- (2)(i) Has been authorized, in writing, to act as agent for the following principals in certifying that those principals have not participated, and will not participate in any action contrary to subparagraphs a.(1) through a.(3), above

(insert full name of person(s) in the Offeror's organization responsible for determining the prices offered in this bid or offer, and the title of his or her position in the Offeror's organization);

- (ii) As an authorized agent, does certify that the principals named in subdivision b.(2)(i) above have not participated, and will not participate, in any action contrary to subparagraphs a.(1) through a.(3) above; and
- (iii) As an agent, has not personally participated, and will not participate, in any action contrary to subparagraphs a. (1) through a. (3) above.

c. If the Offeror deletes or modifies subparagraph a.(2) above, the Offeror must furnish with its offer a signed statement setting forth in detail the circumstances of the disclosure.

I.5 Certification Regarding Debarment, Suspension, Proposed Debarment, Environmental Compliance and Other Responsibility Matters (JUL 97)

a.(1) The Offeror certifies, to the best of its knowledge and belief, that -

(i) The Offeror and/or any of its Principals -

- (A) Are are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;
- (B) Have have not , within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (C) Are are not presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in subdivision a. (1)(i)(B) of this provision.

- (D) Are are not presently indicted for or otherwise criminally or civilly charged by a Federal, state or local entity with violation of any environmental laws; and
- (E) Have have not within the three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for violation of a Federal, state or local environmental statute or regulation.
- (ii) The Offeror has has not , within a three-year period preceding this offer, had one or more contracts terminated for default by any Federal agency.
- (2) "Principals," for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions).
- (3) If the Offeror answers affirmatively to **(a)(1)**, above, the Offeror shall include in its offer an explanation of the circumstances, including the outcome.

This certification concerns a matter within the jurisdiction of an agency of the United States and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under section 1001, title 18, United States Code.

- b. The Offeror shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- c. A certification that any of the items in paragraph **a.** of this provision exists will not necessarily result in withholding of an award under this Solicitation. However, the certification will be considered in connection with a determination of the Offeror's responsibility. Failure of the Offeror to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Offeror nonresponsible.
- d. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph **a.** of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- e. The certification in paragraph **a.** of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly rendered an erroneous certification, in addition to the other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this Solicitation for default.

I.6 Type of Business Organization (APR 96)

The Offeror represents that--

- a. It operates as a corporation incorporated under the laws of the State of _____, an individual, a partnership, a nonprofit organization, or a joint venture.
- b. If the Offeror is a foreign entity, it operates as an individual, a partnership, a nonprofit organization, a joint venture, or a corporation registered for business in _____ (country)
- c. If the Offeror is a corporation, it is independent (not owned or controlled by another company), owned or controlled by _____ corporation company registered for business in _____ (state/country).
- d. If the Offeror is owned or controlled by another, state the relationship (e.g., wholly owned subsidiary, etc.):

- e. The Offeror agrees to provide additional information relating to the above representations if requested to do so by the Contracting Officer.

I.7 Authorized Negotiators (JUN 95)

The Offeror represents that the following individuals are authorized to negotiate on its behalf.

TYPED NAME	TITLE	TELEPHONE NO.

I.8 Persons Authorized to Request Shipment of Material (FEB 98)

The Offeror shall provide the name(s), title(s), signature(s), and telephone number(s) of representative(s) authorized to sign Section **J.3 Shipping Instructions**:

TYPED NAME	SIGNATURE	TITLE	TELEPHONE NO.

I.9 Offeror's Billing Address (JUL 95)

The Offeror shall provide its billing address and billing facsimile number below.

FAX: _____ EMAIL: _____

I.10 Export Certification (AUG 04)

- a. By completion of this certification, the Offeror agrees that the ferromanganese purchased under this contract will be for export only and will not be consumed in The United States of America, Mexico, or Canada. The Offeror agrees to furnish to the Defense National Stockpile Center a copy of the Marine Bill of Lading documenting that shipment of the material took place to other than the United States, Mexico, or Canada.
- b. The Offeror further agrees that failure to comply with this certification may render any contract resulting from this solicitation as eligible for termination for default in accordance with Section **G.7 Default (JAN 02)**.
- c. The Offeror certifies that any ferromanganese awarded for export use will be exported outside of The United States of America, Canada, and Mexico. Additionally, if the Contractor violates this certification, the Contractor may be determined by DNSC to be ineligible to participate in future offerings of this or any other material offered for sale by the Defense National Stockpile Center.

COMPANY NAME

NAME OF COMPANY OFFICIAL

POSITION/TITLE

SIGNATURE

DATE

SECTION J - LIST OF ATTACHMENTS

J.1 Analyses (MAR 06)

J.2 Storage Locations (MAR 06)

J.4 Fedwire and Electronic Funds Transfer Procedures (OCT 05, Rev.)

J.5 Material Safety Data Sheet (JUN 05)

J.1 Analyses of Material (MAR 06)

Item #	Location	Pile	Grade	Net Weight (ST)	Origin	Mn	C	SI	P	S	Fe	As	Sn	Pb
80	New Haven, IN	42	B	2,183.00	Canada	76.18%	6.57%	0.53%	0.31%	0.01%	16.39%			0.014%
83	Marietta, OH	20	B	33,762.00	Domestic	76.66%	6.68%	0.34%	0.21%	0.01%		0.138%	0.009%	
84	New Haven, IN	28	A	2,662.00	France	78.08%	6.23%	0.63%	0.19%	0.01%	14.86%			
85	New Haven, IN	34	A	1,102.00	Norway	78.49%	6.85%	0.36%	0.25%	0.01%	14.04%			
86	New Haven, IN	45	B	325.00	Japan	76.03%	6.51%	0.33%	0.21%	0.01%	16.91%			
87	New Haven, IN	80	A	814.00	France	78.74%	6.62%	1.11%	0.14%	0.01%	13.38%			
88	New Haven, IN	76	B	4,135.00	Germany	76.02%	6.80%	0.38%	0.21%	0.01%	16.58%			
89	Curtis Bay, MD	18	B	896.00	France	77.36%	6.53%	0.91%	0.23%	0.02%	14.95%			
90	Curtis Bay, MD	26	B	45,229.00	France	77.01%	6.54%	0.77%	0.19%	0.01%	15.42%			

J.2 Storage Locations (MAR 06)

Location	Operational Status	Days	Hours	Accessibility	Responsible Depot	Depot Manager
Curtis Bay, MD	Un-Staffed	Monday -	1200 - 1430	Truck / Rail	Binghamton, NY	Bill Guiton Phone: (607) 773-2602
		Tuesday - Thursday	0700 - 1430			
		Friday -	0700 - 1000			
Note 1: Prior arrangements must be made before shipping. Note 2: Truck Scale is available (weight capacity-200,000 Lbs).						Phone: (607) 773-2602
<hr/>						
Location	Operational Status	Days	Hours	Accessibility	Responsible Depot	Depot Manager
Marietta, OH	Un-Staffed	Monday -	1230 - 1600	Truck / Rail	Warren, OH	Jack Pittano Phone: (330) 652-1456
		Tuesday - Thursday	0700 - 1600			
		Friday -	0700 - 1200			
Note 1: Prior arrangements must be made before shipping.						Phone: (304) 675-3410
<hr/>						
Location	Operational Status	Days	Hours	Accessibility	Responsible Depot	Depot Manager
New Haven, IN	Staffed	Monday - Thursday	0730 - 1500	Truck / Rail	Hammond, IN	John Olszewski Phone: (219) 937-5383 Ext. 104
		Friday	0730 - 1430			
Note 1: Prior arrangements must be made before shipping. Note 2: Truck and Rail Scale is available (weight capacity-360,000 Lbs).						Phone: (260) 749-9544

Point of Contact

Defense Logistics Agency
 Defense National Stockpile Center
 Attn: Charles Harder
 8725 John J. Kingman Road, Suite 3229
 Fort Belvoir, VA 22060-6223

Telephone Number: (703) 767-1163
 Facsimile Number: (703) 767-7608

J.6 FEDWIRE AND ELECTRONIC FUNDS TRANSFER PROCEDURES (OCT 05, Rev.)

Fedwire (wire transfer)

The Sender must use a bank that offers Fedwire funds transfer capability. Information regarding Fedwire, including listings of Fedwire funds transfer participants, may be found at <http://www.frbervices.org>.

To ensure the funds are credited to the Defense National Stockpile Center the following information is required for any wire transfer of funds.

1. Bank Name, Location, and Routing Number.

Bank Name: TREAS NYC
Location: New York, NY
Routing Number: 021030004

2. Amount of funds to be transferred.

3. Beneficiary Name: 6355
DFAS/DNSC

4. Third Party Information – Contractor’s Name, Commodity, and Contract Number.

NOTE: (Under Item 3, the number 6355 is the ALC = Agency Location Code (this is the same as account number)

Electronic Funds Transfer

The following information is required for payments made through electronic funds transfer.

1. Bank Name, Location, Bank Number, SWIFT Code, and Account Number.

Bank Name: Mellon Bank
Location: Pittsburgh, PA
Bank Number: 043000261
Bank SWIFT Code: MELNUS3P
Account Number: 910-1027

2. Amount of funds to be transferred.

3. Beneficiary Name: Department of Defense DFAS

4. Addendum Information: Payment for DNSC Contract No. _____
Invoice No. _____

J.5 MATERIAL SAFETY DATA SHEET (JUN 05)

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

DEFENSE LOGISTICS AGENCY
DEFENSE NATIONAL STOCKPILE CENTER
8725 JOHN J. KINGMAN ROAD
SUITE 3339
FORT BELVOIR, VA 22060-6223

EMERGENCY TELEPHONE NUMBER:
1-800-424-9300 (NORTH AMERICA)
1-703-527-3887 (INTERNATIONAL)

SUBSTANCE: FERROMANGANESE, HIGH CARBON

TRADE NAMES/SYNONYMS:
DLANA389

CREATION DATE: Jul 24 1992
REVISION DATE: Jun 16 2005

2. COMPOSITION, INFORMATION ON INGREDIENTS

COMPONENT: MANGANESE
CAS NUMBER: 7439-96-5
EC NUMBER (EINECS): 231-105-1
PERCENTAGE: 76.0-78.0

COMPONENT: CARBON
CAS NUMBER: 7440-44-0
EC NUMBER (EINECS): 231-153-3
PERCENTAGE: <7.50

COMPONENT: SILICON
CAS NUMBER: 7440-21-3
EC NUMBER (EINECS): 231-130-8
PERCENTAGE: <1.00

COMPONENT: PHOSPHORUS, WHITE
CAS NUMBER: 7723-14-0
EC NUMBER (EINECS): 231-768-7
PERCENTAGE: <0.95

COMPONENT: ARSENIC
CAS NUMBER: 7440-38-2
EC NUMBER (EINECS): 231-148-6
PERCENTAGE: <0.90

COMPONENT: CHROMIUM
CAS NUMBER: 7440-47-3
EC NUMBER (EINECS): 231-157-5
PERCENTAGE: <0.50

COMPONENT: OXYGEN, COMPRESSED GAS
CAS NUMBER: 7782-44-7
EC NUMBER (EINECS): 231-956-9
PERCENTAGE: <0.50

COMPONENT: SULFUR
CAS NUMBER: 7704-34-9
EC NUMBER (EINECS): 231-722-6
PERCENTAGE: <0.05

COMPONENT: LEAD
CAS NUMBER: 7439-92-1
EC NUMBER (EINECS): 231-100-4
PERCENTAGE: <0.05

COMPONENT: TIN
CAS NUMBER: 7440-31-5
EC NUMBER (EINECS): 231-141-8
PERCENTAGE: <0.02

3. HAZARDS IDENTIFICATION

NFPA RATINGS (SCALE 0-4): HEALTH=1 FIRE=0 REACTIVITY=1



EMERGENCY OVERVIEW:

PHYSICAL DESCRIPTION: Hard, dense lumps.

MAJOR HEALTH HAZARDS: nerve damage, cancer hazard (in humans)

PHYSICAL HAZARDS: Negligible fire and explosion hazard in bulk form. Dust/air mixtures may ignite or explode. Contact with water or moist air may generate flammable and/or toxic gases.

POTENTIAL HEALTH EFFECTS:

INHALATION:

SHORT TERM EXPOSURE: irritation, changes in body temperature, nausea, vomiting, diarrhea, headache

LONG TERM EXPOSURE: irritation, loss of appetite, difficulty breathing, disorientation, difficulty speaking, sleep disturbances, emotional disturbances, hallucinations, mood swings, tremors, muscle cramps, loss of coordination, hearing loss, visual disturbances, lung damage, blood disorders, kidney damage, liver damage, nerve damage, cancer

SKIN CONTACT:

SHORT TERM EXPOSURE: irritation

LONG TERM EXPOSURE: irritation, cancer

EYE CONTACT:

SHORT TERM EXPOSURE: irritation

LONG TERM EXPOSURE: irritation

INGESTION:

SHORT TERM EXPOSURE: gastrointestinal irritation, nausea, vomiting, diarrhea

LONG TERM EXPOSURE: drowsiness, cancer

CARCINOGEN STATUS:

OSHA: Yes

NTP: Yes

IARC: Yes

4. FIRST AID MEASURES

INHALATION: If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.

SKIN CONTACT: Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse.

EYE CONTACT: Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.

INGESTION: If a large amount is swallowed, get medical attention.

5. FIRE FIGHTING MEASURES

FIRE AND EXPLOSION HAZARDS: Negligible fire and explosion hazard in bulk form. Dust/air mixtures may ignite or explode.

EXTINGUISHING MEDIA: dolomite, dry powder for metal fires, dry sand, graphite, soda ash, sodium chloride

FIRE FIGHTING: Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Stay away from the ends of tanks. For fires in cargo or storage area: Cool containers with water from unmanned hose holder or monitor nozzles until well after fire is out. If this is impossible then take the following precautions: Keep unnecessary people away, isolate hazard area and deny entry. Let the fire burn. Use extinguishing agents appropriate for surrounding fire. Avoid inhalation of material or combustion by-products.

6. ACCIDENTAL RELEASE MEASURES

WATER RELEASE:

Subject to California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65). Keep out of water supplies and sewers.

OCCUPATIONAL RELEASE:

Collect spilled material in appropriate container for disposal. Notify Local Emergency Planning Committee and State Emergency Response Commission for release greater than or equal to RQ (U.S. SARA Section 304). If release occurs in the U.S. and is reportable under CERCLA Section 103, notify the National Response Center at (800)424-8802 (USA) or (202)426-2675 (USA).

7. HANDLING AND STORAGE

STORAGE: Store and handle in accordance with all current regulations and standards. See original container for storage recommendations. Keep separated from incompatible substances.

HANDLING: Use methods to minimize dust.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS:

MANGANESE:

MANGANESE AND COMPOUNDS (as Mn):

5 mg/m³ OSHA ceiling (metal) (fume) (compounds)

1 mg/m³ OSHA TWA (particulate) (vacated by 58 FR 35338, June 30, 1993)

3 mg/m³ OSHA STEL (particulate) (vacated by 58 FR 35338, June 30, 1993)

0.2 mg/m³ ACGIH TWA (metal and inorganic compounds)

1 mg/m³ NIOSH recommended TWA 10 hour(s) (metal) (fume) (compounds)

3 mg/m³ NIOSH recommended STEL (metal) (fume) (compounds)

0.5 mg/m³ DFG MAK (peak limitation category - I, with excursion factor of 1) (inhalable fraction) (metal and inorganic compounds)

0.5 mg/m³ UK WEL TWA (metal) (inorganic compounds)

0.5 mg/m³ UK WEL TWA (metal and inorganic compounds)

MEASUREMENT METHOD: Particulate filter; Acid; Inductively coupled plasma; NIOSH IV # 7300, Elements

ARSENIC:

10 ug/m³ OSHA TWA

0.01 mg/m³ ACGIH TWA

0.002 mg/m³ NIOSH recommended ceiling 15 minute(s)

0.1 mg/m³ UK WEL TWA

MEASUREMENT METHOD: Particulate filter; Acid; Hydride generation atomic absorption spectrometry; NIOSH IV # 7900; ALSO # 7300, Elements

VENTILATION: Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

EYE PROTECTION: Wear splash resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

CLOTHING: Wear appropriate chemical resistant clothing.

GLOVES: Wear appropriate chemical resistant gloves.

RESPIRATOR: Under conditions of frequent use or heavy exposure, respiratory protection may be needed. Respiratory protection is ranked in order from minimum to maximum. Consider warning properties before use.

Any dust, mist, and fume respirator.

Any air-purifying respirator with a high-efficiency particulate filter.

Any powered, air-purifying respirator with a dust, mist, and fume filter.

Any powered, air-purifying respirator with a high-efficiency particulate filter.

For Unknown Concentrations or Immediately Dangerous to Life or Health -

Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply.

Any self-contained breathing apparatus with a full facepiece.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DESCRIPTION: Hard, dense lumps.

BOILING POINT: Not applicable

MELTING POINT: Not available

VAPOR PRESSURE: Not applicable

VAPOR DENSITY: Not applicable

SPECIFIC GRAVITY: Not available

WATER SOLUBILITY: Not available

PH: Not applicable

VOLATILITY: Not applicable

ODOR THRESHOLD: Not available

EVAPORATION RATE: Not applicable

COEFFICIENT OF WATER/OIL DISTRIBUTION: Not available

10. STABILITY AND REACTIVITY

REACTIVITY: Stable at normal temperatures and pressure. Contact with water or moist air may form flammable and/or toxic gases or vapors.

CONDITIONS TO AVOID: None reported.

INCOMPATIBILITIES: metals, oxidizing materials, halogens, peroxides, combustible materials, acids, reducing agents

MANGANESE:

ALUMINUM (DUST): Forms explosive mixtures with air.

AMMONIUM NITRATE (FUSED): Violent or explosive reaction.

BROMINE PENTAFLUORIDE: Violent reaction and possible ignition.

CARBON DIOXIDE: Ignites.

CHLORINE: Ignites.

FLUORINE: Incandescent reaction.

HYDROGEN PEROXIDE: Violent decomposition and/or ignition.

NITRIC ACID: Incandescent reaction and feeble explosion.

NITROGEN DIOXIDE: Ignition.

OXIDIZERS (STRONG): Fire and explosion hazard.

PHOSPHORUS: Incandescent reaction when heated.

SULFUR DIOXIDE: Burns brilliantly on warming.

CARBON:

ALKALI METALS: Contact may result in an exothermic reaction with ignition or an explosion.

AMMONIUM NITRATE: Possible explosion when heated.

AMMONIUM PERCHLORATE: Possible explosion on heating.

BROMATES: Contact is likely to result in ignition or an explosion.

CALCIUM HYPOCHLORITE: Possible explosion on heating.

CHLORATES: Contact is likely to result in ignition or an explosion.

CHLORINE MONOXIDE: Explodes.

CHROMATES: Incompatible.

DICHLORINE OXIDE: Explosion reaction.

HALOGENS: Contact of carbon with any halogen is liable to result in ignition or an explosion.
INTERHALOGENS: Contact of carbon with any interhalogen is liable to result in ignition or an explosion.
IODATES: Contact is likely to result in ignition or an explosion.
IODINE PENTOXIDE: Explodes when warmed.
METAL NITRATES: Contact is likely to result in ignition or an explosion.
NITRIC ACID: Violent reaction.
NITROGEN OXIDE: Ignition with incandescence.
NITROGEN TRIFLUORIDE: Explosion at reduced temperatures.
OILS (UNSATURATED): Fire and explosion hazard.
OXIDES: Contact with many oxides is likely to result in ignition or an explosion.
OXIDIZERS (STRONG): Fire and explosion hazard.
OXOSALTS: Contact is likely to result in ignition or an explosion.
OXYGEN: May result in ignition or an explosion.
OXYGEN DIFLUORIDE: Possible explosion.
OZONE: Fire hazard.
PEROXIDES: Contact is likely to result in ignition or an explosion.
PEROXYFORMIC ACID: Violent oxidation.
PEROXYFUROIC ACID: Explosive decomposition.
POTASSIUM PERMANGANATE: Ignition on heating.
SODIUM SULFIDE: May undergo spontaneous heating.
TRIOXYGEN DIFLUORIDE: Ignition with possible explosion.

HAZARDOUS DECOMPOSITION:

Thermal decomposition products: miscellaneous decomposition products

POLYMERIZATION: Will not polymerize.

11. TOXICOLOGICAL INFORMATION

MANGANESE:

IRRITATION DATA:

500 mg/24 hour(s) skin-rabbit mild; 500 mg/24 hour(s) eyes-rabbit mild

TOXICITY DATA:

2300 ug/m³ inhalation-man TCl_o; 9 gm/kg oral-rat LD₅₀; 3709 mg/m³/6 hour(s)-13 week(s) intermittent inhalation-rat TCl_o; 180 mg/kg/30 day(s) intermittent intraperitoneal-rat TDLo; 210 ug/m³/5 year(s) intermittent inhalation-man TCl_o; 0.3 mg/m³/5 hour(s)-26 week(s) intermittent inhalation-rat TCl_o; 0.3 mg/m³/5 hour(s)-26 week(s) intermittent inhalation-monkey TCl_o; 0.7 mg/m³/24 hour(s)-22 week(s) continuous inhalation-rat TCl_o; 0.7 mg/m³/24 hour(s)-22 week(s) continuous inhalation-mouse TCl_o; 250 mg/m³/1 year(s) intermittent inhalation-human TCl_o; 0.5 mg/m³/39 week(s) intermittent inhalation-human TCl_o; 200 mg/kg/20 day(s) intermittent oral-rat TDLo

ACUTE TOXICITY LEVEL:

Slightly Toxic: ingestion

TARGET ORGANS: nervous system

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: history of alcoholism, blood system disorders, liver disorders, nervous system disorders, respiratory disorders

TUMORIGENIC DATA:

400 mg/kg intramuscular-rat TDLo/1 year(s) intermittent

MUTAGENIC DATA:

dominant lethal test - rat intraperitoneal 25 mg/kg

REPRODUCTIVE EFFECTS DATA:

50 mg/kg oral-rat TDLo 20 day(s) post pregnancy continuous; 322.5 mg/kg oral-mouse TDLo 43 day(s) male; 1290 mg/kg oral-mouse TDLo 43 day(s) male

ADDITIONAL DATA: Symptoms may depend on a combination of contributing factors including genetic predisposition, age, nutrition, anemia or alcohol.

CARBON:

TOXICITY DATA:

>5 gm/kg oral-rat LD; >5 gm/kg intraperitoneal-rat LD; >5 gm/kg subcutaneous-rat LD; >5 gm/kg oral-mouse LD; >5 gm/kg intraperitoneal-mouse LD; >5 gm/kg subcutaneous-mouse LD; 440 mg/kg intravenous-mouse LD₅₀; >5 gm/kg oral-dog LD; >5

gm/kg intraperitoneal-dog LD; >5 gm/kg subcutaneous-dog LD

ACUTE TOXICITY LEVEL: Insufficient Data.

REPRODUCTIVE EFFECTS DATA:

167 mg/kg subcutaneous-rat TDLo 8 day(s) pregnant female continuous

ARSENIC:

TOXICITY DATA:

7857 mg/kg/55 year(s) oral-man TDLo; 4 mg/kg oral-child TDLo; 763 mg/kg oral-rat LD50; 13390 ug/kg intraperitoneal-rat LD50; 145 mg/kg oral-mouse LD50; 46200 ug/kg intraperitoneal-mouse LD50; 300 mg/kg subcutaneous-rabbit LDLo; 10 mg/kg intraperitoneal-guinea pig LDLo; 300 mg/kg subcutaneous-guinea pig LDLo; 763 mg/kg oral-rat LD50; 144 mg/kg oral-mouse LD50; 1000 mg/kg intraperitoneal-mouse LD50; 1360 mg/kg/17 day(s) intermittent oral-rat TDLo; 280 mg/kg/4 week(s) continuous oral-mouse TDLo

CARCINOGEN STATUS: OSHA: Carcinogen; NTP: Known Human Carcinogen; IARC: Human Sufficient Evidence, Animal Limited Evidence, Group 1; ACGIH: A1 -Confirmed Human Carcinogen

An increased incidence of urinary bladder, skin, lung, liver, and kidney cancer has been associated with inorganic arsenic compounds through medical treatment, contaminated drinking water, arsenical pesticide residues or occupational exposure. Cancers at other sites have also been reported, but a clear association has not been confirmed.

LOCAL EFFECTS:

Irritant: inhalation, skin, eye

ACUTE TOXICITY LEVEL:

Moderately Toxic: ingestion

TARGET ORGANS: immune system (sensitizer), nervous system

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: diabetes, heart or cardiovascular disorders, immune system disorders or allergies, kidney disorders, liver disorders, nervous system disorders, skin disorders and allergies

TUMORIGENIC DATA:

76 mg/kg oral-man TDLo/12 year(s) intermittent; 75 mg/kg implant-rabbit TDLo

MUTAGENIC DATA:

cytogenetic analysis - human unreported 4286 ug/kg; cytogenetic analysis - mouse oral 280 mg/kg 8 week(s); sister chromatid exchange - human oral 0.211 mg/L 15 year(s); cytogenetic analysis - human oral 0.211 mg/L 15 year(s); DNA damage - human lung 5 umol/L

REPRODUCTIVE EFFECTS DATA:

605 ug/kg oral-rat TDLo 35 week(s) pre pregnancy continuous; 580 ug/kg oral-rat TDLo 30 week(s) pre pregnancy/1-20 day(s) pregnant female continuous; 187 mg/kg oral-mouse TDLo 8-18 day(s) pregnant female continuous

HEALTH EFFECTS:

INHALATION:

ACUTE EXPOSURE:

MANGANESE: Dust or fumes may be irritating to the mucous membranes. Occupational exposure to dust or fumes has been reported to cause upper respiratory tract problems, black mucous membrane discharge from the nose, and neurological damage. Metal fume fever, an influenza-like illness, may occur due to the inhalation of freshly formed metal oxide particles sized below 1.5 microns and usually between 0.02-0.05 microns. Symptoms may be delayed 4-12 hours and begin with a sudden onset of thirst, and a sweet, metallic or foul taste in the mouth. Other symptoms may include upper respiratory tract irritation accompanied by coughing and a dryness of the mucous membranes, lassitude and a generalized feeling of malaise. Fever, chills, muscular pain, mild to severe headache, nausea, occasional vomiting, exaggerated mental activity, profuse sweating, excessive urination, diarrhea and prostration may also occur. Tolerance to fumes develops rapidly, but is quickly lost. All symptoms usually subside within 24-36 hours.

CARBON: Inhalation of dust may cause slight mucous membrane irritation.

CHRONIC EXPOSURE:

MANGANESE: If sufficient quantities of manganese dust or fumes are inhaled and absorbed, systemic poisoning known as "manganism", a Parkinsonian-like syndrome may occur. It is characterized initially by anorexia, asthenia, headache, insomnia or somnolence, irritability, restlessness, and spasm or pain in the muscles. Manganese psychosis may follow with uncontrollable behavior, unaccountable laughing or crying, visual hallucinations, confusion and euphoria. Sexual excitement followed by impotence may occur. These symptoms may disappear with the onset of true neurological manifestations of slow, slurred and irregular speech, monotonous tone, double vision, impaired hearing, difficulty with fine motor movements, and disturbances in gait and balance with frequent propulsion or retropulsion. Mask-like face, decreased movement of the eyelids and eyes and tremors of the upper extremities and head may also occur. Other signs and symptoms may include urinary bladder disturbances, excessive salivation and sweating, hematological changes, vasomotor disorders, decreased pulmonary function, kidney and possibly liver damage. Removal from exposure shortly after onset of symptoms usually results in improvement, although there may be residual disturbances in gait and speech. Once manganism is well established it becomes irreversible and progressive, but not fatal. An increased incidence of bronchitis and pneumonitis has been reported in studies of workers exposed to manganese dust and fume, and although these effects have been confirmed by animal experiments, they may represent an

aggravation of a pre-existing condition. Allergic diseases of the respiratory tract have also been reported in one study.

CARBON: Repeated or prolonged exposure may cause irritation and pulmonary disorders. Lung damage may result if sufficient exposure occurs.

SKIN CONTACT:

ACUTE EXPOSURE:

MANGANESE: 500 mg applied to the skin of rabbits caused mild irritation.

CARBON: Contact may cause irritation.

CHRONIC EXPOSURE:

MANGANESE: Sensitization has been reported in guinea pigs.

CARBON: Repeated or prolonged contact may cause mechanical irritation.

EYE CONTACT:

ACUTE EXPOSURE:

MANGANESE: Dust or fumes may be irritating to the eyes. 500 mg applied to the eyes of rabbits caused mild irritation.

CARBON: Contact with dust may cause mechanical irritation. May also cause conjunctivitis.

CHRONIC EXPOSURE:

MANGANESE: Fumes may cause conjunctivitis.

CARBON: Repeated or prolonged exposure may cause mechanical irritation.

INGESTION:

ACUTE EXPOSURE:

MANGANESE: Extremely large doses may cause gastrointestinal irritation and possibly systemic toxicity.

CARBON: Extremely large doses may produce gastrointestinal disturbances.

CHRONIC EXPOSURE:

MANGANESE: Manganese poisoning has been reported in persons drinking manganese-contaminated well water. Prolonged ingestion of manganese in water has produced lethargy, edema, and decreased movement of the eyes and eyelids.

CARBON: No data available.

[12. ECOLOGICAL INFORMATION](#)

Not available

[13. DISPOSAL CONSIDERATIONS](#)

Dispose in accordance with all applicable regulations.

[14. TRANSPORT INFORMATION](#)

U.S. DEPARTMENT OF TRANSPORTATION: No classification assigned.

CANADIAN TRANSPORTATION OF DANGEROUS GOODS: No classification assigned.

LAND TRANSPORT ADR: No classification assigned.

LAND TRANSPORT RID: No classification assigned.

AIR TRANSPORT IATA: No classification assigned.

AIR TRANSPORT ICAO: No classification assigned.

MARITIME TRANSPORT IMDG: No classification assigned.

[15. REGULATORY INFORMATION](#)

U.S. REGULATIONS:

CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR 302.4):

ARSENIC: 1 LBS RQ

PHOSPHORUS, WHITE: 1 LBS RQ

CHROMIUM: 5000 LBS RQ

LEAD: 10 LBS RQ (solid metal particles < 100 micrometer diameter (0.004 inches))

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355.30): Not regulated.

SARA TITLE III SECTION 304 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355.40): Not regulated.

SARA TITLE III SARA SECTIONS 311/312 HAZARDOUS CATEGORIES (40 CFR 370.21):

ACUTE: No

CHRONIC: Yes

FIRE: No

REACTIVE: Yes

SUDDEN RELEASE: No

SARA TITLE III SECTION 313 (40 CFR 372.65):

ARSENIC

MANGANESE AND COMPOUNDS (as Mn)

OSHA PROCESS SAFETY (29CFR1910.119): Not regulated.

STATE REGULATIONS:

California Proposition 65:

Known to the state of California to cause the following:

ARSENIC

Cancer (Feb 27, 1987)

LEAD

Cancer (Oct 01, 1992)

Developmental toxicity (Feb 27, 1987)

Male reproductive toxicity (Feb 27, 1987)

Female reproductive toxicity (Feb 27, 1987)

LEAD COMPOUNDS

Cancer (Oct 01, 1992)

Developmental toxicity (Feb 27, 1987)

Male reproductive toxicity (Feb 27, 1987)

Female reproductive toxicity (Feb 27, 1987)

CANADIAN REGULATIONS:

WHMIS CLASSIFICATION: Not determined.

EUROPEAN REGULATIONS:

EC CLASSIFICATION (CALCULATED): Not determined.

NATIONAL INVENTORY STATUS:

U.S. INVENTORY (TSCA): Listed on inventory.

TSCA 12(b) EXPORT NOTIFICATION: Not listed.

[16. OTHER INFORMATION](#)
