State of Rhode Island and Providence Plantations
Department of Administration
Division of Purchases

RIVIP BIDDER CERTIFICATION COVER FORM

SECTION 1 - BIDDER INFORMATION

Bidder must be registered as a vendor on the RIVIP system at www.purchasing.ri.gov to submit a bid proposal.

Solicitation Number:	7549957A1
Solicitation Title:	HEATING, VENTILATION AND AIR CONDITIONING SERVICES & REPAIR (MPA-136) - ADDENDUM 1 (9 PGS)
Bid Proposal Submission Deadline Date & Time:	11/2/2015 11:30 AM
RIVIP Vendor ID #:	17954
Bidder Name:	Sarra Corporation
Address:	1 Harry Street Cranston , RI 02907 USA
Telephone:	401-942-1050
Fax:	401-943-5179
Contact Name:	Frank A Sarra
Contact Title:	President
Contact Email:	frank@sarraengineering.com

SECTION 2 —DISCLOSURES

Bidders must respond to every statement. Bid proposals submitted without a complete response may be deemed nonresponsive.

Indicate "Y" (Yes) or "N" (No) for Disclosures 1-4, and if "Yes," provide details below. Complete Disclosure 5. If the Bidder is publicly held, the Bidder may provide owner information about only those stockholders, members, partners, or other owners that hold at least 10% of the record or beneficial equity interests of the Bidder.

N 1. State whether the Bidder, or any officer, director, manager, stockholder, member, partner, or other owner or principal of the Bidder or any parent, subsidiary, or affiliate has been subject to suspension or debarment by any federal, state, or municipal governmental authority, or the subject of criminal prosecution, or convicted of a criminal offense within the previous 5 years. If "Yes," provide details below.

N 2. State whether the Bidder, or any officer, director, manager, stockholder, member, partner, or other owner or principal of the Bidder or any parent, subsidiary, or affiliate has had any contracts with a federal, state, or municipal governmental authority terminated for any reason within the previous 5 years. If "Yes," provide details below.

N 3. State whether the Bidder, or any officer, director, manager, stockholder, member, partner, or other owner or principal of the Bidder or any parent, subsidiary, or affiliate has been fined more than $5000 for violation(s) of any Rhode Island environmental law(s) by the Rhode Island Department of Environmental Management within the previous 5 years. If "Yes," provide details below.

N 4. State whether any officer, director, manager, stockholder, member, partner, or other owner or principal of the Bidder is serving or has served within the past two calendar years as either an appointed or elected official of any state governmental authority or quasi-public corporation, including without limitation, any entity created as a legislative body or public or state agency by the general assembly or constitution of this state.

5. List each officer, director, manager, stockholder, member, partner, or other owner or principal of the Bidder, and each intermediate parent company and the ultimate parent company of the Bidder. For each individual, provide his or her name, business address, principal occupation, position with the Bidder, and the percentage of ownership, if any, he or she holds in the Bidder, and each intermediate parent company and the ultimate parent company of the Bidder.

Disclosure details (continue on additional sheet if necessary):

Frank A. Sarra
President/ Senior Estimator
1 Harry Street
Cranston, RI 02907
% of Ownership = 100%

SECTION 3 —CERTIFICATIONS

Bidders must respond to every statement. Bid proposals submitted without a complete response may be deemed nonresponsive.

Indicate "Y" (Yes) or "N" (No), and if "No," provide details below.

THE BIDDER CERTIFIES THAT:

Y 1. The Bidder will immediately disclose, in writing, to the State Purchasing Agent any potential conflict of interest which may occur during the term of any contract awarded pursuant to this solicitation.

Y 2. The Bidder possesses all licenses and anyone who will perform any work will possess all licenses required by applicable federal, state, and local law necessary to perform the requirements of any contract awarded pursuant to this solicitation and will maintain all required licenses during the term of any contract awarded pursuant to this solicitation. In the event that any required license shall lapse or be restricted or suspended, the Bidder shall immediately notify the State Purchasing Agent in writing.

Y 3. The Bidder will maintain all required insurance during the term of any contract pursuant to this solicitation. In the event that any required insurance shall lapse or be canceled, the Bidder will immediately notify the State Purchasing Agent in writing.

Y 4. The Bidder understands that falsification of any information in this bid proposal or failure to notify the State Purchasing Agent of any changes in any disclosures or certifications in this Bidder Certification may be grounds for suspension, debarment, and/or prosecution for fraud.

Y 5. The Bidder has not paid and will not pay any bonus, commission, fee, gratuity, or other remuneration to any employee or official of the State of Rhode Island or any subdivision of the State of Rhode Island or other governmental authority for the purpose of obtaining an award of a contract pursuant to this solicitation. The Bidder further certifies that no bonus, commission, fee, gratuity, or other remuneration has been or will be received from any third party or paid to any third party contingent on the award of a contract pursuant to this solicitation.

Y 6. This bid proposal is not a collusive bid proposal. Neither the Bidder, nor any of its owners, stockholders, members, partners, principals, directors, managers, officers, employees, or agents has in any way colluded, conspired, or agreed, directly or indirectly, with any other bidder or person to submit a collusive bid proposal in response to the solicitation or to refrain from submitting a bid proposal in response to the solicitation, or has in any manner, directly or indirectly, sought by agreement or collusion or other communication with any other bidder or person to fix the price or prices in the bid proposal or the bid proposal of any other bidder, or to fix any overhead, profit, or cost component of the bid price in the bid proposal or the bid proposal of any other bidder, or to secure through any collusion, conspiracy, or unlawful agreement any advantage against the State of Rhode Island or any person with an interest in the contract awarded pursuant to this solicitation. The bid price in the bid proposal is fair and proper and is not tainted by any collusion, conspiracy, or unlawful agreement on the part of the Bidder, its owners, stockholders, members, partners, principals, directors, managers, officers, employees, or agents.

Y 7. The Bidder: (i) is not identified on the General Treasurer's list created pursuant to R.I. Gen. Laws § 37-2.5-3 as a person or entity engaging in investment activities in Iran described in § 37-2.5-2(b); and (ii) is not engaging in any such investment activities in Iran.

Y 8. The Bidder will comply with all of the laws that are incorporated into and/or applicable to any contract with the State of Rhode Island.

Certification details (continue on additional sheet if necessary):

Submission by the Bidder of a bid proposal pursuant to this solicitation constitutes an offer to contract with the State of Rhode Island through the Division of Purchases on the terms and conditions contained in this solicitation and the bid proposal. The Bidder certifies that: (1) the Bidder has reviewed this solicitation and agrees to comply with its terms and conditions; (2) the bid proposal is based on this solicitation; and (3) the information submitted in the bid proposal (including this Bidder Certification Cover Form) is accurate and complete. The Bidder acknowledges that the terms and conditions of this solicitation and the bid proposal will be incorporated into any contract awarded to the Bidder pursuant to this solicitation and the bid proposal. The person signing below represents, under penalty of perjury, that he or she is fully informed regarding the preparation and contents of this bid proposal and has been duly authorized to execute and submit this bid proposal on behalf of the Bidder.

BIDDER

Date: 11/2/2015

Sarra Corporation
Name of Bidder

Signature in ink

Frank Sarra, President
Printed name and title of person signing on behalf of Bidder

Request for Quote

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
ONE CAPITOL HILL
PROVIDENCE RI 02908

CREATION DATE : 16-OCT-15
BID NUMBER: 7549957
TITLE: HVAC Services and Repair (MPA-136)

BLANKET START : 01-DEC-15
BLANKET END : 30-NOV-16
BID CLOSING DATE AND TIME:02-NOV-2015 11:30:00

BUYER: Ohara 2nd, John F
PHONE #: 401-574-8125

BILL TO
MASTER PRICE AGREEMENT
SEE BELOW
RELEASE AGAINST, RI MPA
US

SHIP TO
MASTER PRICE AGREEMENT
SEE BELOW
RELEASE AGAINST, RI MPA
US

Requistion Number:

Line	Description	Quantity	Unit	Unit Price	Total
1	MPA-136 12/1/15-11/30/16 Pipefitter Master 1 Straight Time Hourly Rate Onsite Highest Tier	859.00	Hour	$159	$136,581.00
2	MPA-136 12/1/15-11/30/16 Pipefitter Master 1Straight Time Hourly Rate Onsite Medium Tier	1,516.00	Hour	$110	$166,760.00
3	MPA-136 12/1/15-11/30/16 Pipefitter Master 1 Straight Time Hourly Rate Onsite Lowest Tier	960.00	Hour	$93	$89,280.00
4	MPA-136 12/1/15-11/30/16 Pipefitter Master 1 Overtime Hourly Rate Onsite Highest Tier	8.00	Hour	$195	$1,560.00
5	MPA-136 12/1/15-11/30/16 Pipefitter Master 1 Overtime Hourly Rate Onsite Medium Tier	45.00	Hour	$139	$6,255.00
6	MPA-136 12/1/15-11/30/16 Pipefitter Master 1 Overtime Hourly Rate Onsite Lowest Tier	3.00	Hour	$119	$357.00
7	MPA-136 12/1/15-11/30/16 Pipefitter Journeyperson 1 Straight Time Hourly Rate Onsite Highest Tier	1.00	Hour	$126	$126.00
8	MPA-136 12/1/15-11/30/16 Pipefitter Journeyperson 1 Straight Time Hourly Rate Onsite Medium Tier	1.00	Hour	$110	$110.00
9	MPA-136 12/1/15-11/30/16 Pipefitter Journeyperson 1 Straight Time Hourly Rate Onsite Lowest Tier	1.00	Hour	$93	$93.00
10	MPA-136 12/1/15-11/30/16 Pipefitter Journeyperson 1 Overtime Hourly Rate Onsite Highest Tier	1.00	Hour	$150	$150.00
11	MPA-136 12/1/15-11/30/16 Pipefitter Journeyperson 1 Overtime Hourly Rate Onsite Medium Tier	1.00	Hour	$139	$139.00
12	MPA-136 12/1/15-11/30/16 Pipefitter Journeyperson 1 Overtime Hourly Rate Onsite Lowest Tier	1.00	Hour	$119	$119.00
13	MPA-136 12/1/15-11/30/16 Apprentice Pipefitter Straight Time Hourly Rate Onsite Highest Tier	1.00	Hour	$70	$70.00
14	MPA-136 12/1/15-11/30/16 Apprentice Pipefitter Straight Time Hourly Rate Onsite Medium Tier	1.00	Hour	$70	$70.00

It is the Vendor's responsibility to check and download any and all addenda from the RIVIP. This offer may not be considered unless a signed RIVIP generated Bidder Certification Cover Form is attached and the Unit Price column is completed. The signed Certification Cover Form must be attached to the front of the offer

Request for Quote

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
ONE CAPITOL HILL
PROVIDENCE RI 02908

CREATION DATE : 16-OCT-15
BID NUMBER: 7549957
TITLE: HVAC Services and Repair (MPA-136)

BLANKET START : 01-DEC-15
BLANKET END : 30-NOV-16
BID CLOSING DATE AND TIME: 02-NOV-2015 11:30:00

BUYER: Ohara 2nd, John F
PHONE #: 401-574-8125

BILL TO
MASTER PRICE AGREEMENT
SEE BELOW
RELEASE AGAINST, RI MPA
US

SHIP TO
MASTER PRICE AGREEMENT
SEE BELOW
RELEASE AGAINST, RI MPA
US

Requistion Number:

Line	Description	Quantity	Unit	Unit Price	Total
15	MPA-136 12/1/15-11/30/16 Apprenctice Pipefitter Straight Time Hourly Rate Onsite Lowest Tier	1.00	Hour	$70	$70.00
16	MPA-136 12/1/15-11/30/16 Apprentice Pipefitter Overtime Hourly Rate Onsite Highest Tier	1.00	Hour	$90	$90.00
17	MPA-136 12/1/15-11/30/16 Apprentice Pipefitter Overtime Hourly Rate Onsite Medium Tier	1.00	Hour	$90	$90.00
18	MPA-136 12/1/15-11/30/16 Apprentice Pipefitter Overtime Hourly Rate Onsite Lowest Tier	1.00	Hour	$90	$90.00
19	MPA-136 12/1/15-11/30/16 Refrigeration Master 1 Straight Time Hourly Rate Onsite Highest Tier	1.00	Hour	$161	$161.00
20	MPA-136 12/1/15-11/30/16 Refrigeration Master 1 Straight Time Hourly Rate Onsite Medium Tier	1.00	Hour	$126	$126.00
21	MPA-136 12/1/15-11/30/16 Refrigeration Master 1 Straight Time Hourly Rate Onsite Lowest Tier	1.00	Hour	$118	$118.00
22	MPA-136 12/1/15-11/30/16 Refrigeration Master 1 Overtime Hourly Rate Onsite Highest Tier	1.00	Hour	$195	$195.00
23	MPA-136 12/1/15-11/30/16 Refrigeration Master 1 Overtime Hourly Rate Onsite Medium Tier	1.00	Hour	$150	$150.00
24	MPA-136 12/1/15-11/30/16 Refrigeration Master 1 Overtime Hourly Rate Onsite Lowest Tier	1.00	Hour	$139	$139.00
25	MPA-136 12/1/15-11/30/16 Refrigeration Journeyperson 1 Straight Time Hourly Rate Onsite Highest Tier	1.00	Hour	$161	$161.00
26	MPA-136 12/1/15-11/30/16 Refrigeration Journeyperson 1 Straight Time Hourly Rate Onsite Medium Tier	1.00	Hour	$126	$126.00
27	MPA-136 12/1/15-11/30/16 Refrigeration Journeyperson 1 Straight Time Hourly Rate Onsite Lowest Tier	1.00	Hour	$118	$118.00
28	MPA-136 12/1/15-11/30/16 Refrigeration Journeyperson 1 Overtime Hourly Rate Onsite Highest Tier	1.00	Hour	$195	$195.00
29	MPA-136 12/1/15-11/30/16 Refrigeration Journeyperson 1	1.00	Hour	$150	$150.00

It is the Vendor's responsibility to check and download any and all addenda from the RIVIP. This offer may not b[illegible]ed RIVIP generated Bidder Certification Cover Form is attached and the Unit Price column is completed. The signed Certification Cover Form must be attached to the front of the offer

Request for Quote

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
ONE CAPITOL HILL
PROVIDENCE RI 02908

CREATION DATE : 16-OCT-15
BID NUMBER: 7549957
TITLE: HVAC Services and Repair (MPA-136)

BLANKET START : 01-DEC-15
BLANKET END : 30-NOV-16
BID CLOSING DATE AND TIME:02-NOV-2015 11:30:00

BUYER: Ohara 2nd, John F
PHONE #: 401-574-8125

BILL TO
MASTER PRICE AGREEMENT
SEE BELOW
RELEASE AGAINST, RI MPA
US

SHIP TO
MASTER PRICE AGREEMENT
SEE BELOW
RELEASE AGAINST, RI MPA
US

Requistion Number:

Line	Description	Quantity	Unit	Unit Price	Total
	Overtime Hourly Rate Onsite Medium Tier				
30	MPA-136 12/1/15-11/30/16 Refrigeration Journeyperson 1 Overtime Hourly Rate Onsite Lowest Tier	1.00	Hour	$139	$139.00
31	MPA-136 12/1/15-11/30/16 Apprentice Refrigeration Straight Time Hourly Rate Onsite Highest Tier	1.00	Hour	$80	$80.00
32	MPA-136 12/1/15-11/30/16 Apprentice Refrigeration Straight Time Hourly Rate Onsite Medium Tier	1.00	Hour	$80	$80.00
33	MPA-136 12/1/15-11/30/16 Apprentice Refrigeration Straight Time Hourly Rate Onsite Lowest Tier	1.00	Hour	$80	$80.00
34	MPA-136 12/1/15-11/30/16 Apprentice Refrigeration Overtime Hourly Rate Onsite Highest Tier	1.00	Hour	$100	$100.00
35	MPA-136 12/1/15-11/30/16 Apprentice Refrigeration Overtime Hourly Rate Onsite Medium Tier	1.00	Hour	$100	$100.00
36	MPA-136 12/1/15-11/30/16 Apprentice Refrigeration Overtime Hourly Rate Onsite Lowest Tier	1.00	Hour	$100	$100.00
37	MPA-136 12/1/15-11/30/16 Sheet Metal 1 Straight Time Hourly Rate Onsite Highest Tier	1.00	Hour	$126	$126.00
38	MPA-136 12/1/15-11/30/16 Sheet Metal 1 Straight Time Hourly Rate Onsite Medium Tier	1.00	Hour	$126	$126.00
39	MPA-136 12/1/15-11/30/16 Sheet Metal 1 Straight Time Hourly Rate Onsite Lowest Tier	1.00	Hour	$126	$126.00
40	MPA-136 12/1/15-11/30/16 Sheet Metal 1 Overtime Hourly Rate Onsite Highest Tier	1.00	Hour	$161	$161.00
41	MPA-136 12/1/15-11/30/16 Sheet Metal 1 Overtime Hourly Rate Onsite Medium Tier	1.00	Hour	$161	$161.00
42	MPA-136 12/1/15-11/30/16 Sheet Metal 1 Overtime Hourly Rate Onsite Lowest Tier	1.00	Hour	$161	$161.00
43	MPA-136 12/1/15-11/30/16 Sheet Metal Journeyperson 1	1.00	Hour	$115	$115.00

It is the Vendor's responsibility to check and download any and all addenda from the RIVIP. This offer may not b[illegible]ed RIVIP generated Bidder Certification Cover Form is attached and the Unit Price column is completed. The signed Certification Cover Form must be attached to the front of the offer

Request for Quote

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
ONE CAPITOL HILL
PROVIDENCE RI 02908

CREATION DATE : 16-OCT-15
BID NUMBER: 7549957
TITLE: HVAC Services and Repair (MPA-136)

BLANKET START : 01-DEC-15
BLANKET END : 30-NOV-16
BID CLOSING DATE AND TIME: 02-NOV-2015 11:30:00

BUYER: Ohara 2nd, John F
PHONE #: 401-574-8125

BILL TO
MASTER PRICE AGREEMENT
SEE BELOW
RELEASE AGAINST, RI MPA
US

SHIP TO
MASTER PRICE AGREEMENT
SEE BELOW
RELEASE AGAINST, RI MPA
US

Requistion Number:

Line	Description	Quantity	Unit	Unit Price	Total
	Straight Time Hourly Rate Onsite Highest Tier				
44	MPA-136 12/1/15-11/30/16 Sheet Metal Journeyperson 1 Straight Time Hourly Rate Onsite Medium Tier	1.00	Hour	$115	$115.00
45	MPA-136 12/1/15-11/30/16 Sheet Metal Journeyperson 1 Straight Time Hourly Rate Onsite Lowest Tier	1.00	Hour	$115	$115.00
46	MPA-136 12/1/15-11/30/16 Sheet Metal Journeyperson 1 Overtime Hourly Rate Onsite Highest Tier	1.00	Hour	$150	$150.00
47	MPA-136 12/1/15-11/30/16 Sheet Metal Journeyperson 1 Overtime Hourly Rate Onsite Medium Tier	1.00	Hour	$150	$150.00
48	MPA-136 12/1/15-11/30/16 Sheet Metal Journeyperson 1 Overtime Hourly Rate Onsite Lowest Tier	1.00	Hour	$150	$150.00
49	MPA-136 12/1/15-11/30/16 Apprentice Sheet Metal Straight Time Hourly Rate Onsite Highest Tier	1.00	Hour	$87	$87.00
50	MPA-136 12/1/15-11/30/16 Apprentice Sheet Metal Straight Time Hourly Rate Onsite Medium Tier	1.00	Hour	$87	$87.00
51	MPA-136 12/1/15-11/30/16 Apprentice Sheet Metal Straight Time Hourly Rate Onsite Lowest Tier	1.00	Hour	$87	$87.00
52	MPA-136 12/1/15-11/30/16 Apprentice Sheet Metal Overtime Hourly Rate Onsite Highest Tier	1.00	Hour	$121	$121.00
53	MPA-136 12/1/15-11/30/16 Apprentice Sheet Metal Overtime Hourly Rate Onsite Medium Tier	1.00	Hour	$121	$121.00
54	MPA-136 12/1/15-11/30/16 Apprentice Sheet Metal Overtime Hourly Rate Onsite Lowest Tier	1.00	Hour	$121	$121.00
55	MPA-136 12/1/15-11/30/16 Major Equipment (with operator applicable) CRANE Rates for items 55 through 58 shall include the following.	1.00 60Ton 85Ton 115Ton	Hour	$200 $356 $478	$200.00 $356.00 $478.00

It is the Vendor's responsibility to check and download any and all addenda from the RIVIP. This offer may not be considered unless a signed RIVIP generated Bidder Certification Cover Form is attached and the Unit Price column is completed. The signed Certification Cover Form must be attached to the front of the offer

Request for Quote

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
ONE CAPITOL HILL
PROVIDENCE RI 02908

CREATION DATE : 16-OCT-15
BID NUMBER: 7549957
TITLE: HVAC Services and Repair (MPA-136)

BLANKET START : 01-DEC-15
BLANKET END : 30-NOV-16
BID CLOSING DATE AND TIME:02-NOV-2015 11:30:00

BUYER: Ohara 2nd, John F
PHONE #: 401-574-8125

BILL TO
MASTER PRICE AGREEMENT
SEE BELOW
RELEASE AGAINST, RI MPA
US

SHIP TO
MASTER PRICE AGREEMENT
SEE BELOW
RELEASE AGAINST, RI MPA
US

Requistion Number:

Line	Description	Quantity	Unit	Unit Price	Total
	All rates shall be inclusive without limitations, wages, benefits, vehicle, fuel, tools, mobilization and demobilization, supervision, insurance, all licenses, permits, overhead and profit and all other requirements necessary for the commencement, performance and completion of the Work.				
56	MPA-136 12/1/15-11/30/16 Major Equipment (with operator applicable) CRANE	1.00 60Ton 85Ton 115Ton	Day	 $1600.00 $2850.00 $3820.00	 $1600.00 $2850.00 $3820.00
57	MPA-136 12/1/15-11/30/16 Major Equipment (with operator applicable) CRANE	1.00 60Ton 85Ton 115Ton	Week	 $8,000.00 $14,250.00 $19,100.00	 $8,000.00 $14,250.00 $19,100.00
58	MPA-136 12/1/15-11/30/16 Major Equipment (with operator applicable) CRANE Materials are to be provided at COST plus the following (applicable) fee for overhead, pickup and delivery. No additional charges will be acceptable. $0-500 NO FEE $501-750 $75.00 $751-1000 $96.00 $1001-1500 $125.00 $1501-2500 $180.00 $2501-5000 $300.00 $5001-7500 $438.00 Over $7501. $525.00. Acknowledgement of fee structure on materials.	1.00 60Ton 85Ton 115Ton	Month	 $32,000.00 $57,000.00 $76,400.00	 $32,000.00 $57,000.00 $76,400.00

Delivery: _____

Terms of Payment: Net 30 Days

It is the Vendor's responsibility to check and download any and all addenda from the RIVIP. This offer may not be considered unless a signed RIVIP generated Bidder Certification Cover Form is attached and the Unit Price column is completed. The signed Certification Cover Form must be attached to the front of the offer

Appendix A

Prompt Payment Discount Form

(Invoice discounts for receiving fast payments)

Note: All vendors responding to the within solicitation must complete a Prompt Payment Discount ("PPD") form as part of this Master Price Agreement solicitation.

Bidder Name: Sarra Corporation

RFQ/RFP Bid Solicitation Number: 7549957

Prompt Payment Discounts ("PPD"). Vendors benefit from PPD by increased, usable cash flow as a result of fast and efficient payments for commodities or services rendered. ACH payments increase the prompt pay benefit by ensuring that funds are paid directly to their designated bank accounts, thus eliminating the delay of check clearance policies and traditional mail lead time (additional form required for ACH enrollment can be found at http://controller.admin.ri.gov/Forms/index.php). Vendors are highly encouraged to enroll and will receive consideration for enrollment.

The State benefits because contractors reduce the cost of products and services through the applied discount. While Bidders/Contractors have flexibility in determining the actual % discount(s) offered to the State, the discount(s) must be identified in 10 days or more for Payment Issuance Date. The State may use the prompt pay discounts submitted as a basis for selection and may negotiate discounts as deemed in the best interest of the State.

All discounts offered will be automatically deducted from payment when the issue date is within the specified number of days listed below and in accordance with the State's Prompt Payment Law. Payment days will be measured **from** the date goods are received and accepted/performance was completed OR the date an invoice is received by the Office of the DOA Controller, whichever is later **to** the date the payment is issued via ACH or mailed by the State Treasurer. The date of payment "issue" is the date a payment is considered "paid" not the date a payment is "received" by a vendor.

The State encourages Vendors to use the RIFANS Supplier Portal which has the functionality to electronically submit invoices against open Purchase Orders. This eliminates mailing and handling time and will increase the payment cycle especially for those suppliers who offer Prompt Payment Discounts.

Enter the Prompt Payment Discount percentage (%) off the invoice payment, for each of the payment issue dates listed, if the payment is issued within the specified Payment Issue days. For example:

5% - 10 Days
4% - 15 Days
3% - 20 Days
1% - 25 Days

Discount %	Payment Issue Date Within
2 %	10 Days
%	15 Days
%	20 Days
%	25 Days

By checking this box, we certify that we will not offer any Prompt Payment Discounts	☐	
We will sign up for ACH payment. (please circle response)	Yes	No
We will utilize the State's Supplier Portal to electronically submit invoices. (please circle response)	Yes	No

Signature _____ Date 11/2/2015

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Labor and Training
Center General Complex
1511 Pontiac Avenue
Cranston, RI 02920-4407

TTY: Via RI Relay 711

Lincoln D. Chafee
Governor
Charles J. Fogarty
Director

STATE CONTRACT ADDENDUM

RHODE ISLAND DEPARTMENT OF LABOR AND TRAINING

PREVAILING WAGE REQUIREMENTS (37-13-1 ET SEQ.)

The prevailing wage requirements are generally set forth in RIGL 37-13-1 et seq. These requirements refer to the prevailing rate of pay for regular, holiday, and overtime wages to be paid to each craftsmen, mechanic, teamster, laborer, or other type of worker performing work on public works projects when state or municipal funds exceed one thousand dollars ($1,000).

All Prevailing Wage Contractors and Subcontractors are required to:

1. Submit to the Awarding Authority a list of the contractor's subcontractors for any part or all of the prevailing wage work in accordance with RIGL § 37-13-4;

2. Pay all prevailing wage employees at least once per week and in accordance with RIGL §37-13-7 (see Appendix B attached);

3. Post the prevailing wage rate scale and the Department of Labor and Training's prevailing wage poster in a prominent and easily accessible place on the work site in accordance with RIGL §37-13-11; posters may be downloaded at www.dlt.ri.gov/pw/Posters.htm .poster/htm or obtained from the Department of Labor and Training, Center General Complex, 1511 Pontiac Avenue, Cranston, Rhode Island;

4. Access the Department of Labor and Training website, at www.dlt.ri.gov on or before July 1st of each year, until such time as the contract is completed, to ascertain the current prevailing wage rates and the amount of payment or contributions for each covered prevailing wage employee and make any necessary adjustments to the covered employee's prevailing wage rates effective July 1st of each year in compliance with RIGL §37-13-8;

5. Attach a copy of this CONTRACT ADDENDUM and its attachments as a binding obligation to any and all contracts between the contractor and any

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Labor and Training
Center General Complex
1511 Pontiac Avenue
Cranston, RI 02920-4407

Telephone; (401) 462-8000
TTY; Via RI Relay 711

Lincoln D. Chafee
Governor
Charles J. Fogarty
Director

subcontractors and their assignees for prevailing wage work performed pursuant to this contract;

6. Provide for the payment of overtime for prevailing wage employees who work in excess of eight (8) hours in any one day or forty (40) hours in any one week as provided by RIGL §37-13-10;

7. Maintain accurate prevailing wage employee payroll records on a Rhode Island Certified Weekly Payroll form available for download at www.dlt.ri.gov/pw.forms/htm, as required by RIGL §37-13-13, and make those records available to the Department of Labor and Training upon request;

8. Furnish the fully executed RI Certified Weekly Payroll Form to the awarding authority on a monthly basis for all work completed in the preceding month.

9. For general or primary contracts one million dollars ($1,000,000) or more, shall maintain on the work site a fully executed RI Certified Prevailing Wage Daily Log listing the contractor's employees employed each day on the public works site; the RI Certified Prevailing Wage Daily Log shall be available for inspection on the public works site at all times; this rule shall not apply to road, highway, or bridge public works projects. Where applicable, furnish both the Rhode Island Certified Prevailing Wage Daily Log together with the Rhode Island Weekly Certified Payroll to the awarding authority.

10. Assure that all covered prevailing wage employees on construction projects with a total project cost of one hundred thousand dollars ($100,000) or more has a OSHA ten (10) hour construction safety certification in compliance with RIGL § 37-23-1;

11. Employ apprentices for the performance of the awarded contract when the contract is valued at one million dollars ($1,000,000) or more, and comply with the apprentice to journeyperson ratio for each trade approved by the apprenticeship council of the Department of Labor and Training in compliance with RIGL §37-13-3.1;

12. Assure that all prevailing wage employees who perform work which requires a Rhode Island trade license possess the appropriate Rhode Island trade license in compliance with Rhode Island law; and

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Labor and Training
Center General Complex
1511 Pontiac Avenue
Cranston, RI 02920-4407

Telephone: (401) 462-8000
TTY: Via RI Relay 711

Lincoln D. Chafee
Governor

Charles J. Fogarty
Director

13. Comply with all applicable provisions of RIGL §37-13-1, et. seq;

Any questions or concerns regarding this CONTRACT ADDENDUM should be addressed to the contractor or subcontractor's attorney. Additional Prevailing Wage information may be obtained from the Department of Labor and Training at www.dlt.ri.gov/pw.

CERTIFICATION

I hereby certify that I have reviewed this CONTRACT ADDENDUM and understand my obligations as stated above.

By: _____

Title: President

Subscribed and sworn before me this 2 day of Nov, 2015

James C Calcione

Notary Public 58841
My commission expires: 2/14/16

An Equal Opportunity Employer/Program, /Auxiliary aids and services are available upon request to individuals with disabilities.
TTY via RI Relay 711

FORM W-9
REV 8/15

STATE OF RHODE ISLAND
FORM W-9 PAYER'S REQUEST FOR TAXPAYER IDENTIFICATION NUMBER AND CERTIFICATION

THE IRS REQUIRES THAT YOU FURNISH YOUR TAXPAYER IDENTIFICATION NUMBER TO US. FAILURE TO PROVIDE THIS INFORMATION CAN RESULT IN A $50 PENALTY BY THE IRS. IF YOU ARE AN INDIVIDUAL, PLEASE PROVIDE US WITH YOUR SOCIAL SECURITY NUMBER (SSN) IN THE SPACE INDICATED BELOW. IF YOU ARE A COMPANY OR A CORPORATION, PLEASE PROVIDE US WITH YOUR EMPLOYER IDENTIFICATION NUMBER (EIN) WHERE INDICATED.

Taxpayer Identification Number (T.I.N.)

Enter your taxpayer identification number in the appropriate box. For most individuals, this is your social security number.

Social Security No. (SSN)

Employer ID No. (EIN)

05	0440549

NAME Sarra Corporation

ADDRESS 1 Harry Street

CITY, STATE AND ZIP CODE Cranston, RI 02907

PAYMENT REMITTANCE ADDRESS, IF DIFFERENT FROM THE ADDRESS ABOVE

ADDRESS

CITY, STATE AND ZIP CODE

CERTIFICATION: Under penalties of perjury, I certify that:

(1) The number shown on this form is my correct Taxpayer Identification Number (or I am waiting for a number to be issued to me), **and**

(2) I am not subject to backup withholding because either: (A) I am exempt from backup withholding, or (B) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (C) the IRS has notified me that I am no longer subject to backup withholding.

(3) I am a U.S. citizen or other U.S. person (as defined by the IRS).

Certification Instructions -- You must cross out item (2) above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item (2) does not apply.

Please sign here and provide title, date and telephone number:

SIGNATURE _____ **TITLE** President **DATE** 11/2/2015 **TEL NO** (401) 942-1050

Original Signature Required (Digital Signature Not Acceptable)

BUSINESS DESIGNATION:

Please Check One: Individual ☐ Corporation ☒ Trust/Estate ☐ Government/Nonprofit Corporation ☐

Partnership ☐ Medical Services Corporation ☐ Legal Services Corporation ☐

LLC Tax Classification: Single Member (Individual) ☐ Partnership ☐ Corporation ☐

TIPS:

NAME: Be sure to enter your full and correct legal name as shown on your income tax return for the SSN or EIN provided.

ADDRESS, CITY, STATE AND ZIP CODE: If you operate a business at more than one location, adhere to the following:

1) Same EIN with more than one location -- attach a list of location addresses with remittance address for each location and indicate to which location the year-end tax information return should be mailed.

2) Different EIN for each different location -- submit a completed W-9 form for each EIN and location. (One year-end tax information return will be reported for each EIN and remittance address.)

Mail Completed Form To:
Supplier Coordinator
Purchasing Department
One Capitol Hill, 2nd Floor
Providence RI 02908

Or Email To: doa.pursuppliercoordinator@purchasing.ri.gov

For State Use Only:

IRS____ RI SOS____ FED_____ Other_____

RI Supplier # _____ Approved _____

Date Entered _____ Entered By_____

Proposals found to be technically or substantially non-responsive, at any point in the evaluation process, will be rejected and not considered further. The State, at its sole option, may elect to require presentation(s) by vendors in consideration for the award. An award will not be made to a contractor who is neither qualified nor equipped to undertake and complete required work within a specified time.

SECTION 14: CONTRACTOR RESPONSE FORM

Provide full and detailed responses to the following Schedules:

Schedule A: Company Profile and Experience

14.1 Corporate profile and comparable work experience. Respondents are to provide a brief summary of their corporate profile and experience in providing similar electrical services to institutional facilities.

Company name: Sarra Engineering Corporation

Year business entity was established: 1953

Corporate profile and comparable work experience:

Sarra Engineering is an HVAC contractor who specializes in repairing, maintaining, and replacing HVAC equipment in various applications throughout the state of Rhode Island. We work on major projects as well as perform small service work. Some major clients, Bryant University, Broadrock Renewables, Brown University, has Sarra Engineering on-call 24/7 in order to diagnose the HVAC problem that might come up and repair or replace as necessary. We are signatory to Local 51 "Plumbers & Pipefitters". Our company is led by Frank Sarra who manages all aspects of the company (i.e. accounts payable/receivables, project management, scheduling, estimating, etc.). We have (3) full-time project managers who perform a variety of tasks to help manage the workforce which include estimating, management, scheduling, truck-driving, CAD/BIM coordination, and accounting.

We have all the specialty equipment and tools that are necessary to perform a multitude of work at a moment's notice. This includes: Service truck with welding capabilities for remote destinations (if needed), heavy flatbed truck hauling, trailer hauling for long and wide loads, forklifts up to 10,000 lb capacity, aerial lifts (up to 45' reach), and a 115 ton crane capable of reaching 260'. All this equipment is in addition to our normal pipefitting tools and equipment to include air compressors, welders, torch outfits, generators, etc.

Sarra Engineering has a 24/7 on-call response set up to cater to several of our clients. We have performed projects which range from $100 to $7,000,000.00. No project is too small. Being a number of Local 51 allows us to hire as many men as necessary to complete the work. It also allows us to hire specialty technicians such as refrigerant specialties, if needed. We have been around for over 60 years and continue to strive for the most economical, safe, and best outcome for all of our clients.

***See attached Proposal for more information

SECTION 15: EXPERIENCE AND REFERENCES

Part B: Experience and References

15.1 Experience and References

Provide names, addresses, and contact information for from three (3) owners of projects for which work has been performed in the past five (5) years. Include a brief description of each project. The Division reserves the right to not award a MPA contract to any respondent whose references are deemed to be unsatisfactory.

Year Started: 2014

Year Complete: 2015

Brief Description of Contract:

The project included the complete renovation of the existing HVAC system in a state hospital while being occupied 24/7. The existing system was comprised of steam radiators and window A/C units. The renovation converted the existing system over to fan coil units capable of hot/chilled water for heating/cooling. A new piping infrastructure and mechanical room was installed to accommodate the new system. Self-performing work included pipefitting, rigging, carpentry, masonry, concrete, site work, and structural steel.

Company: ADI Energy, Inc.

Contact Person: John Rizzo

Telephone and Email: JRizzo@ADIEnergy.com, (617) 744-9234

Project and Value: Zambarano State Hospital, Wallum Lake House HVAC Upgrades; $1,700,000.00

Year Started: 2010

Year Complete: 2011

Brief Description of Contract:
Contract included the installation of all HVAC work in a new medical building for Brown University. The project included all piping, ductwork, control work, insulation, and balancing for a complete and operable system. Project included equipment to support laboratories, clean-room environments, and classroom/lecture halls.

Company: Brown University

Contact Person: Stephen Phillips

Telephone and Email: Stephen_Phillips@Brown.edu; (401) 863-7850

Project and Value: Warren Alpert Medical Center; $6,500,000.00

Year Started: 2014

Year Complete: 2014

Brief Description of Contract:
Project included a complete heating system upgrade for the Prout School located in Wakefield, RI. Sarra Engineering was the general contractor on the project. Sub-contracting included asbestos removal, insulation, ductwork, fireproofing, and control work. All other work (pipefitting, rigging, structural steel, concrete, plumbing) was self-performed. The entire mechanical room was initially demolished and then re-built with new higher efficiency equipment.

Company: The Diocese of Providence

Contact Person: Max Girourard

Telephone and Email: mgirouard@dioceseofprovidence.org; (401) 278-4500

Project and Value: The Prout School - Boiler Replacement; $500,000.00

SECTION 16: ADDITIONAL REQUIREMENTS

16.1 Must have a 24hr/7 day a week emergency on call service with a dedicated number.

i. Submit the company protocol for call-in of emergency work.

Please see Section 6.0 in attached proposal

16.2 Safety Program: Must have a designated Safety Manager with a structured safety program and all employees used and are trained in confined space work.

i. Submit a copy of the company's Safety Program

ii. Submit a statement that all employees that perform work are certified for Confined Space Work per OSHA 10 and 30.

Please see Section 7.0 in attached proposal

16.3 List all company owned equipment necessary to perform the services outlined.

Please see Section 8.0 in attached proposal

16.4 List subcontractors proposed as members of the project team, and the duties, responsibilities and concentration of effort which apply to each.

Please see Secion 9.0 in attached proposal

SECTION 17: ATTACHMENT A - PROJECT RELEVANT EXPERIENCE:
Submit on Attachment A:

17.1 Indicate three (3) projects work valued at over $10,000 within the past three (3) years.

i. Year Started: 2015

Year Complete: 2015

Description of Contract:

The replacement of an existing cooling tower located on the roof at the Garrahy Courthouse located in Providence, RI. The project also included the installation of (2) new inline pumps for the (2) existing centrifugalchillers to aid in their efficiencies. The project included all piping, insulation, structural steel, and rigging.

Company: RI Supreme Court

Contact Person: Richard Blakely

Telephone and Email: RBlakely@Courts.Ri.Gov; (401) 222-8639

Project and Value: Garrahy Cooling Tower Project; $300,000.00

ii. Year Started: 2013

Year Complete: 2013

Brief Description of Contract:

The replacement of an existing cooling tower located at the Rhode Island School of Design in Providence, RI. The project involved the shutting down of North Main Street in Providence to facilitate the use of our own crane to remove and replace the existing tower. The work involved all rigging, piping, electrical, and insulating of the new tower.

Company: Rhode Island School of Design

Contact Person: David Crocker

Telephone and Email: DCrocker@RISD.edu; (401) 454-6357

Project and Value: Metcalf Bldg Cooling Tower Replacement; $105,000.00

iii. Year Started: 2014

Year Complete: 2014

Brief Description of Contract:

Pump Replacement of the Grad-E Center at Brown University. The project included the replacement of (3) existing pumps in the basement mechanical room. Work included all rigging, piping, and insulation.

Company: Brown University

Contact Person: Keith Fuchs

Telephone and Email: Keith_Fuchs@Brown.edu; (401) 863-7778

Project and Value: Grad-E Pump Replacement; $35,000.00

17.2 Successful record Self Performing on at least three (3) projects valued at over $50,000 within the past three (3) years.

i. Year Started: 2015

Year Complete: 2015

Brief Description of Contract:

The repair and replacement of (10) exhaust fans used for laboratory exhaust in a research facility located on Brown University's campus. The fans are considered specialty equipment and had to be removed from the roof, set on the ground, disassembled, repaired, replace the motor, and then re-assemble, and put back in place. The crane work was self-performed to aid in the fan removal/re-installation.

Company: Brown University

Contact Person: David Larson

Telephone and Email: Arthur_Larson@Brown.edu; (401) 863-7863

Project and Value: GeoChem Exhaust Motor Replacements; $55,000.00

ii. Year Started: 2013

Year Complete: 2013

Brief Description of Contract:

The project included the replacement of (1) existing cooling along with piping, and structural steel. The project also included the installation of a "vortex separator" to aid in the operation of the cooling tower. Self-performing work included all piping, rigging, and structural steel work necessary to install the new cooling tower.

Company: Hasbro, Inc.

Contact Person: Dan Bubier

Telephone and Email: Dan.Bubier@Hasbro.com; (401) 431-8697

Project and Value: Hasbro Cooling Tower Replacement; $150,000.00

iii. Year Started: 2012

Year Complete: 2012

Brief Description of Contract:

The project included the installation of a new modular chiller to aid in the cooling of a technological research building located on Brown University's campus. The project included the chiller, condenser, and pumps along with associate piping and rigging.

Company: Brown University

Contact Person: Keith Fuchs

Telephone and Email: Keith_Fuchs@Brown.edu; (401) 863-7778

Project and Value: 180 George St. Chiller Replacement; $350,000.00

Sarra Engineering MPA - HVAC Bid Proposal

RI Solicitation#: 7549957

Proposal Submit To:

The State of Rhode Island Department of Administration
Division of Purchases, 2nd Floor
One Capitol Hill
Providence, RI 02908-5855

Sarra Engineering
1 Harry Street
Cranston, RI 02907
TEL: (401) 942-1050
FAX: (401) 943-5179
www.SarraEngineering.com
RIVIP Vendor ID#: 17954

Table of Contents

1.0: Executive Summary 2
2.0: Sarra Engineering's Project Team 3
3.0: Project Team Resumes 4
4.0: Project References 11
5.0: Company Profile 18
6.0: Emergency Contact Protocol 19
7.0: Safety 20
8.0: Equipment and Capabilities 20
9.0: Proposed MPA Team 21

Sarra Engineering
1 Harry Street Cranston, RI 02907
P: (401) 942-1050, F: (401) 943-5179
www.sarraengineering.com

1.0: Executive Summary

Sarra Engineering is a small business contractor who is dedicated to its work and the outcome of the client. Our work includes small repair jobs to multi-million dollar building renovations and new construction. Our employees are some of the most respected and reputable people in the industry and range in a variety of skills. Self-performing work that Sarra Engineering handles includes the following:

- Piping to Include Carbon Steel Welded
- Certified X-Ray Welding
- All Carbon Steel Process, PVC, Copper Piping
- HVAC Rigging
- HVAC Demolition
- Structural Steel Fabrication for HVAC Equipment
- Minor Concrete and Masonry
- Crane Rigging for HVAC Equipment and Supports
    - 115 Ton Capabilities
    - 260' Reach
- Heavy Trucking and Hauling for all Equipment

Amongst these items, we also are a general HVAC contractor which has several sub-contractors and their work includes the following:

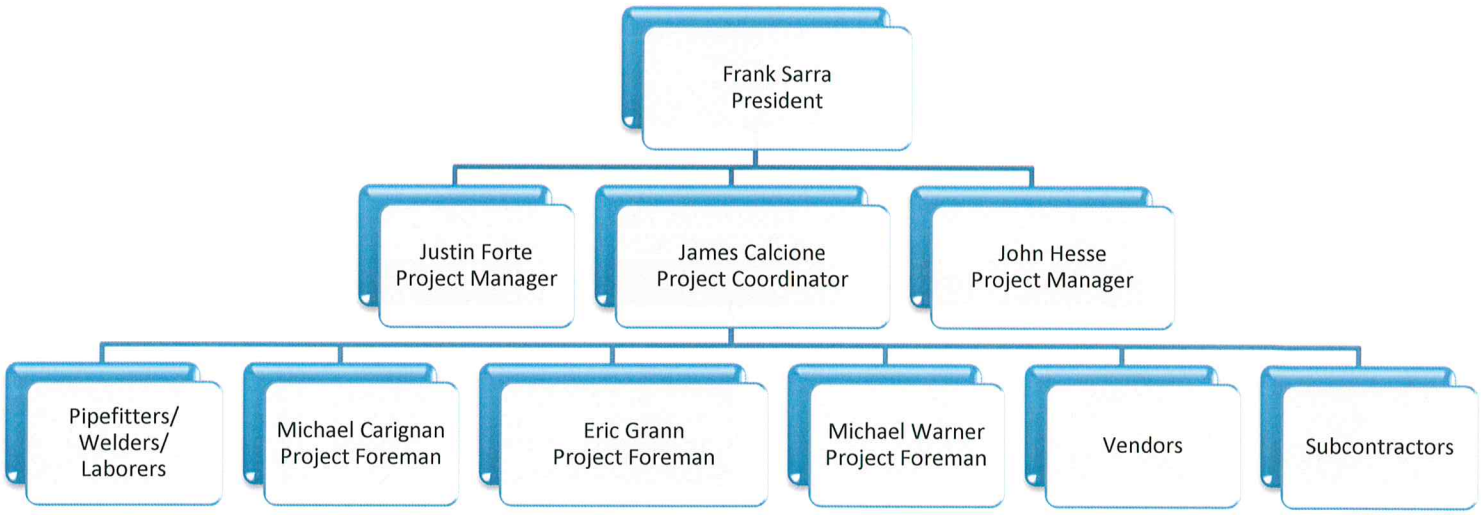
- Insulation
- Temperature Controls
- Air and Water Testing and Balancing
- Ductwork

Our company organization includes several project managers which handle a variety of projects ranging in all sizes. Each project managers works directly with three to four project foreman who are full-time staff. In addition to our full-time staff made up of managers and foreman, we are a union company which allows us to hire as many men as our needed to complete the work in a timely fashion. We hire out of Local 51, "Plumbers & Pipefitters", which includes a range of specialties from refrigerant technicians, to plumbers, welders, and pipefitters.

Some of our main clients that we deal with on a day-to-day basis are Brown University, Bryant University, Rhode Island School of Design, Broadrock Renewables Energy, The Diocese of Providence, and FM Global. We have performed major projects and small service work for each client throughout the years. Through each client, we build a relationship of trust knowing that if something goes wrong, we will always respond and we stand by our own work and will honor all warranty commitments.

Sarra Engineering
1 Harry Street Cranston, RI 02907
P: (401) 942-1050, F: (401) 943-5179
www.sarraengineering.com

2.0: Sarra Engineering's Project Team



Sarra Engineering
1 Harry Street Cranston, RI 02907
P: (401) 942-1050, F: (401) 943-5179
www.sarraengineering.com

3.0: Project Team Resumes

Frank A. Sarra
1 Harry Street
Cranston, RI 02907
(401) 942-1050
Frank@SarraEngineering.com

Title: President/Owner

Responsibilities: Owner of Sarra Engineering

- Senior Estimator
- Accounts Payable/Receivable
- Senior Project Manager
- Crane Operator

Background:

Education

- Roger Williams University - MB

Trade Affiliations

- RI Pipefitter Apprentice – 4 Years
  - Local #51
- RI Master Mechanical Pipefitter
  - Local #51
  - Pipefitter License #6256
- Massachusetts Pipefitter License
  - Pipefitter License #019351
- Crane Operator
  - Local #57: Operating Engineers
  - RI State License - Hydraulic Crane Operator/Construction Forklift

General Contractor

- License #9596

Company Experience:

Pipefitter - 10 Years

- Local #51

Crane Operator – 18 Years

- Local #57

Owner of Sarra Engineering – 24 Years

- HVAC Renovations
- Process Piping
- Industrial Piping
- Institutional HVAC (Also to Include Power Plants, High Temperature Hot Water Distribution, and Steam)
- Renewable Energy Power-Plant Facility (CoGen)
- Semi-Conductor Facility Work
- Rigging of Equipment and Structural Steel (115 Ton Crane)
- Select Demolition
- Select Trucking and Hauling of Equipment and Materials
- Hospitals
- Clean Rooms
- Design/Build
  - Industrial/Institutional HVAC
  - Select Structural
  - Residential

James C. Calcione
1 Harry Street
Cranston, RI 02907
Office: (401) 942-1050
Cell: (401) 477-9357
James@SarraEngineering.com

Title: Office Manager/Project Coordinator

Responsibilities:

Office Manager
- Main Office Secretarial Duties

Project Coordinator
- Project Scheduling
- Project Organization
- Labor Force Organization

Background:

Education
- University of Rhode Island – BA

Golf Professional – 13 Years
- Professional Golf Association Class A2 Member
  - Past Employment
    - Alpine Country Club
    - Foxwoods Casino

Sales – 6 Years
- National Sales Manager for Tourist Division
  - Past Employment
    - Fort U.S.A.
      - Company Specialized in Pewter Manufacturing

Company Experience:

Office Manager - 10 Years
- Phone Operator
- Typist
- Material/Equipment Deliveries

Project Coordinator – 13 Years
- Project Organization
  - Organization between Project Managers, Engineers, and Project Foreman
- Project Scheduling
  - Coordination with Sub-Contractors, General Contractors, Manufacturing Representatives, and Project Owners

Company Sales Representative - 13 Years
- Duties Include Promoting the Company Name and Meeting with Potential Clients/Owners Interested in Construction Renovation/New Work

John Hesse
1 Harry Street
Cranston, RI 02907
Office: (401) 942-1050
Cell: (401) 649-0115
John@SarraEngineering.com

Title: Project Manager/BIM Coordinator

Responsibilities:

BIM Coordinator

- MEP Coordination Amongst Other Trades Using 3D Modeling
- 3D MEP Drafter

Project Manager

- Project Scheduling
- Project Organization

Background:

Education

- Thames Valley State Technical College – ASME
- University of Rhode Island - BSME

CAD Designer/Management – 27 Years

- Past Employment
  - Corporate Scenographics, LLC
  - Toyenco, Inc.
  - CVS – Facilities Design
  - Brooks – Facilities Design
  - Richard Sharpe Associates, Architects
- Job Duties
  - Vendor Coordination
  - CAD Design/Management
  - Project Management
  - Plans and Specifications Reviewer

Company Experience:

BIM Coordinator – 5 Year

- MEP Coordination
  - Using 3D CAD Modeling, Coordinate the System Layouts Amongst Other Trades
  - Procure 100% Construction Documents based on Preliminary Design
  - Prepare Final As-Built 3D Documents based on Field "Red-Line" Drawings and Design Concepts

Project Manager – 5 Year

- Project Organization
  - Organization between Project Managers, Engineers, and Project Foreman
- Project Scheduling
  - Coordination with Sub-Contractors, General Contractors, Vendors, and Project Owners

Justin Forte
1 Harry Street
Cranston, RI 02907
Office: (401) 942-1050
Cell: (401) 323-6244
Justin@SarraEngineering.com

Title: Assistant Project Estimator/Project Manager

Responsibilities:

Assistant Project Estimator

Project Manager

- Project Scheduling
- Project Organization

Background:

Education

- University of New Hampshire – BSCE
- Engineer in Training Certified – May 2011

Office Manager/Intern – Summer Months from 2008-2010

- Past Employment
  - Sarra Engineering
- Job Duties
  - Secretarial Duties
  - Assistance in Pipe-Fitting and Rigging
  - Material Deliveries to Jobsites

Company Experience:

MEP Drafter – 1 Year

- MEP Drafter
  - Prepare Final As-Built 3D and/or 2D Documents based on Field "Red-Line" Drawings and Design Concepts
  - Prepare Proposed MEP Layouts for Approval

Project Manager – 4 Years

- Project Organization
  - Organization between Project Managers, Engineers, and Project Foreman
- Project Scheduling
  - Coordination with Sub-Contractors, General Contractors, Vendors, and Project Owners
- Minor Design Work
  - Structural Design to Support HVAC Equipment

Assistant Project Estimator – 2 Years

- Assistant Estimator for both Structural Steel and HVAC
  - Review bid documents and job-site conditions and communicate to lead estimator for review.
  - Gather vendor/subcontractor pricing
  - Material take-offs from bid documents

Eric Grann
1 Harry Street
Cranston, RI 02907
Office: (401) 942-1050
Cell: (401) 255-6598

Title: Project Foreman/ Superintendent

Responsibilities:

Foreman

- Organize and Direct Labor Force to Complete Project Tasks and Maintain Project Schedule

Background:

Navy – 6 Years

- Fireman

Pipefitter

- Local #51 Union Pipefitter for Various Companies

Company Experience:

Pipefitter – 10 Years

- Local #51 Union Pipefitter
- Carbon steel X-Ray welding
- Rigging
- Piping
  - Industrial
  - Process
  - Commercial

Project Foreman - 15 Years

- Keep Track of Labor Hours Used on Each Individual Job
- Keep Records of Any Changes or Deviations from Original Construction Documents Due to Unforeseen Circumstances
- Organize and Direct Pipefitters, Welders, and Laborers in Order to Maintain both Tasks and Completion Dates
- Coordinate with Office Personnel and Project Managers

Superintendent – 8 Years

- Coordinate all field work with office personnel and other trades on-site
- Direct project foreman how to proceed with various tasks and make sure the schedule is met
- Help design/build on job-site using existing conditions

Michael Carignan
1 Harry Street
Cranston, RI 02907
Office: (401) 942-1050
Cell: (401) 413-9124

Title: Project Foreman/ Superintendent

Responsibilities:

Foreman

- Organize and Direct Labor Force to Complete Project Tasks and Maintain Project Schedule

Background:

Pipefitter

- Local #51 Union Pipefitter for Various Companies

Company Experience:

Pipefitter – 10 Years

- Local #51 Union Pipefitter
- Carbon steel X-Ray welding
- Rigging
- OSHA 40 Certified
- Foreman's Training Certified
- Piping
  - Industrial
  - Process
  - Commercial

Project Foreman - 10 Years

- Keep Track of Labor Hours Used on Each Individual Job
- Keep Records of Any Changes or Deviations from Original Construction Documents Due to Unforeseen Circumstances
- Organize and Direct Pipefitters, Welders, and Laborers in Order to Maintain both Tasks and Completion Dates
- Coordinate with Office Personnel and Project Managers

Superintendent – 4 Years

- Coordinate all field work with office personnel and other trades on-site
- Direct project foreman how to proceed with various tasks and make sure the schedule is met
- Help design/build on job-site using existing conditions

Michael Warner
1 Harry Street
Cranston, RI 02907
Office: (401) 942-1050
Cell: (401) 641-3365

Title: Project Safety Supervisor/Project Foreman

Responsibilities:

Safety

- Maintain Jobsite Safety
- Update Equipment Inspections
- Coordinate Safety Inspections and Keep Detailed Reports
- Coordinate "Toolbox Talks" and Any Updated Training

Foreman

- Organize and Direct Labor Force to Complete Project Tasks and Maintain Project Schedule

Background:

Safety Credentials

- AED CPR Certified
- 1st Responder
- Incident Safety Officer
- Instant Command Certified
- Confined Space Certified

Pipefitter – 10 Years

- Master 1 Mechanical Pipefitter
- Sprinkler Fitter

Company Experience:

Safety Supervisor – 18 Years

- Responsible for Jobsite Safety
  - Conduct Field Inspections
  - Keep Up-to-Date OSHA Records
  - Enforce "Sarra Engineering Safety Manual" Policies
  - Ensure That All Equipment/Tools are Inspected and Up-to-Date by OSHA Regulations

Project Foreman – 23 Years

- Keep Track of Labor Hours Used on Each Individual Job
- Keep Records of Any Changes or Deviations from Original Construction Documents Due to Unforeseen Circumstances
- Organize and Direct Pipefitters, Welders, and Laborers in Order to Maintain both Tasks and Completion Dates
- Coordinate with Office Personnel and Project Managers
- Master 1 Pipefitter

4.0: Project References

Project:

2014 – Zambarano State Hospital, Wallum Lake House HVAC Upgrades

Contract Amount: $1,700,000 (Bonded)
Project Manager: John Rizzo, (617) 744-9234
General Contractor: ADI Energy, Inc.
37 Thurber Blvd, Suite 107
Smithfield, RI 02917
HVAC Contractor: Sarra Engineering
Project Duration: 12 months
Description:

- Renovate the existing HVAC system in an occupied hospital.
- The project involved major coordination between the nurses and patients to allow access into each room while performing work.
- The existing steam radiator system was replaced with a complete Hot Water/Chilled Water system to feed new fan coil units in each patient room.
- Project involved self-performed masonry, site, concrete, and drywall work.
- The installation included all piping, insulation, and testing and balancing for the following equipment:
  - (1) Steam Absorption Chiller
  - (1) Cooling Tower
  - (1) Steam to Hot Water Heat Exchanger
  - (3) Pumps
  - (214) Fan Coil Units with New Complete Infrastructure Piping

Project:

2008 / 2009 - Brown University Bio-Medical Building Air handling Unit Upgrade

Contract Amount: $4,600,000 (Un-Bonded)
Project Manager: Stephen Phillips, (401) 863-7850
General Contractor: Sarra Engineering
Project Duration: 27 months
Description:

- Remove and install (8) new 30,000CFM air handling units while the building is occupied for classes and research year round.
- Building was extremely sensitive and could not be interrupted at any time due to high level research projects and classes
- Entire project took place without any HVAC interruption of service for more than 6 hours at any one time.
- Critical animal care research labs could not deviate in temperature more than 3 degrees without animals being affected negatively, sometimes causing death.
- The air handling units are the heart of this building with operating rooms for students to operate under line conditions.

Sarra Engineering
1 Harry Street Cranston, RI 02907
P: (401) 942-1050, F: (401) 943-5179
www.sarraengineering.com

- Work consisted of installing 30' x 10' x 7' tall units in sections through rigging access locations created by Sarra Engineering no larger than 6' wide x 7' tall.
- A temporary air handler was installed and re-ducted to take the place of each unit while each air handler was being replaced to ensure proper temperature, humidification, and airflow met FDA testing requirements for research
- The project also included (in addition to the air handlers) all ducting, insulation, controls, testing and balancing for the following:
    - Clean Steam Generator
    - Steam piping
    - Chilled water piping
    - (1) New 450 ton chiller that had to be rigged into position in pieces

Project:

2005/2007 - Brown University Rockefeller Library Central Chiller Plant & Air Handling Unit Replacement

Contract Amount: $4,125,000 (Un-Bonded)
Project Manager: Jeffery Parker, (401) 863-7850
General Contractor: Sarra Engineering
Project Duration: 2 Years
Description:

- Phase I: Install a 1500 ton chiller plant for the central campus under a 250,000 sq. ft. library while it stayed open year round.
    - The installation included the following:
        - (2) chillers
        - (14) pumps
        - (4) cooling towers
- Phase II: Demolition and replacement of (20) air handling units while keeping the HVAC in running condition for the entire project.
    - Each unit was removed from under the building and at the penthouse
    - Temporary units were installed while removing old units.
- This project in its' entirety was very sensitive because this building is the main library for the whole campus and is served year round

Project:

2015 – Toray Plastics, A-5 Upgrades

Contract Amount: $550,000.00 (Un-bonded)
Project Manager: Robert Fitzpatrick, (781) 573-1700
General Contractor: EMCOR Services Northeast, Inc.
80 Hawes Way
Stoughton, MA 02072
HVAC Contractor: Sarra Engineering

Sarra Engineering
1 Harry Street Cranston, RI 02907
P: (401) 942-1050, F: (401) 943-5179
www.sarraengineering.com

Project Duration: 6 months
Description:

- Upgrade the existing mechanical system to be able to support additional factory processes.
- Project included shut-down and tie-in work to existing systems without interrupting factory production.
- Self-performing work included structural steel, concrete, and rigging in addition to piping.
- The installation included all piping, process piping, and insulation for the following equipment:
  - (2) Centrifugal Chillers
  - (2) Cooling Towers
  - (10) Pumps (ranging from 10 Horsepower to 100 Horsepower)
  - (2) Plate/Frame Heat Exchangers

Project:

2010 – Brown University Warren Alpert Medical Center

Contract Amount: $6,500,000 (Bonded)
Project Manager: Stephen Phillips, (401) 863-7850
General Contractor: Suffolk Construction Company
HVAC Contractor: Sarra Engineering
Project Duration: 1 Year
Description:

- Design/Build of a former jewelry factory that was re-built into a brand new medical facility.
- Project was designed and coordinated with the use of BIM Modeling.
- The installation consisted of all associated piping, ducting, insulation, controls, testing, and balancing of the following equipment:
  - (6) Air Handling Units (units ranging from 7500CFM to 70,000CFM),
  - (2) 300Ton Chillers
  - (2) Cooling Towers
  - (3) Split System A/C Air Handling Units
  - (8) Pumps
  - (4) Boilers
  - (180) VAV boxes

Project:

2010/2011 – Brown University Aquatics and Fitness Center

Contract Amount: $4,500,000.00 (Bonded)
Project Manager: John Cooke, (401) 863-7850
General Contractor: Shawmut Design and Construction
HVAC Contractor: Sarra Engineering
Project Duration: 18 Months
Description:

- Design/Build of a new fitness and aquatics center which includes a 1 million gallon heated swimming pool.

Sarra Engineering
1 Harry Street Cranston, RI 02907
P: (401) 942-1050, F: (401) 943-5179
www.sarraengineering.com

- Job was based on 50% design documents and completed with the use of BIM Coordination.
- The installation consisted of all associated piping, ducting, insulation, controls, testing, and balancing of the following equipment:
    - (3) Condensing Boilers
    - High Temperature Hot Water system complete with piping and Heat Exchangers
    - (2) Pool Dehumidification Units capable of heating and cooling of both water and air
    - (4) Air Handling Units (units ranging from 6000CFM to 25,000CFM)
    - (1) 20,000CFM Energy Recovery Unit
    - (7) Pumps (Ranging from 50GPM to 1350GPM)
    - New Solar Panel Array complete with Photovoltaic and Thermal panels (Largest collegiate Solar Panel Array in the Country)
    - (38) VAV boxes

Project:

2008 - Brown University – J. Walter Wilson Building
Tenant Fit-Out – 2000 ton Chiller Plant

Contract Amount: $4,000,000 (Bonded)
Project Manager: Jeffery Parker, (401) 863-7850
General Contractor: Shawmut Design & Construction
HVAC Contractor: Sarra Engineering
Project Duration: 9 months
Description:

- Design/Build of a 6 story, 75,000 square feet, former lab building
    - The installation included all piping, ducting, controls, balancing, testing, and insulation for the following equipment:
        - (2) 26,000 CFM custom air handling units
        - 55 VAV boxes
- 3000 Ton Chiller Plant installed on 6th Floor
    - The chiller plant was installed for distribution of chilled water for J. Walter Wilson building and surrounding buildings.
    - Chiller plant is the largest on campus.
    - The installation included all piping, rigging, controls, insulation, testing, and balancing for the following equipment:
        - (2) 1000 ton chillers
        - (7) 125 HP pumps
        - (8) cooling towers

Project:

2008 - E.F.D., Inc. Factory Consolidation Project

Sarra Engineering
1 Harry Street Cranston, RI 02907
P: (401) 942-1050, F: (401) 943-5179
www.sarraengineering.com

Contract Amount: $3,100,000 (Un-bonded)
Project Manager: Christopher Ducharme, (401) 943-0190
General Contractor: E. Turgeon Construction
HVAC Contractor: Sarra Engineering
Project Duration: 11 months
Description:

- Install a complete HVAC system for new EFD factory consisting
- The installation included all piping, process piping, ductwork, controls, insulation, testing and balancing for the following equipment:
  - (1) 450 ton chiller
  - (2) cooling towers with free cooling heat exchanger
  - (2) boilers
  - (8) pumps
  - (20) air handling units w/associated exhaust

Project:

2012 & 2013 – Hasbro Cooling Tower Replacement

Owner's Representative: Dan Bubier, (401) 431-8697
Hasbro, Inc.
1027 Newport Avenue
Pawtucket, RI 02861
HVAC/General Contractor: Sarra Engineering
Contract Amount: $300,000.00 (Un-Bonded)
Project Duration: 1 Month (Per Project)
Description:

- Replace Both Cooling Towers at Hasbro in Pawtucket, RI.
- Each tower was done in consecutive years due to full use of towers throughout year. Shut-downs had to be minimalized.
- Crane/Rigging work was performed off-hours on weekends.
- Each tower was 600 Tons Cooling Capacity.
- Each tower installation included the following:
  - New Vortex Separator with Associated Piping
  - Piping – Steel Welded
  - Insulation
  - Electrical
  - Automatic Temperature Controls
  - Structural Steel (Self-Performed)

Project:

2013 – Brown U. – Barus & Holley/Prince Lab
Infrastructure Upgrades

Project Manager: Dan Ramos, (617 – 387 – 3400)
Bond Brothers, Inc.
145 Spring Street
Everett, MA 02149

Sarra Engineering
1 Harry Street Cranston, RI 02907
P: (401) 942-1050, F: (401) 943-5179
www.sarraengineering.com

General Contractor: Bond Brothers, Inc.
HVAC Contractor: Sarra Engineering
Contract Amount: $5,200,000 (Un-Bonded)
Project Duration: 12 Months
Description:

- Upgrade the complete HVAC infrastructure for an existing occupied building.
- Building was occupied throughout the entire project. The building was used for scientific research and was not allowed to be shut-down due to processes taking place.
- IPD (Integrated Project Delivery) Project was built with minimal design documentation. Flow diagrams and schematics were used for fabrication and installation. As-Built drawings were done after the fact to show what was done.
- The installation included all rigging, piping, sheet-metal, insulation, controls, testing and balancing for the following equipment:
    - (1) 50,000 CFM Knocked Down Air Handling Unit, Built-In-Place
    - (2) 360 Ton Centrifugal Chillers, Knocked Down Package, Assembled in Place
    - (3) Plate and Frame Heat Exchangers
    - (12) Pumps
    - (2) 360 Ton Cooling Towers
    - (2) Shell & Tube Heat Exchangers
    - (2) 90 Ton Air Cooled Chillers with Associated Condensers
    - (1) Energy Recovery Systems Complete with Pumps, Make-Up Feed Package, and Coils
    - (2) Strobic Lab Exhaust Fans

Project:

<u>1981-2003 – ON-Semi Conductor</u>

HVAC Contractor: Sarra Engineering
Project Duration: 21 Years
Description:

- Major HVAC Contractor for over 20 Years
- Installation of original HVAC plants including the following:
    - Boiler Plant
    - Chiller Plant
    - Compressed Air System
    - Vacuum System
    - DI Water System
    - Clean Room Piping
        - Rooms included Air Handling Units to meet levels of heating/cooling necessary ranging from 1 unit to 26 units per room.
        - Pipefitters and workers had to wear necessary protection and go through proper protocols before entering rooms and performing any work.

Sarra Engineering
1 Harry Street Cranston, RI 02907
P: (401) 942-1050, F: (401) 943-5179
www.sarraengineering.com

- Systems included Carbon Steel Welding, Copper Sweat and Braze, and Stainless Steel Welding
- Used for major maintenance of equipment
- Performed several small projects over the course of 20 years expanding the existing mechanical systems, including:
    - Chiller Plant expansion to increase to a 1800 Ton Chiller Plant
    - Boiler Plant Expansion to include High Pressure Steam, Medium Pressure Steam, and Hot Water
    - Cooling Tower Replacements as needed due to age of equipment.
- In 2003 the plant closed and was moved to another location outside of the United States which was the reason for stoppage of work.

Project:

2004 - TACO HVAC Upgrades

Owner Representative:	Norman Shardlow, (401) 942-8000 Taco Manufacturing, Facilities Manager 1160 Cranston Street Cranston, RI 02907
General/HVAC Contractor:	Sarra Engineering
Contract Amount:	$3,200,000.00
Project Duration:	8 Months

Description:

- Install a complete HVAC system for an existing occupied building.
- Building was occupied throughout the entire project. Manufacturing stayed fully operational through duration of project.
- Project included relocation of several process lines which included process gases and fluids necessary for manufacturing.
- The installation included all piping, insulation, testing and balancing for the following equipment:
    - (1) Plate and Frame Heat Exchanger
    - (1) 500 Ton Chiller
    - (1) 180 Ton Absorption Chiller
    - (6) Gas Fired Turbines
    - (13) Rooftop Air Handlers
    - (1) Cooling Tower
    - (3) Hot Water Boilers
    - (7)Pumps

Sarra Engineering
1 Harry Street Cranston, RI 02907
P: (401) 942-1050, F: (401) 943-5179
www.sarraengineering.com

5.0: Company Profile

Company Name: Sarra Engineering Corporation
One Harry Street
Cranston, RI 02907

Years in Business: Incorporated in 1953 by Frank Sarra Sr.
Professional Engineer License #1194
Rhode Island Master Mechanical License #0078

Present Owner: Frank A. Sarra Jr. - President / Owner
- RI Master Pipe Fitter License #6256

Elizabeth Sarra - Vice-President

Type of work: Primary Mechanical Contractor specializing in:

- HVAC Renovations
- Process Piping
- Industrial Piping
- Institutional HVAC including Power Plants, Steam, High Temperature Hot Water Distribution
- Landfill Power Plant Construction
- Semi-Conductor Facility Work

Staff: 15 to 30 Full Time Employees – Dependant on workload
Pipe fitters signatory to Local #51 Pipefitters & Plumbers

Office Personnel:

- Frank A. Sarra: Estimator / Project Manager / Accounts Receivable / Accounts Payable
- Elizabeth C. Sarra: Accounts Receivable / Accounts Payable
- James C. Calcione: Office Manager / Project Manager / Human Resources
- John Hesse: BIM/MEP Coordinator/Project Manager
- Justin Forte: Project Manager/ Project Estimator/ CAD Technician
- Brian Wallace: Shop Forman / Equipment Maintenance / Equipment Operator / Pipefitter / Licensed Crane Operator
- Eric Grann: General Superintendent of Projects
- Michael Warner: General Forman Projects
- Michael Carignan: General Forman Projects

Facilities: Office owned and located at One Harry Street, Cranston, RI 02907
Storage Warehouse: 2400 sq. ft.
Fabrication Shop 5000: sq. ft.

Self-Performing Work:

- Piping to include carbon steel welded

Sarra Engineering
1 Harry Street Cranston, RI 02907
P: (401) 942-1050, F: (401) 943-5179
www.sarraengineering.com

- Certified X-Ray Welding
- Certified Stainless Steel Welding
- All carbon steel process, copper, PVC
- Rigging
- Select demolition
- Structural steel fabrication
- Minor concrete and masonry
- Crane hoisting and handling to 115 ton
- Selected heavy trucking and hauling

Sub-Contractor:

- Ductwork
- Insulation
- Temperature Controls
- Balancing
- Selected Rigging

Safety:

- Worker's Compensation Mod: .77
- 10 Hr OSHA Safety Cards held by ALL employees
- OSHA Fines or Incentives: (0) for 25 years

6.0: Emergency Contact Protocol

EMERGENCY PROCEDURE

In case of emergency, please do the following:

1) Call the Project Manager, James Calcione, 401-942-1050 / cell 401-477-9357 at any time.

2) Call the office 401-942-1050 and ask for Frank A. Sarra, President, Sarra Engineering Office Hours 7am – 3:30pm

3) Below are the primary Mechanical contacts:

Most Important Emergency numbers:

HVAC:	Sarra Engineering	Main: 401-942-1050
President:	Frank A. Sarra	401-942-1050
Project Coordinator:	James C. Calcione	401-477-9357
Project Foreman:	Eric Grann	401-255-6598
Project Foreman:	Michael Carignan	401-413-9124
Project Foreman:	Michael Warner	401-641-3365

Sarra Engineering
1 Harry Street Cranston, RI 02907
P: (401) 942-1050, F: (401) 943-5179
www.sarraengineering.com

7.0: Safety

All employees are given Sarra Engineering's "Safety Manual" upon working in the field. In the manual, it explains all of our protocols and steps needed in order to work in a safe manner. We take safety very seriously in all of our work. Our record is proof of this, as our current MOD rating is 0.77. All employees are required to have "OSHA 10" cards and are also required to be trained in confined space work. Much of our service work for some of our current clients includes confined space work, and as a result it is now mandatory for all employees to be trained and equipped to handle such scenarios. For more information on company protocol for various safety requirements, please see attached "Sarra Engineering Safety Manual".

8.0: Equipment and Capabilities

The following is a brief list of all major equipment that Sarra Engineering currently maintains and owns to aid in a variety of projects and applications as is necessary to complete the work.

- Heavy Flatbed Truck – 35,000 lb capacity w/ Roll-Off Bed
- International Flatbed Truck – 20,000 lb capacity w/ Roll-Off Bed
- Tractor Trailer Heavy Hauling – 40' Long Trailers for Specialty Rigging
- Hydraulic Crane – 115Ton Crane with 260' Reach
- Forklifts – 3 Forklifts ranging from 4000 lb capacity to 10,000 lb capacity
- Hydraulic Lull – 10,000 lb capacity
- Service Truck – Gas Welder/Generator Capabilities for Remote Locations
- Aerial Lifts – 2 Aerial Lifts for 20' Reach
- Aerial Telalift – Lift with 45' Range with 360Degree Rotation and Extending Arm
- Gas-Powered Generators/Welders
- Electric-Powered Welders
- Generators
- Coring Machines (up to 24" diameter)
- Mig Welders
- Smoke-Eaters
- Oxy/Acetylene Torch Setups
- ProPress Guns (from ½" to 4" pipe)
- MegaPress Kit (from ½" to 2" pipe)
- Specialty Rigging Equipment to include:
    - CAT Rollers
    - Straps from 4' to 20' long
    - Chainfalls (up to 5Ton capabilities, electric and manual)
    - Chain Com-A-Longs
    - Crank-Lifts
    - Various Chains & Shackles
    - Refrigerator Hand Trucks
    - House Jacks
    - Pallet Jacks (electric and manual)
    - Strap-Jacks

Sarra Engineering
1 Harry Street Cranston, RI 02907
P: (401) 942-1050, F: (401) 943-5179
www.sarraengineering.com

9.0: Proposed MPA Team

The following is a list of subcontractors that Sarra Engineering would utilize if awarded the MPA:

- Insulation – "Applied Insulation Concepts", a certified WBE
- Ductwork – "Quality Air Metals"
- Automated Temperature Controls – "Johnson Controls"

All other work would be self-performed by Sarra Engineering.

Sarra Engineering
1 Harry Street Cranston, RI 02907
P: (401) 942-1050, F: (401) 943-5179
www.sarraengineering.com

Rhode Island Department of Labor and Training
Division of Workforce Regulation and Safety

MASTER MECHAN CONTRC 00000078

FRANK A SARRA
1 HARRY STREET
CRANSTON RI 02907

Ronald R. Ambrosio
Administrator

11/30/2015
Expiration Date

STATE OF RHODE ISLAND
CONTRACTORS' REGISTRATION
AND LICENSING BOARD

REGISTRATION NO. 9596
EXP. DATE 11/1/17

REGISTRANT'S NAME
SARRA CORPORATION

AUTHORIZED REPRESENTATIVE
FRANK A SARRA

DRIVER'S LICENSE #
RI 7716531

EXECUTIVE DIRECTOR

State of Rhode Island and Providence Plantations
Rhode Island Department of Labor and Training

PIPEFITTER/MASTER 1 00006256

SARRA CORP AND SARRA ENGIN
FRANK A SARRA JR
1 HARRY STREET
CRANSTON RI 02907

JOHN SHAW
Administrator

10/31/2017
Expiration Date

HESCO

HEAVY EQUIPMENT SERVICES COMPANY

P.O. Box 726
Niantic, CT 06357
Phone: (860) 739-4446
Fax: (860) 739-4448

CERTIFICATE OF UNIT TEST AND/OR EXAMINATION OF CRANE, DERRICK, OR OTHER MATERIAL HANDLING DEVICE

Certificate Number: 12512 **Type:** Annual **Owner's Identification:**

1. **Owner:** Sarra Mechanical Contractors

   Owner's Address: 1 Harry Street **City:** Cranston **State:** RI **Zip:** 02907

2. **Description:** Crane ☑ Derrick ☐ Other ☐

   Location: (a) Remains at Worksite ☐ (b) Changes Worksite ☑ (c) On Barge ☐

   If (a) or (c), Describe:

   Type: Hydraulic All Terrain Crane

   Manufacturer: Grove **Model Number:** GMK4100L **Serial Number:** 4100 5337

   Maximum Rated Capacity: 220,000 lb.

3. **Service Status at Time of Survey:** **Lifting:** **Other (describe):**

4. **Boom at Time of Survey:** **Length:** 196.9' + 55' **Type:** Hydraulic Telescopic w/Lattice Bifold SAW

5. **Test Loads Applied (cross out if only examination conducted)**

Radius	Proof Load	Rated Load	Outriggers (yes, no)	Boom Direction (over rear, over side)
76'	10,000 lb.	11,900 lb.	Yes	Over Rear
X	X	X	No	X
X	X	X	No	X

   Description of Proof Load: Crane Counterweight

   Basis for Assigned Load Ratings: Functional

6. **Remarks and/or Limitations Imposed:**

7. **Indicating/Limiting Device:** **Type** Load Indicator **Accuracy** 2%

   Type **Accuracy**

I CERTIFY THAT ON 5/21/2015 **THE ABOVE DEVICE WAS**

☐ **EXAMINED AND TESTED,** ☑ **EXAMINED, BY THE UNDERSIGNED OR HIS AUTHORIZED REPRESENTATIVE WHO, IN HIS OPINION, SAID THE UNIT MET THE REQUIREMENTS OF** 1926.1400

NAME OF AUTHORIZED EXAMINER: Mark Quinn **HESCO NUMBER:** 103

SIGNATORY AUTHORITY: Edward A. Shapiro **DATE:** 5/22/2015

EDWARD A. SHAPIRO PRESIDENT

MEMBER
CRANE CERTIFICATION ASSOCIATION OF AMERICA

Rhode Island

COMMERCIAL DRIVER LICENSE

Class B License No. 8660015

Birthdate 04-12-1968 Expires 04-12-2017

Sex	Ht.	Wt.	Eyes	Hair	Issue Date
M	511	240	BLUE	BRO	05-11-1993

Restrictions: Endorsements:

BRIAN K WALLACE
4 WEST VIEW DR
RICHMOND, RI 02892

Carlo Durgan
DIVISION OF MOTOR VEHICLES ADMINISTRATOR

19 CDL

NCCCO CERTIFIED

Operator

Certification #: 130286959

Certification Designations:
TLL

Issued to: BRIAN K. WALLACE

Issue Date: 02/28/2013 Expiration Date: 02/28/2018

Thom Sicklestead, President, NCCCO Board of Directors

Graham J. Brent, Executive Director, NCCCO

For identification purposes only. Subject to provisions of suspension or revocation.

National Commission for the Certification of Crane Operators

State of Rhode Island and Providence Plantations
Rhode Island Department of Labor and Training

CONST.FORKLIFT/TELEHA 00007720
HYDRAULIC CRANES 00007720

BRIAN K WALLACE
4 WEST VIEW DRIVE
RICHMOND RI 02892

JOHN SHAW 04/30/2016
Administrator Expiration Date

NCCCO CERTIFIED

Operator

Certification #: 130286957

Certification Designations:
TLL

Issued to: FRANK A. SARRA

Issue Date: 02/28/2013 Expiration Date: 02/28/2018

Thom Sicklesteel, President, NCCCO Board of Directors

Graham J. Brent, Executive Director, NCCCO

For identification purposes only. Subject to provisions of suspension or revocation.

National Commission for the Certification of Crane Operators

State of Rhode Island and Providence Plantations
Rhode Island Department of Labor and Training

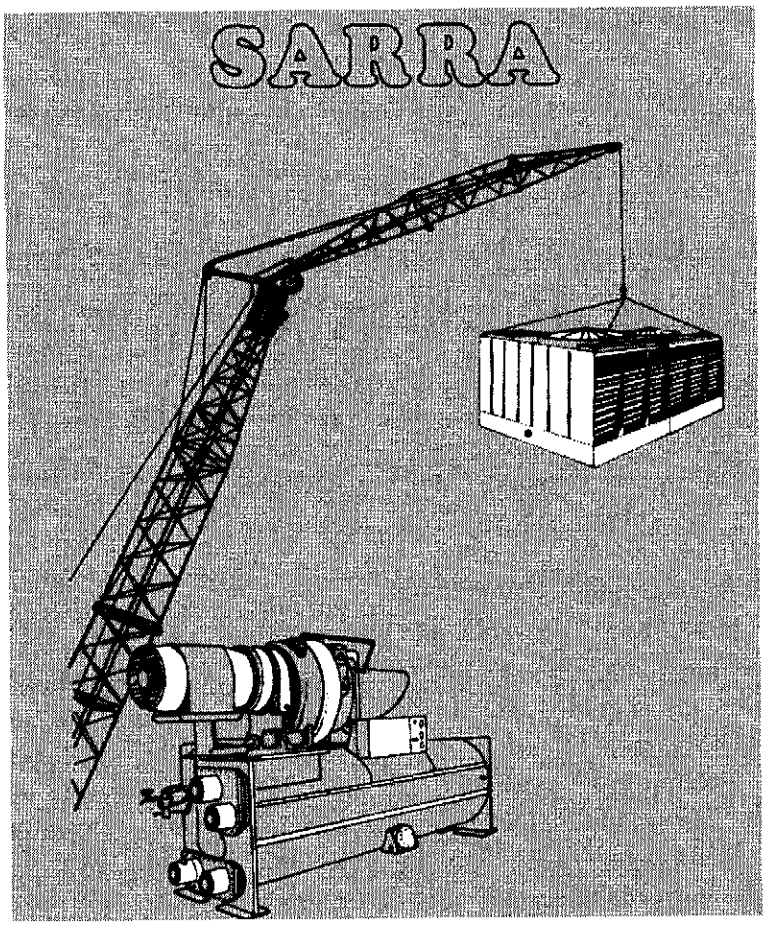
CONST.FORKLIFT/TELEHA 00007740
HYDRAULIC CRANES 00007740

FRANK A SARRA JR
1 HARRY STREET
CRANSTON RI 02907

JOHN SHAW
Administrator

10/31/2017
Expiration Date

Sarra Engineering Safety Manual



Sarra Engineering
1 Harry St.
Cranston, RI 02907
(401) 942-1050
Fax: (401) 943-5179

Table of Contents

Section	# of Pages
Section 1: Introduction/Guidelines	7
Section 2: Automobile Safety	1
Section 3: Combined Safety Program	15
Section 4: Fire Safety Program	2
Section 5: Respirator Program	7
Section 6: Lock-Out/Tag-Out Program	7
Section 7: Hazard Communication Program	27
Section 8: Safety Inspection Check List	30
Section 9: Accident Reporting to OSHA	14

Introduction/ Guidlines

Section 1

Sarra Engineering

Sarra Engineering Corporation

To ALL TRADE EMPLOYEES:

The following is the Company's Health and Safety Policy Statement and Employee Safety Guidelines.

Sarra Engineering Corp. has a strict hiring policy regarding health and safety training. All employees are required to have completed OSHA 10 training and a copy of the card or other proof is required prior to employment with our company. The Safety Manager does and will visit all jobsites on a regular basis and shall have the authority to remove any employee or stop work for concerns regarding any health/safety reasons at any time.

Also, our Safety Manager will perform additional safety training on a regular basis to conform to and exceed OSHA requirements. All employees should be familiar with our Safety Manual and any questions should be directed to the Safety Manager. It is the individual employee's responsibility to assure that the work is performed safely and to question the safety manager if there is any doubt in that regard.

All employees are covered by a Health Plan.

SARRA ENGINEERING

MECHANICAL CONTRACTORS

ONE HARRY STREET CRANSTON, RI 02907

TEL (401) 942-1050 FAX (401) 943-5179

Introduction:

A. At Sarra Engineering Health & Safety is considered the highest priority both to the employee and the general public
B. Sarra Engineering has taken on a Zero Tolerance Policy regarding safety violation
C. Report any and all personal injuries or public complaints to Sarra Engineering immediately
D. Frank A. Sarra, President of Sarra Engineering, is the overall coordinator of the company program and has the overall responsibility. The job foreman has the responsibility at each job site

SARRA ENGINEERING SAFETY PROGRAM

Sarra Engineering Corporation requires that employers write and implement each of the following programs as they apply to job type.

1. Hazard Communication Program
   A. Blood-borne pathogens exposure control program

2. Lock-Out / Tag-Out Program
3. Respirator Program
4. Confined Space Prorgam
5. Fire Safety Program
6. Automobile Safety
7. Record Keeping and Posters
8. Safety Inspection
9. Crane Certification

SARRA ENGINEERING

MECHANICAL CONTRACTORS

ONE HARRY STREET CRANSTON, RI 02907
TEL (401) 942-1050 FAX (401) 943-5179

Employee Job Safety Guidelines

A) Instructions
   1. Read the following information carefully; ask any questions if you do not understand it fully.
   2. It is mandatory that all information contained within the Job Safety Rules is adhered to at all times.
   3. Sign and return the bottom portion of the fifth page to the office immediately

B) Protective Equipment
   1. Hard Hats, Safety Glasses and Ear Protection must be worn at all times on all jobs, no exceptions
   2. Goggles or face shields are compulsory when drilling, burning, chipping, grinding, sawing, grouting and while otherwise required by your foreman. Welding helmets are mandatory for all welders. Respiratory equipment, ear plugs, life jackets and life lines shall be worn as required. Do not proceed without the proper safety equipment, notify your foreman or the office if you can not continue
   3. Gloves are to be worn when handling materials with sharp edges and as directed by your foreman. Finger rings and wrist watched are a constant hazard and all workers are encouraged to remove then while working
   4. Company logo Shirts are to be worn by all personnel while on company time. No ties, loose or ragged clothing is permitted
   5. Work Boots will be worn that support the ankle and guard against puncture and toe wounds
   6. Cement burns are a constant hazard in construction work, particularly in warmer weather. Be sure cement does not get inside your boots or gloves. Your protective hand cream on your hands and wrists. Wash off any cement or concrete that gets on your hands as soon as possible. Report any burns, no matter how slight, to your foreman
   7. It is the employees responsibility to know where fire extinguishers, telephones, first aid kits and materials safety data sheets (MSDS) are located and how to use them in case of an emergency

C) Unsafe Conditions
   1. Report all accidents, injuries and unsafe conditions to your foreman and main office (401-942-1050)
   2. Do not proceed where unsafe conditions exist, notify your foreman
   3. Keep your workplace clean; good house keeping promotes safe and efficient work. Do not allow trash, scrap or boards with protruding nails to lie in your workplace. Keep walkways, exits, stairs and landing clear
   4. Learn the safest way to do your job before you start

D) Tools, Equipment and Materials
   1. Check all vehicles and equipment before use to assure that they are in proper operating condition

2. Hand tools such as hammers, punches, picks, chisels should be inspected for faulty handles or mushroomed heads prior to the start of each job and shall be re-inspected at weekly intervals throughout the term of the job
3. Cables, ropes, sheaves, shackles, booms, lifting equipment, etc., shall be checked each day. Worn or frayed items are to replaced or repaired at once
4. All electrical equipment must be grounded. Three pronged plugs and receptacles are required on extension and equipment cords. Flat or broken cords are forbidden
5. Use safety guards provided. The source of power must be disconnected whenever it is necessary to repair or adjust a piece of electrical equipment. Note: Only authorized persons are to repair electrical equipment
6. All wires within 10' of the apex, roof, sides or corners of a proposed building or of a fully extended crane must be moved or shielded until such time as the building is completely erected.
7. Gasoline may be handled or stored only in approved safety cans. All internal combustion engines must be shut off and cooled before fueling, oiling, cleaning, or adjusting. Check oil when refueling. Do not use gas for cleaning parts or tools.
8. Oxygen and acetylene equipment can be extremely dangerous. Unless you are a qualified and authorized person to use this equipment, leave it alone. Cylinders shall be secured upright at all times to keep oil away from oxygen fitting (with caps or when not in use). Watch for nearby combustibles and keep bottles shielded or in a safe distance from welding or cutting operations. A fire watch is required at all times when burring is required.
9. Compressed air hoses should never be pointed at yourself or anyone else. Compressed air must be used for the prescribed operations only, with the pressure kept as low as possible for doing the job adequately.
10. Riding-seatbelts provided must be worn. Riding materials hoists, cranes loads, balls, hooks, or excavation equipment is not permitted.
11. Materials or equipment being transported by truck must be loaded, cinched and flagged in a manner consistent with good loading and transportation practice and the truck shall be driven only by authorized employees holding valid chauffer's licensees of the proper class
12. Stay out from under and in front of loads on cranes, etc. Do not cause or permit a load to be carried over a co-worker who is unaware of it or cannot get clear
13. Do not attempt to lift objects that are too heavy for you to lift alone, ask for help.

E) Ladders, Scaffolding and Openings

1. All ladders must be inspected prior to the start of each job and equipment with safety feet. Ladders built on the job must be built of #1 grade lumber free if knots with cleats capped, blocked, wired or stripped. Ladders should never be painted
2. Ladders must be on a firm foundation, lashed or hooked to a structure and extend 36" above the landing
3. Never climb or descend a ladder with anything in your hands or pockets, use a hand line for tools and equipment
4. Wood scaffolding must be of good sound lumber generally two planks wide, of no less than 2" x 8" material, adequately supported. Wheel on metal scaffolds must be provided with locks. Guard rails and toe-boards must be used on all scaffolding. Safety belts must be worn when height is equal to or more than 10'
5. Opening in the floor or ground must be railed off and have 4" toe-boards, or covered. Open-sided floors must be railed including toe-boards. Excavation must be guarded by barriers with warning lights at night.

6. Trenches more than 5" deep shall be shored, sloped or a trench shield used, and materials stored at least 2 feet from the edge. Trenches more than 4' deep shall have ladders extending 3' above the trench, within 25' of workers.
7. Scissor lift operators must be trained and certified by a manufactures representative before the lift can be operated.

F) Crane Rigging

1. You must read and understand the Operator's and Safety handbook and the Load chart before operating the crane. The handbook and load chart must be readily available to the operator at all times and must remain in the cab while the crane is in use. Ensure that all personnel working around the crane are thoroughly familiar with the safe operating practices. You must be thoroughly familiar with the location and content of all placards and decals on the crane. Decals provide important operational or maintenance function. Inspect the crane every day (before the start of each shift). Ensure that routine maintenance and lubrication are being dutifully performed. Don't operate a damaged or poorly maintained crane. You risk lives when operating faulty machinery-including your own.
2. Work site. Prior to any operation, you must inspect the ENTIRE work site (including ground conditions) where the crane will travel and operate. Be sure that the surfaces will support a load greater that the cranes weight and maximum capacity. Barricade the area where the crane is working and keep all unnecessary personnel out of this are
3. Use tag lines whenever possible to help control the movement of the load.
4. Safety Information. Do not pass loads or boom over ground personnel. To avoid death or serious injury, keep all parts of this machine, the rigging and materials being lifted at least 6m (20ft) away from all electrical power lines and equipment. Keep all personnel away from this machine if it is being operated near electrical power lines or equipment. Before operating this crane in the vicinity of electrical power lines or equipment, notify the power utility company. Obtain positive and absolute assurance that the power has been turned off. Federal Law prohibits the use of cranes closer that 3m (10ft) to power sources up to 50,000 volts and greater distances for higher voltages. Crane manufacturer recommends keeping cranes twice the minimum distance. Occupational Safety and Health Standards. During crane use, assume that every line is energized (hot) and take the necessary precautions.
5. Electrical Contact. If the crane should come in contact with an energized power source, you must: 1. Stay in the crane cab. Don't panic. 2. Immediately warn personnel in the vicinity to stay away. 3. Attempt to move the crane away from the contacted power source using the crane's controls which are likely to remain functional. 4. Stay in the crane until the power company has been contacted and the power source has been de-energized. NO ONE must attempt to come close to the crane or load until the power has been turned off.
6. Safe Operation. Be sure that the load is well secured and attached to the hook with rigging of proper size and in good condition. Use only slings or other rigging devises rated for the job and use them properly. Never wrap the hoist cable around the load. Check all tackle hardware and slings before use. Refuse to use faulty equipment. Never work the crane when darkness, fog, or other visibility restrictions make such operations unsafe. A qualified signal person shall be used at all times when: Working in the vicinity of power lines; the crane operator cannot clearly see the load at all times; moving the crane in an area or direction in which the operator cannot clearly see the path of travel. At all times use standardized hand signals-previously agreed upon and completely understood by the operator and signal person. If communication with the signal person is lost, crane

movement must be stopped until communications are restored. Keep your attention focused on the crane's operator. If for some reason you must look in another direction, stop all crane movement first. When vision is obscured, use and follow the directions of a single qualified signal person. Obey a signal to stop from anyone.

G) General Information
   1. Safety is of the highest priority, both to the employee and the general public.
   2. Report any and all personal injuries, or public complaints to the office immediately

H) Automatic Suspension
   1. Violation of any of the following items will subject you to automatic suspension to discharge:
      - Violation of OSHA regulations
      - Intoxication- coming to the job while under the influence or in possession of intoxicating liquors or narcotics.
      - Fighting or provoking a fight
      - Horseplay in any form. Scuffling pranks, wrestling, throwing materials at others, etc...
      - Smoking in known or posted "No Smoking Areas".
      - Disregard and uncorteous behavior to the welfare of other employees and the general public.

Automobile Safety

Section 2

Sarra Engineering

Automobile Safety

Sarra Engineering maintains that all vehicles abide by the State and Federal laws regarding driving safety. To ensure this safety, Sarra Engeneering has devised a maintenance schedule for each of its registered vehicles.

This schedule includes the following:

1. All vehicles shall receive regular, periodic maintenance and the maintenance log shall be put on file.

   a. Sarra Engineering , cars cross-state lines on occasion, we will comply with the appropriate Department of Transportation's maintenance and safety requirements.

2. Prior to the assignment of a company vehicle an employee's driver's license must be reviewed; noting its existence and evaluating any restrictions. Also, a Department of Motor Vehicles' report must be obtained for that employee and reviewed for prior accidents.

3. Employees having two chargeable accidents in one year shall be reprimanded. Chronic repeaters shall receive disciplinary action.

4. Truck drivers shall visually inspect their vehicle daily.

5. Loose objects shall be removed or secured to the vehicle so that the driver's ability to operate his/hers vehicle is not hindered.

6. If an accident does occur, it is essential that the driver of the vehicle call the police to the scene immediately. It is also essential that the employee or another call Sarra Engineering 401-942-1050

Confined Space Program

Section 3

Sarra Engineering

Confined Space Definitions (To be used with Pre-entry Checklists and Entry Permit)

Acceptable entry conditions: The conditions that must exist in a permit space to allow entry and to ensure that employees involved with a permit-required confined space entry can safely enter into and work within the space.

Attendant: An individual stationed outside one or more permit spaces who monitors the authorized entrants and who performs all attendant's duties assigned in the employer's permit space program.

Authorized entrant: An employee who is authorized by the employer to enter a permit space.

Blanking or binding: The absolute closure of a pipe, line, or duct by fastening of a solid plate (such as a spectacle blind or a skillet blind) that completely cover the bore and is capable of withstanding the maximum pressure of the pipe, line or duct with no leakage beyond the plate.

Confined space: A space that **(1)** is large enough and so configured that an employee can bodily enter and perform assigned work, and **(2)** has limited or restricted entry or exit (for example tanks, vessels, silos, storage bins, hoppers, vaults and pits are spaces that may have limited means of entry), and **(3)** is not designed for continuous employee occupancy.

Double block and bleed: The closure of a line, duct, or pipe by closing and locking or tagging two in-line valves and by opening and locking or tagging a drain or vent valve in the line between the two closed valves.

Emergency: Any occurrence (including any failure or hazard control or monitoring equipment) or event internal or external to the permit space that could endanger entrants.

Engulfment: The surrounding and effective capture of a person by a liquid or finely divided (flowable) solid substance that can be breathed in and can cause death by filling or plugging the respiratory systems; or that can exert enough force on the body to cause death by strangulation's, constriction or crushing.

Entry: The action by which a person passes through an opening into a permit-required space. Entry includes ensuing work activities in that space and is considered to have occurred as soon as any part of the entrant's body breaks the plane of an opening into the space.

Entry Permit: The written or printed document that is provided by the employer to allow and control entry into the permit space and contains the information of the permit-required confined space program.

Entry Supervisor: The person (such as the employer, foreman or crew chief) responsible for determining if acceptable entry conditions are present at a permit space where entry is planned; for authorizing entry and overseeing entry operations; and for terminating entry as required by this section: Note an entry supervisor also may serve as an attendant or as an authorized entrant, as long as that person is trained and equipped as required by this section for each role he or she fills. Also the duties of the entry supervisor may be passed from one individual to another during the course of an entry operation.

Hazardous Atmosphere: An atmosphere that may expose employees to the risk of death, incapacitation, impairment of the ability to self-rescue (that is, escape unaided from a permit space), injury or illness from one or more of the following causes:

1. Flammable gas, vapor or mist in excess of 10% of its lower flammable limit (LEL).

2. Airborne combustible dust at a concentration that meets or exceeds its LEL. Note: This concentration may be approximated as a condition in which the dust obscures vision at a distance of 5 feet (1.52 m) or less.
3. Atmosphere oxygen concentration below 19.5% or above 23.5%.
4. Atmospheric concentration of any substance for which a dose of a permissible exposure limit is published in Sub-part A, Toxic and Hazardous Substances, of this part and which could result in employee exposure in excess of its dose or permissible exposure limit. Note: An atmospheric concentration of any substance that is not capable of causing death, incapacitation, impairment of ability to self rescue, injury or acute illness due to its health effected is not covered by this provision.
5. Any other atmospheric condition that is immediately dangerous to life or health. Note: For air contaminants for which OSHA has not determined a dose of permissible exposure limit, other sources of information such as; Material Safety Data Sheets that comply with the Hazard Communications Standard, 29 CFR 1910.1200 of this part, published information and internal documents can provide guidance in establishing acceptable atmospheric conditions.

Hot Work Permit: The employer's written authorization to perform operations (for example: riveting, welding cutting, burning and heating) capable of providing a source of ignition.

Immediately dangerous to life or health (IDLH): Any condition that poses an immediate or delayed threat to life or that would cause irreversible adverse health effects or that would interfere with an individual's ability to escape unaided from a permit space. Note: Some materials-hydrogen fluoride gas and cadmium vapor, for example – may produce immediate transient effects that, even if severe, may pass without medical attention, but are flowed by sudden possibly fatal collapse 12-72 hours after exposure. The victim "feels normal" from transient effects until collapse. Such materials in hazardous quantities are considered to be "immediately" dangerous to life or health.

Inerting: The displacement of the atmosphere in a permit space by a non-combustible gas (such as nitrogen) to such extent that the resulting atmosphere is non-combustible. Note: This procedure produces an IDLH oxygen deficient atmosphere.

Isolation: The process by which a permit space is removed from service and completely protected against the release of energy and material into the space by such means as: blanking or blinding; misaligning or removing a section of lines, pipes or ducts; a double block and bleed system; lock-out or tag-out of all sources of energy; or blocking or disconnecting all mechanical linkages.

Line breaking: The intentional opening of a pipe, line or duct that is or has been carrying flammable, corrosive or toxic material, an inert gas or a fluid at a volume, pressure or temperature capable of causing injury.

Non-Permit confined space: A confined space that does not contain or with respect to atmospheric hazards, have the potential to contain any hazard capable of causing death or serious physical harm.

Oxygen deficient atmosphere: An atmosphere containing less than 19.5% oxygen by volume.

Oxygen enriched atmosphere: An atmosphere containing more that 23.5% oxygen by volume.

Permit-Required confined space (permit space): A confined space that has one or more of the following characteristics:

1. Contains or has a potential to contain a hazardous atmosphere.
2. Contains a material that has the potential for engulfing an entrant.
3. Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor that slopes downward and tapes to a smaller cross-section.
4. Contains any other recognized serious safety or health hazard.

Permit-required confined space program (permit space program): The employer's overall program for controlling and where appropriate, for protected employees from permit space hazards or regulating employee entry into permit spaces.

Permit System: The employer's written procedure for preparing and issuing permit space to service following termination of entry.

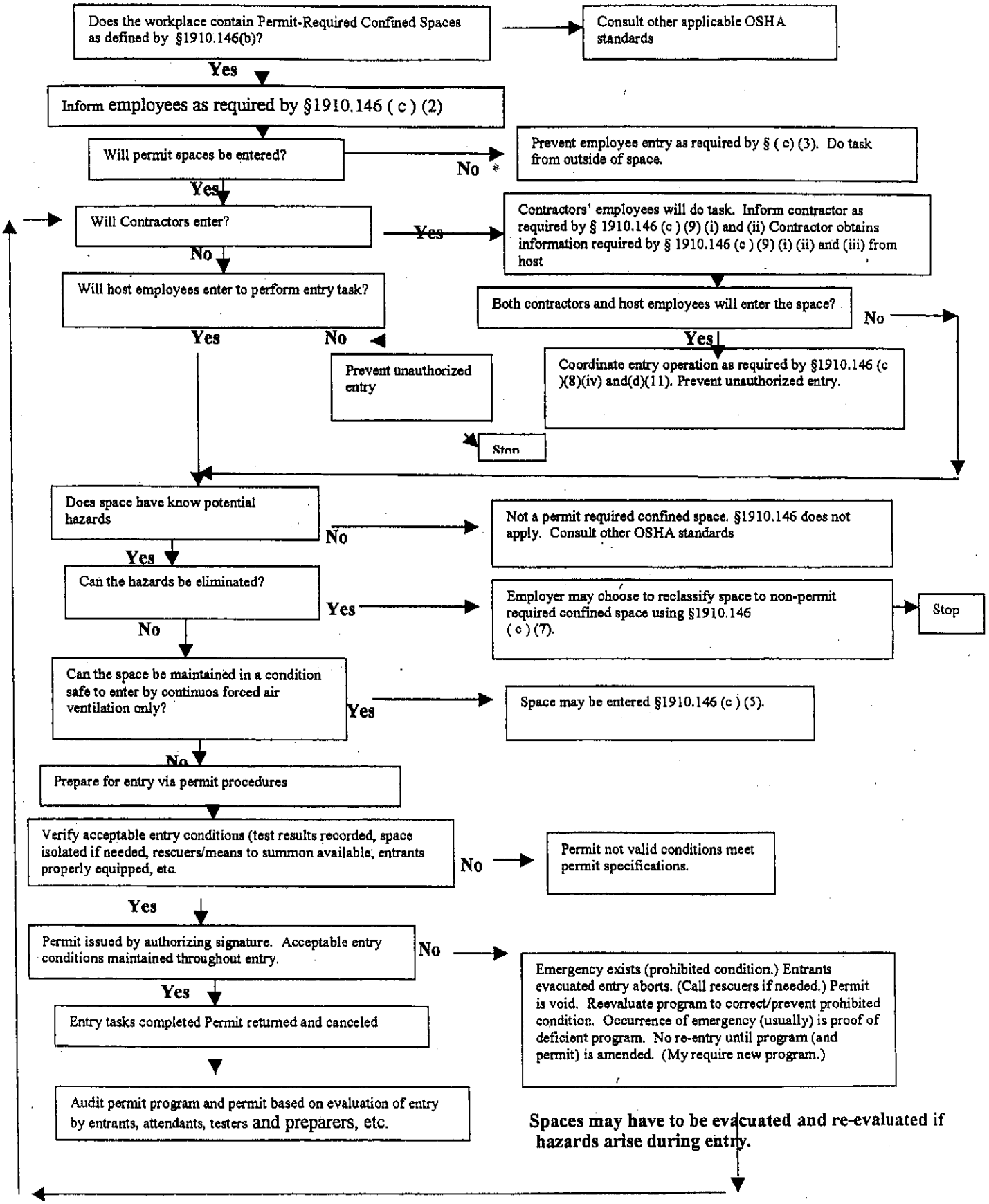
Prohibited condition: Any condition in a permit space that is not allowed by the permit during the period when entry is authorized.

Rescue Services: The personnel designed to rescue employees from permit spaces.

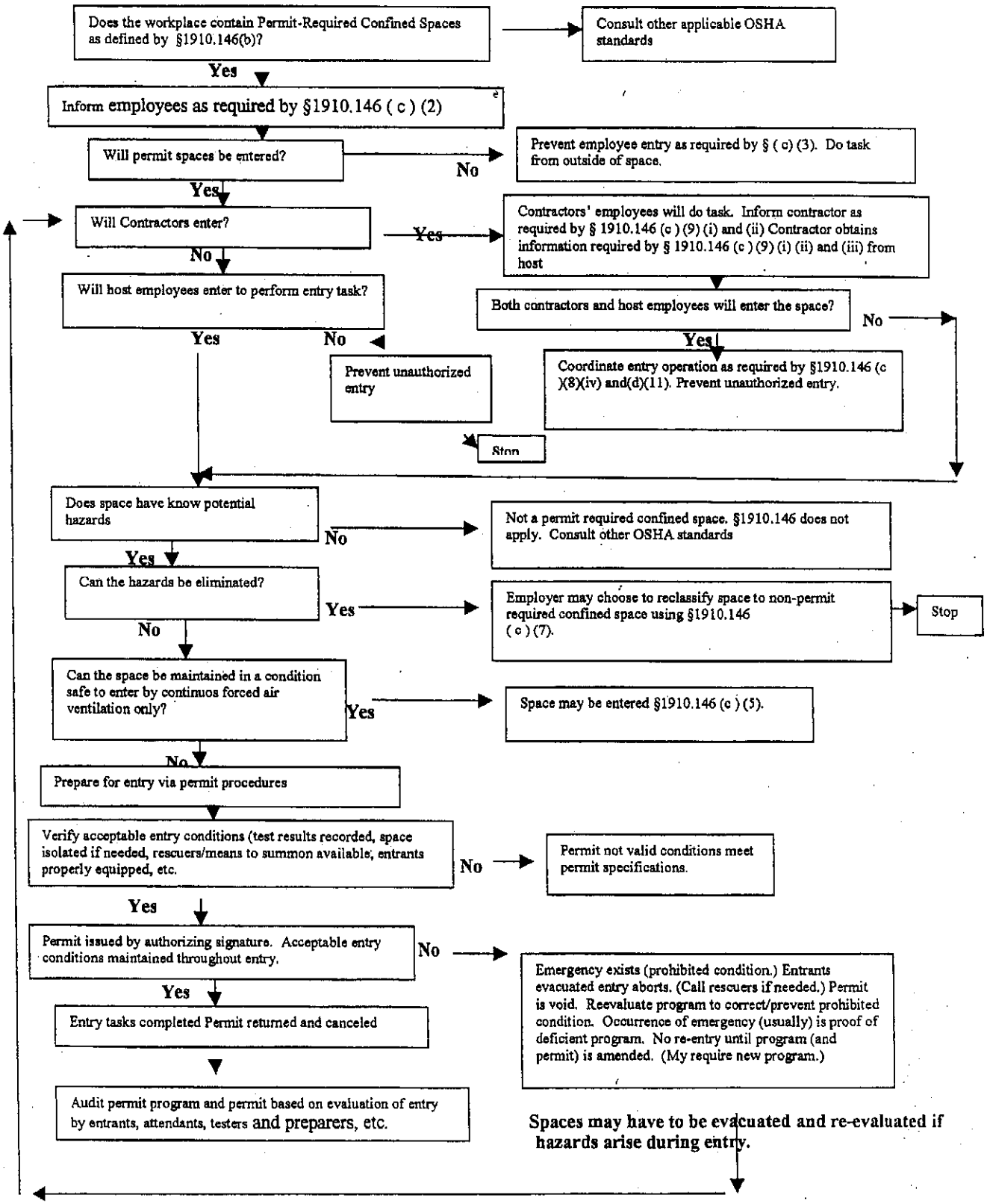
Retrieval System: The equipment including a retrieval line, chest or full body harness, wristlets if appropriate and lifting devices or anchor used for non-entry rescue of persons from permit spaces.

Testing: The process by which the hazards that may confront entrants of a permit space are identified and evaluated. Testing includes specifying the test that is to be performed in the permit space. Note: Testing enables the employer both to devise and implement adequate control measures for the protection of authorized entrants and to determine if acceptable entry conditions are present immediately before and during entry.

Permit-Required Confined Space Decision Flow Chart



Permit-Required Confined Space Decision Flow Chart



DANGER

CONFINED SPACE

DANGER

CONFINED SPACE

Inspection and Evaluation

All work areas for this business will be inspected and evaluated to determine if they require a confined space entry permit. The inspection is the responsibility of the job (project) foreman and/or supervisor. All hazards will be listed on and evaluated. Conditions that prohibit entry to a confined space will be evaluated and listed on the entry permit.

Permits

All entry to a permit-space is restricted to those with permits. Permits must be available to all employees requiring entry to a confined space that requires a permit (permit-space). The permit should extend only for the duration of the task. The Administrator must retain all permits for a year to facilitate review of the confined space program.

Permits must include the following:

1. Identification of the space.
2. Purpose of entry.
3. Date and duration of the permit.
4. List of authorized entrants.
5. Names of current attendants and entry supervisor.
6. List of hazards in the permit space.
7. List of measures to isolate permit space and eliminate/control hazards.
8. The acceptable entry conditions.
9. Results of test initialed by the person(s) performing tests.
10. Rescue and emergency services and means to summon them.
11. Communication procedures for attendants/entrants.
12. Required equipment (respirators, communication devices, alarm, etc.)
13. Any other necessary information.
14. Any additional permits (such as for hot work under the Fire Safety Program).

The Permit Program must be renewed annually.

Outside Rescue Services

The job (project) foreman and/or supervisor will be responsible to contact outside rescue services. The outside rescue services will be called in the event of any emergency involving confined space.

Outside rescue services must be made aware of hazards and have access to permit spaces in order to develop rescue plans and practice rescues. Employers must provide hospitals or treatment facilities with any MSDS's or other information about known hazards in a permit space; if the information can aid in treatment of rescued employees.

Rescue Services

A list of the appropriate rescue services as well as their corresponding phone number should be posted and all should be aware of this list.

Preventing Unauthorized Entry

List the methods used to inform employees to prevent unauthorized entry.

1. Work area should be well marked as a confined space job site.

2. Job (project) foreman and or supervisor will let all employees know the dangers and hazards of entering a confined space if not authorized.

3. An attendant will check to ensure only authorized entrants go into the work area and will notify Job (project foreman) and/or supervisor of any unauthorized entry.

Confined Space Notice

The administrator will inform employee through signs or other equally effective means of all confined spaces requiring a permit to enter.

Confined Space Program Lists

The administrator will complete the following lists in order to implement a confined space program:

Due to the nature of our business a list of Known Confined Spaces will change depending on the jobs that we are awarded.

Personnel Authorized to Issue Entry Permits

Entry supervisors must know hazards of confined spaces and must verify that all tests have been conducted and all procedures and equipment are in place before endorsing a permit. They must also verify that rescue services are available and the means for summoning them are operable.

Entry supervisor may terminate entry and cancel permits. They must remove unauthorized individuals who enter confined space. They also must determine that conditions are acceptable as specified in the permit.

Personnel Authorized to Enter Confined Spaces

All personnel issued permits to enter confined spaces must know the hazards they may face, be trained to recognize signs or symptoms of exposure and understand the consequences of exposure to hazards.

Entrants must know how to:

1. Use any needed equipment.
2. Communicate with attendants.
3. Alert attendants when a warning symptom or other hazardous conditions exist.
4. Exit as quickly as possible whenever ordered or alerted (by alarm, warning signs or prohibited conditions) to do so.

Attendants

Attendants must know the hazards of a confined space and be aware of potential exposures. Attendants must perform the following duties:

1. Check permits of authorized entrants.
2. Prevent entry by those without a permit.
3. Maintain a continuous count of those in a confined space.
4. Remain outside the confined space until relieved.

If necessary, an attendant will do the following:

1. Order everyone to exit a confined space.
2. Contact rescuers.
3. Perform non-entry rescues.

Attendants may not perform any duty that will interfere with the duties listed above.

A list of authorized personnel trained in the use of monitor devices will be posted for each project.

Authorized On-Site Rescue Team Members

Rescuers should use employee retrieval systems whenever possible. On-site teams must be properly equipped. They must practice simulated rescues at least once every 12 months.

They must receive the same training as authorized entrants and additional training about the following:

1. Use of personal protective equipment.
2. Use of rescue equipment
3. First aid, including CPR.

Confined Space Training

Training should provide employees with the understanding, skills and knowledge to do the job safely. Training must include both initial and refresher courses. Refresher training is necessary when duties change, when hazards change or whenever evaluation determines inadequacies in an employee's knowledge. Employer certification training must include employee's name, signature or initials of trainer and date of training.

Date: _____ **Instructor:** _____

Subject: _____

Employee Name	**Employee Signature**

Sewer Pre-Entry Checklist

A confined space either is entered through an opening other than a door (such as a manhole or side port) or requires the use of a ladder or rungs to reach the working level and test results are satisfactory. This checklist must be filled out whenever the job site meets these criteria.

Yes	No		
☐	☐	1.	Did your survey of the surrounding area show it to be free of hazards such as drifting vapors from tanks, piping or sewers?
☐	☐	2.	Does your knowledge of industrial or other discharges indicate that this area is likely to remain free of dangerous air contaminants while occupied?
☐	☐	3.	Are you certified in operation of the gas monitor being used?
☐	☐	4.	Has a gas monitor functional test (bump test) been performed this shift on the gas monitor to be used?
☐	☐	5.	Did you test the atmosphere of the confined space before entry?
☐	☐	6.	Did the atmosphere check as acceptable (no alarm given)?
☐	☐	7.	Will the atmosphere be continuously monitored while the space is occupied?

The job (project) foreman and/or supervisor will be contacted for personnel rescue by local fire department in the event of an emergency. If in-site location, contact in-house rescue unit at:

_____

(Telephone number and location)

Notice: If any of the above questions are answered "NO", **DO NOT ENTER. Contact your immediate supervisor.**

Job/Location: _____

Lead Man Signature: _____

Confined Space Pre-Entry Check List

Date: _____ Time: _____

Expires: _____ Issued: _____

Job Site: _____

Job Supervisor: _____

Equipment to be worked on: _____

Work to be performed: _____

Pre-Entry (see Safety Procedures)

1. Atmospheric Checks:
   Time:_____ Oxygen _____%
   Explosive _____% L.F.L. Toxic _____PPM

2. Source Isolation (No Entry):

	N/A	Yes	No
Pumps and lines	☐	☐	☐
Disconnected	☐	☐	☐

3. Ventilation Modifications:

	N/A	Yes	No
Mechanical	☐	☐	☐
Natural Ventilation Only	☐	☐	☐

4. Atmospheric Check After Isolation and Ventilation:

   Time _____
   Oxygen _____% >19.5%
   Explosive _____% <10%
   Toxic _____PPM <PPM H2Ss

If conditions are in compliance with the above requirements and there is no reason to believe conditions may change adversely, then proceed to the Permit Space Pre-Entry Check List. Complete and post with this permit. If conditions are not in compliance or there is reason to believe that conditions may change adversely, proceed to the Entry Checklist portion of this permit.

Entry Permit

Confined Space: _____

Hazardous Area: _____

Permit Valid for three hours only. All copies of permit will remain at job site until job is completed.

Site Location and Description: _____

Purpose of Entry: _____

Supervisor(s) in charge of crews: _____

Phone Number: _____

Type of Crew: _____

Requirements Completed (Bold denotes minimum requirements to be completed and reviewed before entry).

	Completed	Date
Lock-out/De-energized/Try-out	☐	_____
Line(s) Broken-Capped-Blanked	☐	_____
Purge-Flush and Vent	☐	_____
Full Body Harness w/"D" ring	☐	_____
Emergency Escape Retrieval	☐	_____
Equipment	☐	_____
Lifelines	☐	_____
Secure Area (Post and Flag)	☐	_____
Breathing Apparatus	☐	_____
Stand-by Safety Personnel	☐	_____
Fire Extinguishers	☐	_____
Lighting (explosive proof)	☐	_____
Protective clothing	☐	_____
Respirator(s)	☐	_____
Air Purifying	☐	_____

Note: For items that do not apply, enter N/A in the blank.

Continuous Monitoring (every 2 hours)

Test(s) to be taken	Entry Level	Monitoring Results						
Percent of Oxygen	19.5% to 23.5%							
Lower Flammable Limit	Under 10%							
Carbon Monoxide	+ 35 PPM							
Aromatic Hydrocarbon	+1 PPM *5PPM							
Hydrogen Cyanide (skin)	(skin) *4PPM							
Hydrogen Sulfide	+10PPM *15PPM							
Sulfur Dioxide	+2PPM *5PPM							
Ammonia	*35PPM							

*Permissible

Short-term Exposure Limit: Employee can work in the area up to 15 minutes.

Time-weighted Average: Employee can work in area 8 hours (longer with appropriate respiratory protection)

Remarks:

Gas Tester Name and Check _____
Instrument(s) used: _____
Model and/or type: _____
Serial and/or Unit # _____

Safety stand-by person is required for all confined space work.

Safety Stand-By Person(s) _____
Check # _____
Supervisor Authorizing Entry: _____
All Above Conditions Satisfied: _____
Gas-Coordinator: _____
Department: _____
Phone: _____

Fire Safety Program

Section 4

Sarra Engineering

WARNING!
HOT WORK IN PROGRESS
WATCH FOR FIRE!

1. The person doing hot works indicate the time started and post permit at hot work location. **After hot work** Indicate time completed and leave permit posted for Fire Watch.

2. **Fire Watch:** Prior to leaving area, do final inspection, sign, leave permit posted and notify Firesafety Supervisor.

3. **Monitor:** After 4 hours, do final inspection, sign and return to Firesafety Supervisor.

Hot work being done by: ☐**Employee:** _____ ☐**Contractor:** _____	
Date:	**Job No.**
Location/ Building & Floor	
Nature of the job	
Name of person doing hot work:	

I verify the above location has been examined, the precautions checked on the required precautions checklist have been taken to prevent fire, and permission is authorized for this work.

Signed: Fire safety supervisor/operations supervisor:

Time started:		Time finished:
Permit Expires	Date:	Time:

FIRE WATCH SIGN OFF:
Work area and all adjacent areas to which sparks and heat might have spread were inspected during fire watch period were found fire safe.

Signed: _____

FINAL CHECK UP:
Work area was monitored for 4 hours following Hot work and found fire safe
Signed: _____

Required Precautions Checklist

- ☐ Available Sprinklers, hose streams and extinguishers are in service/operable.
- ☐ Hot Work Equipment in good repair.

Requirements within 35 ft. (11m) of work.

- ☐ Flammable liquids, dust, lint and oily deposits removed.
- ☐ Explosive atmosphere in area eliminated.
- ☐ Floors swept clean.
- ☐ Combustible floors wet down, covered with damp sand or fire-resistant sheets.
- ☐ Remove other combustibles where possible otherwise protect with fire resistant tarpaulins or metal shields.
- ☐ All wall and floor openings covered.
- ☐ Fire-resistant tarpaulins suspended beneath work.

Work on walls or ceilings.

- ☐ Construction in noncombustible and without combustible covering or insulation.
- ☐ Combustibles on the other side of wall moved away.

Work on enclosed Equipment.

- ☐ Enclosed Equipment cleaned of all combustibles.
- ☐ Containers purged of flammable liquids/vapors
- ☐ Pressurized vessels, piping and equipment removed from service, isolated and vented.

Fire Watch/Hot Work Monitoring.

- ☐ Fire watch will be provided during and for 60 minutes after work, including and coffee or lunch breaks.
- ☐ Fire watch is supplied with suitable extinguishers, and, where practical charged small hose.
- ☐ Fire watch is trained in the use of this equipment and in sounding an alarm.
- ☐ Fire watch may be required for adjoining areas, above, and below.
- ☐ Monitor Hot Work area for 4 hours after the job is completed.

Other Precautions Taken.

_____

_____

_____

WARNING!!

HOT WORK IN PROGRESS

WATCH FOR FIRE!

In Case of Emergency Call:
At:

WARNING!!

Respirator Program

Section 5

Sarra Engineering

Program Elements

1. Develop a written program.

   Sarra Engineering Safety Manager will develop a detailed written operating procedure governing the selection and use of respirators using the NIOSH Respirator Decision Logic as a guideline. Outside consultation, manufacturers' assistance and other recognized authorities will be consulted if there is any doubt regarding the proper selection and use. These detailed procedures will be included as appendices to this respirator program. Only Aero Mechanical's Safety Manager may amend these procedures.

2. Selection of Respirator

   Respirators will be selected on the basis of hazards to which the worker is exposed. Sarra Engineer Safety Manager will make all selections. Only MSHA/NIOSH-certified respirators will be selected and used.

3. Users will be instructed and trained in the proper use of respirators and their limitations. Both supervisors and workers will be instructed by Aero Mechanical's Safety Manager.

   Training should provide the employee with the opportunity to:

   - Handle the respirator
   - Have it fitted properly
   - Test its face-piece for face-seal
   - Wear it in normal air for a long familiarity period
   - Wear it in a test atmosphere

   Every respirator wearer will receive fitting instructions. These instructions will include a demonstration of the respirator's use, practice in how the respirator should be worn, practice in adjusting the respirator and instruction in how to determine if it fits properly.

   Respirators should not be worn when conditions prevent a good face seal. Such conditions may include growth of beard, sideburns, a skull cap that projects under the face-piece or temple pieces on glasses. Also, the absence of one or both dentures can seriously affect the fit of a face-piece. Employees of Aero Mechanical, Inc. who are required to wear respirators may not wear beards.

The workers' diligence in observing these requirements will be evaluated by periodic checks. To ensure proper protection, each time the wearer puts on the respirator he/she will check the face-piece. Following the manufacturer's face-piece fitting instructions will do this.

4. Assigning Respirators

Where practicable, respirators will be assigned to individual workers for their exclusive use.

5. Cleaning and Disinfecting Respirators

Respirators will be regularly cleaned and disinfected. Those issued for the exclusive use of one worker will be cleaned after each day's use or more often if necessary. Those used by more than one worker will be thoroughly cleaned and disinfected after each use. Sarra Engineering Safety Manager will establish a cleaning and maintenance facility and develop detailed written cleaning instructions.

6. Storage of Respirators

There is a central respirator cleaning and maintenance facility. Respirators will be stored in a clean and sanitary location.

7. Inspection of Respirators

Respirators used routinely will be inspected during cleaning. Worn or deteriorated parts will be replaced. Respirators available for emergency use, such as self-contained devices, will be thoroughly inspected at least once a month and after each use. Inspection for SCBA (Self-Contained Breathing Apparatus) breathing gas pressure will be performed weekly.

8. Surveillance

Appropriate surveillance of work area conditions, including the degree of employee exposure or stress, will be maintained.

9. Evaluation

There will be regular inspections and evaluations to determine the continued effectiveness of the program. The job (project) foreman and/or supervisor will make frequent inspections of all areas where respirators are used to ensure compliance with the respiratory protection program.

10. Physical Ability of Employee

An employee will not be assigned to a task requiring the use of a respirator unless it has been determined that the employee is physically able to perform the work while using the equipment. The employee's physician will determine what health and physical conditions are pertinent. Each respirator users' medical status will be reviewed annually.

11. Certified Respirators

Only certified respirators will be used.

Respirator Program Evaluation Checklist

In general, the respirator program should be evaluated for each job at least annually. Program adjustments (as appropriate) should be made to reflect the evaluation results.

The evaluation of program functions is separated into the administration and operation aspects of the program.

A. Program Administration

Is there a written policy that acknowledges employer responsibility for providing a safe and healthy workplace?

Is there a written program that assigns program responsibility, accountability and authority?

Is program responsibility vested in one individual?

Are the program administrators knowledgeable about respirators and the program?

Can the administrator coordinate all aspects of the program at the job site?

Can realistic engineering controls or work practices eliminate the need for respirators?

Are there written procedures/statements covering the various aspects of the respirator program including the following:

- Designation of an administrator
- Respirator selection (including purchase of MSHA/NIOSH certified equipment)
- The medical aspects of respirator use
- The issuance of equipment fitting, training
- The maintenance, storage and repair
- Inspection and use under special conditions
- Work area surveillance

B. Program Operation

Respiratory Protective Equipment Selection

Are work area conditions and worker exposures properly surveyed?

Are respirators selected on the basis of the actual hazards to which the worker is exposed?

Are only certified respirators purchased and used?

Do the respirators provide adequate protection for the specific hazard?

Are the respirators effective for the concentration levels of the contaminant?

Have the prospective uses been medically evaluated?

Did the medical evaluation of each user include the user's physical and psychological ability to wear the selected respiratory protective equipment?

Have respirators been issued to the users for their exclusive use?

Are their records covering issuance of respirators?

Respiratory Protective Equipment Fitting

Is each user given the opportunity to try on several respirators to determine whether the respirator he or she will be wearing is the best fitting one?

Is the fit of the respirator tested at appropriate intervals?

Are those users who require corrected lenses properly fitted?

Is the face-piece to face-seal tested in a test atmosphere?

Are workers prohibited from wearing respirators in contaminated work areas if they have facial hair or other characteristics that may cause face-seal leakage?

Respirator Use in the Work Area

Are respirators being worked correctly?

Are workers keeping respirators on all the time while in the work area?

Cleaning and Disinfecting

Are respirators cleaned and disinfected after each use when several people use the same device?

Are respirators issued to individual users cleaned as frequently as necessary?

Are proper cleaning and disinfecting methods utilized?

Storage

Are respirators stored in a manner that protects them from?

- Dust
- Sunlight
- Heat
- Excessive Cold
- Moisture
- Damaging Chemicals

Are respirators stored in a storage facility in a way to prevent them from becoming deformed?

Are qualified individuals instructed in inspection techniques?

Is respirator protective equipment designated for emergency use inspected at least once a month?

Are SCBA breathing gas containers inspected weekly for breathing gas pressure?

Is a record kept of the inspection of emergency use respiratory protective equipment?

Repair

Are the replacement parts used to repair respirators made by the manufacturer of the respirator?

Are repairs made by that manufacturer or by manufacturer trained technicians?

Special Use Conditions

Is there a procedure for using respiratory protective equipment in atmosphere that is immediately dangerous to life or health?

Is a procedure available for using equipment to enter into confined space?

Training

Are users trained in proper respirator use, cleaning and inspection?

Are users trained in the basis for selecting respirators?

Is a competency-based evaluation of users made before and after training?

Lock-Out/ Tag-Out Program

Section 6

Sarra Engineering

Purpose

The accidental or unexpected starting of any machinery or electrical equipment can cause injury or death. Before **ANY** inspections or repairs are made on electrical equipment, power should be turned off at the switch box and the switch locked in the OFF position (Locked-Out). The switch or controls should be securely tagged to show that the equipment or circuits are being worked on (tagged-out).

Machinery being inspected or repaired must be isolated from all potentially hazardous energy sources, which must be locked-out and tagged-out. The machinery must also be free from all residual or accumulated energy before employees may perform any servicing or maintenance activities, if the unexpected release of stored energy could cause injury.

Responsibility

Appropriate employees shall be instructed in the safety significance of the lockout (or tag out) procedures as well as how to use those procedures by the Job (project) foreman and/or supervisor. Only authorized employees may lockout or tag-out machines or equipment. Authorized employees are identified on each Hazardous Energy Control Procedure form.

Job (project) foreman and/or supervisor will instruct affected employees and any other employees whose work operations are or may be in the area in the purpose and use of the lockout or tag-out procedures.

Affected employees or their job titles are identified on each Hazardous Energy Control Procedure Form. The authorized employees will notify them whenever a lockout or tag-out will occur, as well as when the equipment is being placed back in service.

It is the responsibility of management to approve all Hazardous Energy Control Procedures.

The following people can give approvals:

Michael V. St Martin, President
John Cronin, Senior Estimator

Training

Job (project) foreman and/or supervisor will give training on lock-out/tag-out for all equipment or machines.

Authorized and affected employees will be trained in the following:

1. Review of the requirements of 29 CRF 1910.147, control of Hazardous Energy.
2. Types and magnitudes of energy sources.
3. The limitations of tag-out.
4. Lockout and/or procedure for the isolation of energy sources.
5. Procedures for removing lock and/or tags.
6. Procedure for restoring energy.

Authorized employees will be given training at the time of hiring.

Retraining will be given whenever there is a change in job assignment, a change in equipment or processes that would create a new hazard, or whenever a change would occur in this company's Hazardous Energy Control Procedures.

Michele R. Marston, Administrative Assistant, will maintain a list of trained employees and the dates of their training.

Annual Review and Inspection

Each year an authorized employee, who is not involved with the authorized employee to inspect a machine, will conduct a review of the Hazardous Energy Control Procedures for all machines and equipment. As well as the authorized employee that is not involved with the review, will do the actual inspection. A job (project) foreman and/or supervisor will designate an individual for specific machines and/or equipment that apply.

Sample Procedure – Individual

Preparation for Lock-out/Tag-out

Obtain the proper Hazardous Energy Control Procedure for the equipment or machine to be locked-out or tagged-out.

Identify by name or job title all affected employees who may be involved in the impending lockout or tag-out.

Lock-Out or Tag-Out System Procedure

All equipment shall be locked-out or tagged-out to protect against accidental or inadvertent operation when such operation could cause injury to personnel.

Notify all affected employees that a lockout or tag-out system is going to be utilized and the reason for it. The authorized employee shall know the type and magnitude of energy that the machine or equipment utilizes and shall understand the associated hazards.

Shut down the equipment by normal stopping procedures. Operate the equipment to be sure it is off. Operate the switch, valve or other isolating devices so that the equipment is isolated from its energy sources. Stored energy must be dissipated or restrained by methods such as repositioning, blocking, bleeding down, etc.

Lock-Out and/or Tag-Out the energy isolating devices with assigned individual locks or tags.

Note: Combination locks are prohibited for use in any lockout for machines or equipment.

Do not attempt to operate any switch, valve or energy-isolating device when it is locked-out or tagged-out.

Testing Equipment to Ensure Power is Off

After ensuring that no personnel are exposed, and as a check on having disconnected the energy sources, operate the push button or other normal controls to make certain the equipment will not operate.

Caution: Return operating controls to the "neutral" or the "off" position after the test.

The equipment is not locked-out or tagged out.

Restoring Equipment to Normal Production Operation

After servicing or maintenance is complete and equipment is ready for normal production operations, check the area to ensure that no one is exposed.

Ensure that all tools have been removed from the equipment and that all guards have been reinstalled.

Remove lock-out/tag-out devices and operate the energy isolating devices to restore energy to the machine or equipment.

Sample Procedure – Group

Before the implementation of any group lock-out/tag-out, this procedure will be reviewed with all personnel affected or authorized by the group lock-out/tag-out event.

One authorized employee will coordinate the lock-out/tag-out procedure for all group lock-out/tag out events.

Each employee will affix his or her lock or tag to the equipment being serviced or having maintenance.

No employee will be allowed to remove another employee's lock or tag. Each employer will remove his or her own lock or tag when his or her part of the operation is completed.

When service or maintenance will involve more than one shift, members of the off-going shift will remove their locks and tags as the members of the on-coming shift apply their locks and tags.

When equipment has room for only one lock, the coordinator of the procedure will place the lock on the equipment and place the key in a cabinet or box. Each employee will affix his or her lock to the cabinet or box.

Outside Service or Contractor Personnel:

Outside personnel or contractors who may be affected by the lock-out/tag-out must submit their procedures to the job (project) foreman and/or supervisor. Affected employees of this company will be trained and notified of the proper procedures by the job (project) foreman and/or supervisor.

Machine, Equipment Operation Specific List

Equipment: _____

Department: _____

Supervisor: _____

Date: _____

Energy Sources and Locations:

_____

Type of Lock or Energy Control Device:

_____

Authorized Employees:

_____

Other Employees:

_____

Procedure Developed by:

_____

DANGER
THIS TAG & LOCK
TO BE REMOVED
ONLY BY PERSON
SHOWN ON BACK

DANGER
EQUIPMENT
LOCKED OUT BY
DATE

Hazard Communication Program

Section 7

Sarra Engineering

PURCHASES

Project (Job) Foreman will check chemical purchase requests (PR) and verify that a statement requesting a Material Safety Data Sheet (MSDS) appears on the PR before it is processed.

CONTAINER LABELING

Project (Job) Foreman will be responsible for monitoring all containers of hazardous chemicals entering the workplace. He or she will ensure that the chemical containers are properly labeled with:

1. Chemical Name
2. Hazard Warning
3. Name and address of manufacturer, importer or responsible party.

No chemical will be used until it has been checked by the Project (Job) Foreman. If chemicals are to be transferred to a separate container, Project (Job) Foreman will ensure that the new container is properly labeled. Secondary labels can be an extra copy of the manufacturer's label or a generic label. All secondary labels must list the following:

1. Chemical Identity
2. Hazard Warning
3. Manufacturer

The Information on an MSDS includes:

1. The physical and chemical characteristics of the chemical, including vapor pressure, flash point, etc.

2. The fire, explosion and reactivity hazard(s) of the chemical, including the boiling point, flash point and auto-ignition temperature.

3. Health hazards of the chemical mixture, including signs and symptoms of exposure; medical conditions recognized as aggravated by exposure; and primary route(s) of entry.

4. Permissible exposure limit (PEL) or any other exposure limit used or recommended by the manufacturer, importer or employer.

5. Whether the chemical is listed as a carcinogen by the National Toxicology Program (NTP) or has been found to be a potential carcinogen by the American Conference of Governmental Industrial Hygienists (ACGIH) or OSHA.

6. The control measures for the chemical, including fire, engineering and personal protective equipment.

7. General precautions for safe handling and use, including protective measures during repair and maintenance of equipment involving the chemical.

8. Procedures for cleanup of spills and leaks.

9. Emergency first aid procedures.

10. Date the MSDS was prepared or revised.

11. Name, address and telephone numbers of manufacturer, importer or responsible party to call in an emergency.

Employee Information and Training

Before starting work the respective supervisor or foreman of a new employee will go over the new employee's copy of the Hazard Communication Program (HCP) and each MSDS applicable to the new employee's job.

Before any chemical is used, all employees will be informed with of its use. Each affected employee will be instructed on safe use and trained on the hazards of the chemical by the supervisor and/or project (job) foreman in the following manner.

- Review of Hazard Communications Standard, 29 CFR 1910.1200.
- Inventory of all chemicals being used.
- Copy of the MSDS sheet on any chemicals being used.
- Location and availability of written HCP.
- The physical and health effects of the hazardous materials listed on the inventory list of this program (listed on each MSDS sheet).
- Methods and observation techniques used to determine the presence or release of hazardous chemicals in the work area (on each individual MSDS sheet).
- How to lessen or prevent exposure to these hazardous chemicals through usage of control/work practices and personal protective equipment.
- Steps taken by Aero Mechanical, Inc. to lessen or prevent exposure to chemicals listed on the individual list.
- Emergency procedures to follow if exposed to any chemicals.
- Location of MSDS file.
- Location of the Hazardous Chemical list.

Prior to a new chemical hazard being introduced into any section of the new workplace, each employee will be given information and training as outlined above or as outlined on the attached Employee Training Guidelines by his/her supervisor project (job) foreman.

The project (job) foreman is also responsible for ensuring that an MSDS on each new chemical is available prior to the use of the chemical.

After attending the training class, each employee will sign a form to verify that the employee attended the training. Each employee will also sign a form to verify that the written Hazard Communication Program is available for review and that the employee understands the HCP.

Before entering an establishment, the supervisor or the project (job) foreman will ascertain what hazards an employee may be exposed to and then take appropriate action to protect himself or herself. If the employee has any questions about what protection is needed, the employee will immediately contact his/her supervisor or project (job) foreman.

Hazardous Chemicals Inventory List

Chemical	See MSDS Page #
#12452 Yellow	70 & 71
ABS Cement and Cleaner	176
ABS Cement and HC Cement	177
ABS-PVC Transition Cement	576
ABS Resin in Solvent Solution	557
Acetylene, Ethyne, Ethine	5
Adhesives-Cyanoacrylate	375 & 376
Aerosol Blend	550
All Purpose Cleaner	716
Alloys-Nickel Base Wrought	12 & 13
Alloys-Copper & Copper Based	15
Alloys-Stainless Steel & Aluminum	14
Base Hit II	559
Battery-Duracell Alkaline	328
Battery-Eveready (Energizer)	358
Blue Vitriol	1069
Boiler & Heating System Cleaner	541
Boiler and Heating System Stop	522
Boiler Liquid	548
Boilerite Boiler Cleaner	996
Brasses-Leaded Red	1
Brasses-Semi Red	2
Brasses-Yellow Brasses & Leaded Yellow	734 & 735
Brazing Rod (Coated Copper Base Metal)	1237
Brazing Rod (Copper Base Metal)	1238
Brazing Rod (Phosphor Copper Alloy)	1240
Brazing Rod (Silicon Aluminum Alloy)	1236
Carbon Dioxide	736
Carbon Steel Products	105
Carbon Steel-Standard Pipe	1137
Carbon Steel-Structural Pipe and Tubing	1136
Carbon Steel Tine Pipe and Couplings	1138
Caulk-Plumbers	552
Caulk-Polyseamseal Tub and Tile	231, 232 & 233
Celcon M90 Natural	73
Clobber	540
Cloroben Aid-Ox	145 & 146
Cloroben Aid Open Wide	147 to 149
Cloroben Root Raider	143 & 144
CPR	702
CPVC Organosol	524
CPVC Solvent	714
Cyro tek	530
Do-All	1170
Double Agent	571
Drain Pipe Cleaner	536
E-Z Break – Aerosol Container	712
E-Z Break – brush – in – Cap container	713
Electrode-covered	730 & 731
Epoxy – Tabs	691

Chemical	See MSDS Page #
Fibrous Glass Insulation Pipe; ASJ	673
Fire Stopping Sealant	1278A & B
Flipstick	574
Flux-Copper-Mate Soldering Paste	100
Flux-Soldering Utility Paste	1176
Flux Submerged Arc	732
For Heats Sake	575
Furnace Cement	573
Furnace Cement	1075
Furnace Cement & for Heat Sake	538
Gas Leak Detector	578
Grand Slam	1171
Grease-Plumbersheat Pruf	1002
Grease-Rigid Gear Head Motor	1032 & 1033
Grip	542A, 542B & 543
Hercules Flip-Stik	539
Inhibitor Boost	855
Iron Casting Gray	33 & 34
Iron Ike	565
Isobutane Propane LPG	1065
Johni Rings (Horn) Hercules	553
Krak-Stik	683
LA-CO Aluminum Flux Paste	707
LA-CO Aluminum Flux TU-5	715
LA-CO Cord of "Teflon"	690
LA-CO CPR Cleaner – Polisher	686
LA-CO Fast 50/50	681
LA-CO Fast 95/5	709
LA-CO Flux Stik	685
LA-CO Heat-Seal Stik	694
LA-CO LOC Anaorbic Pipe Thread	680
LA-CO M-A Stainless Steel Flux	705
LA-CO Pipetite Paste	718
LA-CO Plasto Joint stik	682
LA-CO Plumbset putty	697
LA-CO Regular Flux Liquid	687
LA-CO Regular Flux Paste	693
LA-CO Regular Flux Paste	700
LA-CO Silver Solder Flux	688
LA-CO Slic-tite Stik with "Teflon"	692
LA-CO Solder Brite 50/50	710
LA-CO Solder Brite 95/5	711
LA-CO Stainless Steel & Chrome Flux Paste	696
LA-CO Stainless Steel Flux N-3 Liquid	695
LA-CO T-O-T Pipe Joint Compound	698
LA-CO Tub/Tile Caulk	689
Lacquer	1063
Lahigh & Atlas Portland Cements	727 & 728
Lacquer-Appliance White #58	1064
Latex Baking Enamel-gray #14B-87	1062
Latex Paint (white)	1248 & 1250
Leak Lock (pipe joint compound)	577
Lenox Band Saw Blades	35

Chemical	See MSDS Page #
Liquid Wrench #1 Penetrant (Aerosol)	1001
Liquid Wrench Super Lubricant (Aerosol)	1012
LOCO-100 Grease (Metco type "F" Grease)	1218
Lubricating Fluid	897
Markal #20 & #25 Dura Ink Marker	706
Markal Ball Paint Markers – All Colors	724
Markal Paintstik "B" Fluorescent Yellow	720
Markal Paintstik "B" Gold	719
Markal Paintstik "B-E" All Colors	721
Markal Paintstik "H" Yellow	722
Markal Paintstik "HT" Yellow	723
Markal Paper Riter #30 – All Colors	717
Markal Sharpie #15 – All Colors	725
Marker – Fast Dry	704
Mercury (Quick Silver)	434
Mondur MR	1252 – 1270
Multi Purpose Plastic Pipe (CPVC)	526
Never-seez Regular	66
NIBCO CPVC Plastic Pipe Cement	1210
NIBCO Extra Heavy Duty PVC Cement	1211
No Drip Pipe Drip Compound	1173 & 1174
NoBurst – 100	856 & 857
NoBurst – (TM) Hydronic Antifreeze Fluid	858
Oil-Hercules Clear or Dark Cutting	551
Oil-Hercules Dark Cutting	534
Oil-Jet Stream Penetrating	528
Oil Lube	527
Oil Penetrating	519
Oxygen, Lox, Gox	7
Oxygenated Solvents	520
Oyltite-Stik	699
P 2045-STD	1272 – 1274
Paint-Black Magic Asphalt	517
Paraffinic Solvent (Low Odor)	1247
Paste – Nipple #11790-A	75
Paste Soldering	537
Pierce	701
Pipe Joint Compound	529
Pipe Joint Tape (Thread Sealant)	523
Pipe Thread Sealant	1077
Pipetite-Stik, Regular & Mechanic Size	684
Plastic Pipe Cement Cleaner	545
Plastic Putti	1074
Plastic Seal	533
Plastic Seal	572
Plumbers Soil	1172
Plumbers Stainless Putty	1175
Poly (vinyl chloride) PVC Pipe	4
Poly/alkoy either/polyols plus additives (Part B)	1272 & 1274
Polyethylene 993	72
Primer 1000	1177
Pro Dope	535
Pro-poxy 20	546

Chemical	See MSDS Page #
Propane (dimethylmethane)	29 & 30
PVC & CPVC Primer	556
PVC Cement	1086
PVC Cement Clear	555
PVC Cement Clear – Below Zero	558
PVC Cement Gray	562
PVC Cleaner/Primer-Purple	580 & 581
PVC Solvent Cement Gray	703
R-D (Root Destroyer)	532
Real Tuff	554
Rector-Seal #5	1018
RectorSeal - #7 New & Improved	1019
Roof & Flashing Cement	547
Rust Raider	1004
Santoprene 273-40	69
Score Paste Flux	569 & 570
Scout (Boiler Cleaning Compound)	549
Sealkote FF	1135
Septic Tank & Cesspool Cleaner	560 & 561
Sil-Can O	101
Silverflow (Phosphor Copper Alloy)	1239
Sizzle	544
Soft Lead	1126 & 1127
Solder 40/60 Tin/Lead	518
Solder – 100% Watersafe	102, 103 & 104
Solder – Aluminum #60	708
Solder Canfield 95% tin/5% antimony	99
Soot & Creosote Destroyer	521
SOS Soot Destroyer Spray	1068
Spiraseal Chlorocarb	726
Steel-alloy Cold Finished Bars	1158
Steel-alloy Leaded Cold Finished Bars	1159
Steel-alloy Hot Rolled Structural Shapes	1151
Steel-alloy Ingots, Blooms, Slabs & Billets	1155
Steel-alloy Leaded Blooms, Slabs & Billets	1156
Steel-alloy (low) High Strength Slabs and Billets	1157
Steel-alloy Pressure Tubing	1145
Steel-alloy Mechanical Tubing	1147
Steel-alloy Tubing, Casing, Coupl. & Drill Pipe	1143
Steel-carbon Cold Finished Bars	1161
Steel-carbon Leaded Cold Finished	1160
Steel-carbon Galv., Sheet (Not Dipped)	1144
Steel-carbon Hot Rolled Structural Shapes	1152
Steel-carbon Ingots, Blooms, Slabs & Billets	1153
Steel-carbon Leaded-Blooms, Slabs & Billets	1154
Steel-carbon Mechanical Tubing	1148

All Pertinent Information; i.e. CAS#'s, Emergency Procedures & Telephone numbers are on each individual MSDS Sheet

All of the above chemicals are used in areas of the workplace related to the Plumbing & HVAC Contracting. Each job (project) foreman and/or supervisor are responsible for making this and all safety information ready and available for any new and/or current employees who may request it.

Non-Routine Tasks

Before any non-routine tasks are performed, the employee shall be advised of special precautions to follow. If the employee receives no instructions, he shall contact the job (project) foreman or if necessary the project manager.

In addition, the job (project) foreman will inform any other personnel who could be exposed. In the event such tasks are required, the job (project) foreman will provide the following information about such activity as it relates to the specific chemicals expected to be encountered:

1. Specific chemical name(s).
2. Hazards of the chemicals.
3. What personal protective equipment is required?
4. What safety measures are to be taken?
5. Emergency Procedures.
6. Measures that have been taken to lessen the hazards including ventilation, respirators and the presence of other employees.

Outside Contractors

It will be the responsibility of the Job (project foreman) to provide other personnel or outside contractors with the following information.

1. Hazardous chemicals to which they may be exposed while in the workplace.
2. Measures to lessen the possibility of exposure.
3. Location of MSDS' for all hazardous chemicals.
4. Procedures to follow if they are exposed.

The Job (project) Foreman will also be responsible for contacting each contractor before the work is started and finding out what chemicals the contractor is bringing into the workplace. If employees are to be exposed to these chemicals the job (project) foreman will inform those employees who may be affected.

_____	_____	_____
(Signature)	(Title)	(Date)

Employee Training Guidelines

I. Prepare Objectives

A. Develop safety attitudes.
B. Make employees aware of the hazardous chemicals
C. Motivate employees to protect themselves by preventing exposure to hazardous chemicals.
D. Learn how to read and understand labels and MSDS.

II. Design a training program that teaches the following:

A. Which hazardous chemicals are found in the work area and where they are found.
B. What chemicals look like and the odor of the chemicals.
C. The nature of the operation in which an employee might be exposed.
D. Information to aid employees in recognizing conditions or situations which may result in the release of a hazardous chemical.
E. The purpose and description of detection or monitoring devices.
F. The purpose for and application of specific first aid procedures and practices.
G. Availability of personal protective equipment.
H. Type, use and limitations of personal protective equipment.
I. Location of personal protective equipment.

III. Techniques used in the training programs:

A. Handout materials – examples of MSDS and labels.
B. Audiovisuals – example of labels and MSDS's.
C. Demonstration of protective equipment. What it is? How to use it? Where protective equipment is located?
D. Test and quizzes.
E. Attendance records.

IV. Assessing effectiveness:

A. Were training objectives met?
B. What part of the training program needs to be revised?
C. What part of the training program was already known and unnecessary?
D. What material was confusing?
E. What material was missing?
F. How often should training be repeated?
G. What did the employees learn?
H. What did the employees fail to learn?

V. MSDSs

A. Were employees taught how to read and understand an MSDS?
B. Did the Hazard Communication Program include instructions such as the information on reading an MSDS that is located in Chapter I?

Shipment of Biological Materials

The following regulations apply to the packaging and shipment of biological materials.

- U.S. Department of Transportation, 49 CFR Parts 171-180 and amendments.
- U.S. Public Health Service, 42 CFR Part 72, Interstate Shipment of Etiologic Agents.
- U.S. Department of Labor, Occupational Safety and Health Administration, 29 CFR Part 1910, 1030, Bloodborne Pathogens.
- International Air Transport Association (IATA), Dangerous Goods Regulations.
- U.S. Postal Services, 39CFR Part 111, Mail-ability of Etiologic Agents, Mail-ability of Sharps and other medical devices and Publication 52, Acceptance of Hazardous, Restricted or Perishable matter.
- International Civil Aviation Organization, Technical Instructions for the Safe Transport of Dangerous Goods by Air.
- United Nations, Recommendations of the Committee of Experts on the Transportation of Dangerous Goods.
- All North American Airlines and FedEx, the largest shipper of infectious materials, use the IATA regulation (also referred to as the Dangerous Goods Regulation or DGR) as their standard. Meeting the conditions of this standard will ensure meeting the provisions of other US regulations.

General Information:

Below is some general information, but please contact the Biological Safety Office for specific information. Note that for any biological materials, for which a state or federal permit or license is required, registration with the Biological Safety Office is also required.

Packaging Biological Materials for Shipment.

There are specific requirements for the packaging and labeling of biological materials. Biological materials include infectious substances (etiologic agents), diagnostic (clinical) specimens and biological products. Proper shipping papers, "Shipper's Declaration for Dangerous Goods", must be completed for shipment of infectious substances, but not for biological products or diagnostic specimens. However, all three groups require proper packaging.

Human blood always requires "Universal Precautions" and may be considered a diagnostic specimen and shipped without the dangerous goods paperwork. A biohazard sticker must be present when shipping human blood, according to the OSHA BBP standard. However, if the human blood is known to be infected with an infectious substance, it must be packaged and shipped as such and requires the dangerous goods paperwork.

If dry ice or liquid nitrogen accompanies a shipment, these materials must be declared and packages must be properly labeled. Dry ice should never be placed in a sealed container.

Packaging Requirements:

- Providing several layers of containment for biological samples.
- Using proper internal labeling for identification of the samples.
- Providing internal absorbent materials in case of spills or leakage.
- Providing proper labeling on the outside of the package as to contents (biohazard symbol, infectious agents, name and phone number of an authority of dangerous goods, etc.)
- Using a certified, UN-numbered container when appropriate. These containers have been tested and shown to withstand various drop tests.
- Using labels for all of the dangerous goods present, i.e. one for the biological agent as well as one for the dry ice with which it is shipped.

Definitions:

- Infectious substances or etiologic agent:
  DOT definition: A viable microorganism or its toxin that causes or may cause disease in humans or animals.
  IATA definitions: Substances known to contain or reasonable expected to contain pathogens. Pathogens are microorganisms (including bacteria, viruses, rickettsia, parasites, fungi) or recombinant microorganisms (hybrid or mutant) that are known or reasonably expected to cause disease in humans or animals.
- Diagnostic Specimen: Any human or animal material including excreta, secreta, blood; blood components, tissue and tissue fluids being shipped for the purposes of diagnosis. Please note that diagnostic specimens that are "known or reasonably expected" to contain pathogens must be handled as infectious substances.
- Biological Product: A product prepared in accordance with regulations that govern vaccines, licensed biological products, etc.

Procedure for packaging infectious substances: Please see the following tables and figures for examples. The IATA Packing instructions 602, 650 and 904 (below) give more detailed information.

- Primary Container(s):
  1. Use a vial, tube, plate made of glass, metal or plastic.
  2. Identify the contents.
  3. Water tight/leakproof.
  4. Reinforce screw caps and plates with adhesive tape, use a metal crimp seal or skirted stopper for metal and glass.

- Secondary Container(s):
  1. Use a watertight container and reinforce with adhesive tape.
  2. Affix biohazard label.
  3. Affix a label with a complete list of the contents including the scientific name and the amount in ml.
  4. Use absorbent packing material sufficient to completely absorb contents and should surround each primary container.

- Shipping Container:
  1. Use one made of fiberboard.
  2. Affix proper labels.
  3. Affix address label with the complete address and phone number for both the shipper and the recipient.
  4. Affix the Class 6, Division 6.2 infectious substance label.
  5. Affix a label with a UN number, proper shipping name and amount of all hazardous substances.
  6. Affix the "double up arrows" sticker.
  7. Use the Class 9 hazardous material label if dry ice is used.
  8. Complete the Shipper's Declaration for Dangerous Goods (see example below).

<u>Testing Requirements:</u>

Packaging must meet the testing requirements of IATA and DOT and have the appropriate UN markings.

Bloodborne Pathogens
Exposure Control Program

This program eliminates or minimizes employee exposure to bloodborne pathogens, as required by 29 CFR 1910.1030.

Job Classifications

All employees in the following job classifications may experience occupational exposure to infectious materials:

Plumbers and Steamfitters (Journeyman/Foreman/Apprentices) Office Staff.

Engineering and Work Practice Controls

Everyone in this office will observe "universal precautions". All human blood and certain human bodily fluids will be treated as if they are known to be infectious for HIV, HBV or other bloodborne pathogens:

1. Hand washing facilities should be readily accessible for each employee. If not available, antiseptic hand cleanser and clean clothe or paper towels will be provided.
2. Employees must wash their hands immediately (or as soon as feasible) after removal of gloves or other personal protective equipment.
3. Employees must wash their hands or other skin with soap and water or flush mucous membranes with water, as soon as possible following an exposure incident. The location of the eyewash would vary depending on job site. The job (project) foreman should ask project supervisor if one is available before beginning the project. If eyewash is unavailable water bottles will be kept on hand until the infected employee(s) can be brought to a medical facility if needed.
4. Contaminated needles or other contaminated sharps will not be bent, recapped or removed except as noted below:
   a. Needles are recapped only by using a mechanical device or a one-handed technique.
   b. Needles may be removed using a mechanical device or a tool (for example, forceps).

5. Breaking or sharing contaminated needles is prohibited.

6. Immediately or as soon as possible after use, contaminated reusable sharps will be placed in appropriate containers until properly processed.

7. No eating, drinking, smoking, applying cosmetics or lip balm or handling contact lenses is allowed in a work area where there is a reasonable likelihood of occupational exposure.

8. No food or drinks shall be kept in refrigerators, freezers, shelves, or cabinets or on counter tops or bench tops where blood or other potentially infectious materials are present.

9. Employees must perform all procedures involving blood or other potentially infectious materials in such a manner as to minimize splashing, spraying, spattering and generation of droplets of these substances.

10. Mouth pipetting or suctioning of blood or other potentially infectious materials is prohibited.

11. Specimens of blood other potentially infectious material will be placed in a container that prevents leakage during:

    a. collection
    b. handling
    c. processing
    d. storage
    e. transporting
    f. shipping

12. Equipment that may become contaminated with blood or other potentially infectious materials will be examined and decontaminated before servicing or shipping.

Job (project) foreman and/or supervisor are responsible for examining and maintaining or replacing the engineering controls on a quarterly basis to ensure their effectiveness.

Personal Protective Equipment

Sarra Engineeringwill provide gloves, masks, eye protection and gowns at no cost to employees. Aero Mechanical, Inc. will also replace, repair or clean personal protective equipment as necessary and at no cost to the employee.

Employees must:

1. Utilize protective equipment in occupational exposure situations.
2. Remove garments that become penetrated by blood or other potentially infectious material immediately or as soon as feasible.
3. Replace all garments that are torn or punctured or that lose their ability to function as a barrier to bloodborne pathogens.
4. Remove all personal protective equipment before leaving the work area.
5. Place all garments in the appropriate designated area or container for storage, cleaning, decontamination or disposal.

Housekeeping

The following housekeeping procedures must be followed:

1. Clean and disinfect contaminated equipment and work surfaces after each patient. (Not applicable)
2. Clean and disinfect contaminated instruments and reusable sharps.
3. Clean and inspect bins, pails, cans and similar receptacles daily.
4. Clean bins, pails, cans and similar receptacles immediately if visibly contaminated.
5. Do not pick up broken glass directly with the hands. Use mechanical means such as a broom and dustpan, tongs or forceps.
6. Do not store contaminated reusable sharps in a manner that requires reaching into the storage containers by hand.
7. Discard contaminated disposable sharps in appropriate containers immediately or as soon as feasible.
8. Handle contaminated laundry as little as possible and with a minimum of agitation.
9. Place contaminated laundry that is ready for pick-up in an appropriate container.

Hepatitis B Vaccination and Post-Exposure Evaluation and Follow-up

The Hepatitis B virus (HBV) vaccine and vaccination series is available at no cost to all employees who have occupational exposure. The HBV vaccination is available after an employee has received his or her required training and within 10 working days of his or her initial job assignment, unless:

1. The employee has previously received the complete Hepatitis B vaccination series.
2. Antibody testing has revealed that the employee is immune.
3. The vaccine is not advised for medical reasons.

An employee who administers first aid as a secondary duty may receive an HBV vaccine within 24 hours after exposure. An employee receiving post-exposure HBV vaccination will be provided with all the post-exposure follow-up procedures listed in this plan.

An employee can initially decline the Hepatitis B vaccination. The employee can request the vaccination at a later date at no cost to the employee. Employees who decline the vaccination must sign the statement that follows this section.

If the U.S. Public Health Service recommends routine booster doses of Hepatitis B vaccine, the booster will be available at no cost to the employee.

Following a report of an exposure incident, the exposed employee (if consenting) will receive a confidential medical evaluation and follow-up. The medical evaluation after exposure and medical follow-up will include at least one of the following:

1. Documentation of the route(s) of exposure.
2. A description of the circumstances under which the exposure occurred.
3. The identification and documentation of the source individual (the identification is not required if the employer can establish that identification is impossible or prohibited by state or local law).
4. The collection and testing of source individual's blood for HBV and HIV serological status.
5. Post-exposure treatment for the employee, when medically indicated in accordance with U.S. Public Health Service.
6. Counseling.
7. Evaluation of any reported illness.

The Healthcare Professional evaluating an employee will be provided with the following information:

1. A copy of the OSHA Bloodborne Pathogens regulations (29 CFR 1910.1030).
2. A description of the exposed employee's duties as they relate to the exposure incident.
3. Documentation of the routes of exposure.
4. A description of the circumstances under which the exposure occurred.
5. Results of the source individual's blood testing, if available.
6. All medical records applicable to treatment of the employee, including vaccination status (the employer must maintain a record of each covered employee's vaccination status).

The employee will receive a copy of the evaluating healthcare professional's written opinion within 15 days of the completion of the evaluation. The Healthcare professional's written opinion for Hepatitis B vaccination is limited to the following: (1) whether the employee needs Hepatitis B vaccination; and (2) whether the employee has received the vaccination. The Healthcare professional's written opinion for post-exposure evaluation and follow-up is limited to the following information:

1. That the employee was informed of the results of the evaluation.
2. That the employee was informed about any medical conditions resulting from exposure to blood or other infectious materials that require further evaluation of treatment.

All other findings or diagnoses will remain confidential and will not be in a written report.

Medical evaluations and procedures at no cost to the employee include the following:

1. The Hepatitis B vaccine.
2. The Hepatitis B vaccination series.
3. The post-exposure evaluation and follow-up, including treatment.

All medical evaluations are made by or under the supervision of a licensed physician or by or under the supervision of another licensed healthcare professional. An accredited laboratory at no cost to the employee must conduct all laboratory tests. All medical records will be kept in accordance with 29 CFR 1910.20.

Hepatitis B Vaccine Declination

I understand that due to my occupational exposure to blood or other infectious materials that I may be at risk of acquiring Hepatitis B virus (HBV) infection. I have the opportunity to receive the Hepatitis B vaccine at no charge to myself. However, I decline Hepatitis B vaccination now. I understand that by declining this vaccine, I continue to be at risk of acquiring Hepatitis B, a serious disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want the Hepatitis B vaccine, I can receive the vaccine at no charge to me.

_____
(Print Name)

_____
(Signature)

_____
(Title)

_____
(Date)

Communications of Hazards to Employees

Label the following with a biohazard label:

1. All containers of regulated waste.
2. Refrigerators and freezers containing blood or other potentially infectious material.
3. All other containers used to store, transport or sip blood or others.

The following symbol indicates a biohazard label:

BIOHAZARD

These labels will be fluorescent orange or orange-red, with letter or symbols in a contrasting color. Labels must be affixed as close as possible to the container. String, wire, adhesive or other methods that prevent its loss or unintentional removal should affix the label. Red bags or red containers may be substituted for labels.

The following are exempt from these labeling requirements:

1. Containers of blood, blood components or blood products labeled as to their contents and released for transfusion or other clinical use.
2. Individual container of blood or other potentially infectious materials placed in labeled containers during storage, transport shipment or disposal.

The labels required for contaminated equipment will also state which portions of the equipment remain contaminated. Decontaminated regulated waste need not be labeled or color-coded.

Training

All employees with occupational exposure will participate in a training program. The program is available to the employee at the time of the first assignment to a task where occupational exposure may take place. Training will occur at least annually. Additional training will be provided when changes (such as modification of tasks or procedures) affect the employee's occupational exposure.

Any employee who is exposed to infectious materials shall receive training, even if the employee was allowed to receive the HBV vaccine after exposure.

The training program will include at least the following elements:

1. An accessible copy of the regulatory text of 29 CFR 1910.1030 and an explanation of its contents.

2. A general explanation of epidemiology and symptoms of bloodborne diseases.

3. An explanation of the modes of transmission of bloodborne pathogens.

4. An explanation of the employer's exposure control plan and the means by which the employee can obtain a copy of the written plan.

5. An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood or other potentially infectious material.

6. An explanation of the use and limitations of methods that will prevent or reduce exposure, including appropriate engineering controls, work practices and personal protective equipment.

7. Information on the types, proper uses, location, removal, handling, decontamination and disposal of personal protective equipment.

8. An explanation of the basis for selection of personal protective equipment.

9. Information on the Hepatitis B vaccine, including information on its efficacy and safety, the method of administration, the benefits of being vaccinated and the fact that the vaccine is offered free of charge.

10. Information on the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious material.

11. An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that is available.

12. Information on the post-exposure evaluation and follow-up required for the employee following an exposure incident.

13. An explanation of the signs, labels and color-coding.

14. An opportunity for interactive questions and answers with the person conducting the training.

15. A list of names of the trainers and their qualifications will be provided. The qualifications of the trainers must meet or exceed OSHA standards.

Record Keeping

We will establish and maintain an accurate medical record for each employee with occupational exposure as required under 29 CFR 1910.20 and 1910.1030.

We will establish and maintain training records as required under 29 CFR 1910.20 and 29 CFR 1910.1030. All medical and training records are available to the subject employee, to anyone having written consent of the subject employee, to the Director of the NIOSH and to the Assistant Secretary of Labor for OSHA, as provided by 29 CFR 1910.20 and 1910.1030.

Training records will be maintained for three years from the date of training.

The Office Administrator will review and update this plan at least annually to reflect new or modified tasks and procedures that affect occupational exposure and employee positions.

A copy of this plan will be kept at Aero Mechanical, Inc. 10 Leah Street, Johnston, RI 02919.

Safety Inspection Checklist

Section 8

Sarra Engineering

Safety Inspection Check List

Inspector: _____

Date: _____

1. **Aisles** N/A _____

_____ Clearly marked.

_____ Aisles clear of obstruction.

_____ Sufficiently wide for material handling.

Any unsafe practices observed:

_____
_____
_____
_____
_____
_____

Comments:

_____
_____
_____
_____
_____

2. **Building Exterior** N/A_____

_____ No defective overhanging cornices, parapets, gutters or tiling.

_____ No loose bricks or chimneys or stacks.

Any unsafe practices observed:

_____
_____
_____
_____
_____
_____

Comments:

_____
_____
_____
_____
_____
_____

3. **Compressed Gasses** N/A_____

_____ Special storage area away from heat sources.

_____ Stored upright and chained to prevent falling over.

_____ Contents legibly marked and segregated by item.

_____ Caps hand tight.

_____ Mechanics and tradesmen properly trained in operation of this equipment.

Any unsafe practices observed:

_____
_____
_____
_____
_____
_____

Comments:

_____
_____
_____
_____
_____
_____

4. **Confined Space Entry** N/A _____

_____ Persons who must work in confined spaces are trained.

_____ Annual retraining is provided.

_____ Confined space purged with fresh air.

_____ Lifelines and harness apparatus and respirators in place.

Any unsafe practices observed:

_____
_____
_____
_____
_____
_____

Comments:

_____
_____
_____
_____
_____
_____

5. **Elevators** N/A _____

_____ Motors properly protected from dirt and steam.

_____ Electrical wiring in good repair.

_____ Fire extinguisher available.

_____ Protection for electrical control panels.

_____ Hoistway interlocks operating and protected.

_____ Satisfactory condition of elevator marked.

_____ Pit well lighted.

_____ Safe load capacity of elevator marked.

_____ Emergency exit provided.

_____ Safety devices tested and working properly.

_____ Elevator inspected. Most recent date: _____

Any unsafe practices observed:

_____

_____

_____

_____

_____

_____

Comments:

_____

_____

_____

_____

_____

_____

8. **Exits and Emergency Preparedness** N/A _____

_____ Adequate number of exits for emergency escape.

_____ No locked or barred exits restricting escape.

_____ Emergency exits adequately illuminated.

_____ Exterior exit surfaces clear for prompt exit.

_____ Flammable materials removed from exit areas.

_____ Exterior exit doors open outward to flat surface.

_____ Written and posted emergency evacuation plan with exit map for all areas.

Any unsafe practices observed:

_____
_____
_____
_____
_____
_____

Comments:

_____
_____
_____
_____
_____
_____

10. **First Aid and Medical Services** N/A _____

_____ Adequate materials and equipment available.

_____ Electrical safety items included in high voltage areas.

_____ Clear instructions on contacting outside medical services.

_____ Provisions for transportation to outside medical services.

_____ OSHA 200 logbook near to first aid department.

_____ Two persons trained in posting OSHA 200 Log.

_____ Trained first aid personnel with annual certification/re-certification.

Any unsafe practices observed:

_____
_____
_____
_____
_____
_____

Comments:

_____
_____
_____
_____
_____
_____

11. **Floors** N/A _____

_____ No slip, trip or fall hazards.

_____ Apertures or openings enclosed, not covered.

_____ Clean, orderly and free of oil or grease hazards.

_____ Grates over floor drains.

_____ Non-slip surfaces wherever possible.

Any unsafe practices observed:

_____
_____
_____
_____
_____
_____

Comments:

_____
_____
_____
_____
_____
_____

12. **Hand and Portable Tools and Equipment** N/A _____

_____ Electrically grounded.

_____ Proper general condition of connecting cords, tools and air hoses.

_____ Guards and safety fixtures safe and operable.

_____ Correct load rating for work performed.

_____ Constant pressure switches on power tools.

_____ Tradesmen, mechanics and helpers properly trained in the operation of the equipment.

Any unsafe practices observed:

_____
_____
_____
_____
_____
_____

Comments:

_____
_____
_____
_____
_____
_____

13. **Hoisting and Lifting Equipment** N/A _____

_____ Identified load capacity.

_____ Overhead guards in place.

_____ Limit stops working effectively.

_____ Special area for refueling and recharging of batteries.

_____ All hand and foot controls operational.

_____ Full unrestricted view for operator.

_____ Operators properly trained in the use of the equipment.

Any unsafe practices observed:

_____
_____
_____
_____
_____
_____

Comments:

_____
_____
_____
_____
_____
_____

14. **Industrial Trucks** N/A _____

_____ All operators trained and licensed.
_____ Check list for the start of the shift.
_____ Load capacity labeled.
_____ Overhead guards in place.
_____ Load back rest extension in place.
_____ Speed posted.
_____ Warning sounds if vehicle is driven backward with awkward or bulky loads.
_____ Slow down ramps.
_____ Forks placed evenly across load.
_____ No riders.
_____ Railroad tracks crossed diagonally.
_____ Pedestrian given right of way.
_____ Dock boards properly secured.
_____ Check trailer truck or boxcar floors for safety of load.
_____ Key removed from truck when out of operation.

Any unsafe practices observed:

_____
_____
_____
_____
_____
_____

Comments:

_____
_____
_____
_____
_____
_____

15. **In-Plant Materials Handling** N/A _____

_____ Dock boards available.

_____ Trailer truck wheel chocks available in receiving/shipping areas.

_____ Pallets and skids in good repair.

_____ Special storage area for unused skids and pallets.

_____ Procedure to set aside broken skids and pallets.

_____ Paths, aisles and stairways clear of obstructions.

_____ Proper drainage preventing accumulation of water or solvents.

Any unsafe practices observed:

_____
_____
_____
_____
_____
_____

Comments:

_____
_____
_____
_____
_____
_____

17. **Lighting** N/A _____

_____ Illumination level sufficient for work performed.

_____ Emergency lighting adequate, operating.

_____ Emergency lighting on all exit routes.

Any unsafe practices observed:

_____
_____
_____
_____
_____
_____

Comments:

_____
_____
_____
_____
_____
_____

18. **Lock-out/Tag-out** N/A _____

_____ Positive lockout systems provided for all power equipment.
_____ Written work-areas policy signed by each person so trained.
_____ Personalized locks with individual keys provided to each mechanic or electrical specialist.
_____ Personalized danger tags provided to each such person.
_____ Only authorized persons allowed to perform this procedure.
_____ Prominent tags indicate use of the lock-out system.
_____ Lockout system will reduce power to zero energy status.

Any unsafe practices observed:

_____
_____
_____
_____
_____
_____

Comments:

_____
_____
_____
_____
_____
_____

19. **Machine Tools** N/A _____

_____ Guarding to power transmission equipment.
_____ Guarding to pinch points, in-running points and points of operation.
_____ Interlock guards in operation.
_____ Eye protection available where needed.
_____ Operating controls locked when not in use.
_____ Emergency stop buttons ready, accessible and operable.
_____ Guarding or deflection equipment provided for chips or sparks from rotating equipment.
_____ Machine tool operators properly trained in operation of equipment.

Any unsafe practices observed:

_____
_____
_____
_____
_____
_____

Comments:

_____
_____
_____
_____
_____
_____

20. **Machinery Guarding** N/A _____

_____ A guard or safety device at each point of operation.
_____ Guard fully prevents operator from reaching around guard.
_____ Guards totally effective and unable to be bypassed.
_____ Mechanics are only persons authorized to remove guards.
_____ Mechanics are held responsible to replace guards after completing repairs.
_____ Start and stop controls are within easy reach of the operator.
_____ Operators can see the entire operation.
_____ Controls clearly labeled.
_____ Two hand trips on hand-fed power presses.
_____ Machinery oiled and greased without removing guards.
_____ All controls, including foot controls are guarded against accidental start-up.
_____ Emergency stop controls clearly identified and accessible.
_____ Adjusting/oiling procedures of moving machinery followed.
_____ No bypassing or removing guards.
_____ No operating equipment at unsafe speed.
_____ Lockout and tag-out procedure implemented.
_____ Personal protective equipment in use as needed.
_____ Mechanics or adjusters properly trained.

Any unsafe practices observed:

_____
_____
_____
_____
_____
_____

Comments:

_____
_____
_____
_____
_____
_____

21. **Noise Control** N/A _____

_____ Engineering controls applied where feasible.
_____ Engineering controls in operation.
_____ Administrative controls applied where feasible.
_____ Administrative controls and regulations observed.
_____ Hearing protection provided where sound levels exceed standards.
_____ Employees wearing approved hearing protection that, if required, is properly inserted in the ear canal.

Any unsafe practices observed:

_____
_____
_____
_____
_____
_____

Comments:

_____
_____
_____
_____
_____
_____

22. **Offices** N/A _____

_____ Floors have no slippery surfaces or excessive polish.
_____ No holes or depressions in floors.
_____ Rugs in halls or offices are free of holes, tears and cannot skid.
_____ No electrical equipment cords stretched across walkways.
_____ Aisles free of obstructions, including electrical outlets.
_____ Stairwells and exits are properly lighted.
_____ Light switch and cover plates are in place.
_____ No unsafe ladders or trolleys.
_____ General housekeeping is good.
_____ No top-heavy filing cabinets (either loading or opening).
_____ Lifting, including opening of windows is performed safely.
_____ Correct use of pins, knives, cutters or staplers.
_____ No fire hazards from cigarette butts.
_____ Safe storage of flammables.
_____ Glass doors either frosted or have lettering or decals.
_____ No running, crowding or jamming of revolving doors.
_____ No slivers in furniture or accessories.
_____ Persons trained in hazard communication standard.
_____ First-aid facilities.
_____ Electrical fans properly guarded.
_____ Adequate ventilation.

Any unsafe practices observed:

_____
_____
_____
_____
_____
_____

Comments:

_____
_____
_____
_____
_____
_____

23. **Personal Protective Equipment** N/A _____

_____ Gloves or palm guards properly chosen for each job.
_____ Eye to face protection properly selected for each job.
_____ Head protection properly selected for each job.
_____ Foot protection properly selected for each job.
_____ Apron or protective clothing properly selected for each job.
_____ Respiratory protection properly selected if necessary for the job.
_____ Hearing protection selected for areas above noise standard.
_____ Safety belts properly chosen for the job if required.
_____ Eye baths and showers readily available and accessible.
_____ Proper signs and instructions at eye baths.
_____ Adequate emergency rescue equipment available.

Any unsafe work practices (for example, failure to use personal protective equipment provided) observed:

_____
_____
_____
_____
_____
_____

Comments:

_____
_____
_____
_____
_____
_____

24. Potentially Hazardous Chemicals

N/A _____

_____ MSDS's available for all chemicals or federally listed hazardous material.
_____ Written hazard communication program prepared and available.
_____ Employees trained in proper handling of each chemical.
_____ Labels on in-plant transfer containers.
_____ Adequate storage cabinets provided with proper venting.
_____ Proper absorbent materials on hand for spills.
_____ Drums or tanks properly bonded and grounded.
_____ Containers inspected for corrosion.

Any unsafe practices observed:

_____
_____
_____
_____
_____
_____

Comments:

_____
_____
_____
_____
_____
_____

25. **Power Systems – Electrical** N/A _____

_____ Electrical control panels clearly identified and secured.

_____ Only certified electrical specialists have access to panels.

_____ Grounding tested.

_____ Explosion-proof fixtures in designated areas.

_____ No exposed conductors at rear of switchboard.

_____ Flexible extension cords free of fraying and splices.

_____ Electrical specialist properly trained in the operation and maintenance of this equipment.

Any unsafe practices observed:

_____
_____
_____
_____
_____
_____

Comments:

_____
_____
_____
_____
_____
_____

26. **Power Systems – Hydraulic** N/A _____

_____ Pressure lines clearly identified.

_____ Check maintenance procedures for nicks, dents and wearing in lines.

_____ Pressure regulated within limits.

_____ Emergency stops fully operational.

_____ Mechanics and tradesmen properly trained in the operation of these systems.

Any unsafe practices observed:

_____
_____
_____
_____
_____
_____

Comments:

_____
_____
_____
_____
_____
_____

27. **Power Systems – Mechanical** N/A _____

_____ Proper guarding of any nip points, rotating collars, cams, chucks, couplings, clutches, shafts, flywheels, blot ends, key ends.

_____ Emergency stops fully operational.

_____ Adequate arrangement for oiling and greasing.

_____ Correct adjustment of work rest device on grinding wheels.

_____ Vent hood in place and ventilation operational for grinding wheels.

_____ Mechanics, tradesmen and helpers properly trained in the operation of these systems.

Any unsafe practices observed:

_____
_____
_____
_____
_____
_____

Comments:

_____
_____
_____
_____
_____
_____

28. **Scaffolds or Platforms** N/A _____

_____ Nonskid flooring.

_____ Level and plumb.

_____ Safe access to platforms.

_____ 4-inch toe-board around all sides of platform.

_____ Working platforms at least 2 feet wide.

_____ All access gates self-closing and locking.

_____ No accumulation of tools and materials.

Any unsafe practices observed:

_____
_____
_____
_____
_____
_____

Comments:

_____
_____
_____
_____
_____
_____

29. **Stairs** N/A _____

_____ Uniform height and tread depth.

_____ Grating type tread on exterior stairs.

_____ Platform levels to break long flights of stairs.

_____ At least 22 inches wide.

_____ Sturdy railing on all open sides.

_____ Proper lighting on the stairs.

_____ No worn or damaged treads.

Any unsafe practices observed:

_____
_____
_____
_____
_____
_____

Comments:

_____
_____
_____
_____
_____
_____

30. **Ventilation** N/A _____

_____ Adequate ventilation for the process.

_____ Hoods properly connected to exhaust system.

_____ Hoods draw air away from people.

_____ Clean-out ports for ducts provided.

_____ Maintenance clean-out schedule observed.

_____ Fans properly guarded.

Any unsafe practices observed:

_____
_____
_____
_____
_____
_____

Comments:

_____
_____
_____
_____
_____
_____

31. **Waste Disposal** N/A _____

_____ Special containers provided for different types of waste (oily rags, chemicals, scrap, garbage, etc.)

_____ Food waste handled separately.

_____ Where required, waste properly labeled.

_____ Satisfactory external disposal arrangements.

_____ Approved disposal arrangements for hazardous waste.

Any unsafe practices observed:

_____
_____
_____
_____
_____
_____

Comments:

_____
_____
_____
_____
_____
_____

32. **Yard and Roads** N/A _____

_____ No obstructions or broken surfaces on roads or sidewalks.

_____ Good housekeeping in yard areas.

_____ Possibly combustible materials stored out of direct sunlight.

_____ Appropriate traffic signs and markers.

_____ Rail siding beds in good repair and free of obstruction.

Any unsafe practices observed:

_____
_____
_____
_____
_____
_____

Comments:

_____
_____
_____
_____
_____
_____

Summary:

Inspector: _____ Date: _____

Accident Reporting to OSHA

Section 9

Sarra Engineering

Accident Reporting to OSHA

Employers must follow OSHA accident reporting requirements even if they are exempt from OSHA record keeping requirements.

Employer's must orally report any work-related accident within eight hours of the event or when the employer learns of the accident if it results in: death or three or more employees being admitted to the hospital.

This type of accident must be reported to the nearest OSHA area office (see chapter 6). The report can be made by telephone or in person. Employers may use OSHA's toll free hot line for reporting workplace safety or health emergencies (1-800-321-OSHA).

This rule applies to fatalities/hospitalization that occur within 30 days of a work-related incident.

The report must include the name of the establishment, the time and location of the incident, number of fatalities or hospitalized employees, contact person, phone number and a brief description of the incident.

Supplementary Record of Occupational Injuries and Illnesses

To supplement the log and summary of occupational injuries and illness (OSHA No. 300) each establishment must maintain a record of each recordable occupational injury or illness. Worker's compensation, insurance or other reports as acceptable as records, if they contain all the facts listed below or are supplemented to do so. If no suitable report is made for other purposes, this form (OSHA 301 – attached at the end of this section) may be used or the necessary facts can be listed on a separate plain sheet of paper. These records must also be available in the establishment without delay and at reasonable times for examination by representatives of the Department of Labor, the Department of Health and Human Services and States accorded jurisdiction under the Act. The records must be maintained for a period of not less than five years following the end of the calendar year to which they relate.

Such records must contain at least the following facts:

1. About the employer – name, mailing address and location if different from the mailing address.

2. About the injured or ill employee – Name, social security number, home address, age, sex, occupation and department.

3. About the accident or exposure to occupational illness – place of accident or exposure, whether it was on employer's premises, what the employee was doing when injured and how the accident occurred.

4. Other – names and address of physician; if hospitalized, name and address of hospital, date of report and name and position of person preparing the report.

See definitions of the Back of OSHA Form 300.

OMB DISCLOSURE STATEMENT

We estimate that it will take an average of 20 minutes to complete this form including time for reviewing instructions; searching, gathering and maintaining the data needed; and completing and reviewing the form. If you have any comments regarding this estimate or any other aspect of this record keeping system, send them to the Bureau of Labor Statistics, Division of Management Systems (1220-0029), Washington, D.C. 20212 and to the Office of Management and Budget, Paperwork Reduction Project (1220-0029) Washington, D.C. 20503

OVERVIEW OF FORM 300

Form Number: OSHA Form 300

Form Name: Log of Work-Related Injuries and Illnesses

Purpose: To summarize information about job-related accidents or illnesses for a calendar year

Description: This form provides information on the following:

1. Name, occupation and department of injured or ill employee
2. Description of injury
3. Description of illness

Alternative: Other formats are permitted, as long as all information that is required by OSHA is also noted on the alternate form.

Instructions: Attached at the end of this section

Posting: This form (or alternative form) must be posted for the entire month of February of each year to summarize the injuries and illnesses reported during the previous calendar year.

Retention: Five years from the end of the year for which the form contains information.

Enforcement: OSHA or state agency authorized to act on behalf of OSHA.

Note: Failure to properly maintain OSHA 300 is the second most common violation of OSHA standards. In fiscal 1991, OSHA issued more than 4,300 citations for failure to maintain a proper OSHA form 300 log.

Form 300 and Form 300 instructions are attached at the end of this section.

U. S. Department of Labor

u of Labor Statistics Supplementary Record of
Occupational Injuries and Illnesses

This form is required by Public Law 91-596 and must be kept in the establishment for 5 years. Failure to maintain can result in the issuance of citations and assessments of penalties.	Case or File No.	Form Approved O.M.B. No. 1220-0029 See OMB Disclosure Statement on reverse.

Employer

1. Name

2. Mail address (Number and Street, City or Town, State and Zip Code)

3. Location, if different from mailing address

Injured or Ill Employee

4. Name (First, middle and last) | Social Security Number

5. Home Address (Number and Street, City or Town, State and Zip Code)

6. Age | 7. Sex: (Check One) Male ☐ Female ☐

8. Occupation (Enter regular job title, not the specific activity he was performing at time of injury)

9. Department (Enter name of department or description to which the injured person or regularly employed, even though he may have been temporarily working in another department at the time of injury.)

The Accident or Exposure to Occupational Illness

If accident or exposure occurred on employer's premises, give address of plant or establishment in which it occurred. Do not indicate department or division within the plant or establishment. If accident occurred outside employer's premises at an identifiable address, give that address. If it occurred on a public highway or at any other place which cannot be identified by number and street, please provide place references locating the place of injury as accurately as possible.

. Place of accident or exposure (Number and Street, City or Town, State and Zip Code)

11. Was place of accident or exposure on employer's premises? Yes ☐ No ☐

12. What was the employee doing when injured? (Be specific. If he was using tools or equipment or handling material, name them and tell what he was doing with them.)

13. How did the accident occur? (Describe fully the events which resulted in the injury or occupational illness. Tell what happened and how it happened. Name any objects or substances involved and tell how they were involved. Give full details on all factors which led or contributed to the accident. Use separate sheet for additional space.

Occupational Injury or Occupational Illness

14. Describe the injury or illness in detail and indicate the part of the body affected. (E.g. amputation of right index finger at second joint, fracture of ribs, lead poisoning, dermatitis of left hand, etc.)

15. Name the object or substance which directly injured the employee. (For example, the machine or thing he struck against or which struck him, the vapor or poison he inhaled or swallowed, the chemical or radiation which irritated his skin; or in cases of strains, hernia etc. the think he was lifting, pulling, etc.)

16. Date of injury or initial diagnosis of occupational illness | 17. Did employee die? (Check one) Yes ☐ No ☐

Other

18. Name and address of Physician

19. If hospitalized, Name and address of hospital

Date of Report	Prepared by	Official Position

IA No. 101 (Feb 1981)

OSHA's Form 300 (Rev. 01/2004)

Log of Work-Related Injuries and Illnesses

Attention: This form contains information relating to employee health and must be used in a manner that protects the confidentiality of employees to the extent possible while the information is being used for occupational safety and health purposes.

Year 20 __ __

U.S. Department of Labor
Occupational Safety and Health Administration
Form approved OMB no. 1218-0176

You must record information about every work-related death and about every work-related injury or illness that involves loss of consciousness, restricted work activity or job transfer, days away from work, or medical treatment beyond first aid. You must also record significant work-related injuries and illnesses that are diagnosed by a physician or licensed health care professional. You must also record work-related injuries and illnesses that meet any of the specific recording criteria listed in 29 CFR Part 1904.8 through 1904.12. Feel free to use two lines for a single case if you need to. You must complete an Injury and Illness Incident Report (OSHA Form 301) or equivalent form for each injury or illness recorded on this form. If you're not sure whether a case is recordable, call your local OSHA office for help.

Establishment name _____

City _____ State _____

Identify the person			Describe the case			Classify the case (CHECK ONLY ONE box for each case based on the most serious outcome for that case)				Enter the number of days the injured or ill worker was								
(A) Case no.	(B) Employee's name	(C) Job title (e.g., Welder)	(D) Date of injury or onset of illness	(E) Where the event occurred (e.g., Loading dock north end)	(F) Describe injury or illness, parts of body affected, and object/substance that directly injured or made person ill (e.g., Second degree burns on right forearm from acetylene torch)	Death	Days away from work	Job transfer or restriction	Other recordable cases	Away from work (K)	On job transfer or restriction (L)	Injury (1)	Skin disorder (2)	Respiratory condition (3)	Poisoning (4)	Hearing loss (5)	All other illnesses (6)
			/ month/day							days	days						
			/ month/day							days	days						
			/ month/day							days	days						
			/ month/day							days	days						
			/ month/day							days	days						
			/ month/day							days	days						
			/ month/day							days	days						
			/ month/day							days	days						
			/ month/day							days	days						
			/ month/day							days	days						
			/ month/day							days	days						
			/ month/day							days	days						
			/ month/day							days	days						
			/ month/day							days	days						
					Page totals ➤												

Be sure to transfer these totals to the Summary page (Form 300A) before you post it.

Page ___ of ___

Public reporting burden for this collection of information is estimated to average 14 minutes per response, including time to review the instructions, search and gather the data needed, and complete and review the collection of information. Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number. If you have any comments about these estimates or any other aspects of this data collection, contact: US Department of Labor, OSHA Office of Statistical Analysis, Room N-3644, 200 Constitution Avenue, NW, Washington, DC 20210. Do not send the completed forms to this office.

OSHA
Forms for Recording
Work-Related Injuries and Illnesses

U.S. Department of Labor
Occupational Safety and Health Administration

Dear Employer:

This booklet includes the forms needed for maintaining occupational injury and illness records for 2004. These new forms have changed in several important ways from the 2003 recordkeeping forms.

In the December 17, 2002 Federal Register (67 FR 77165-77170), OSHA announced its decision to add an occupational hearing loss column to OSHA's Form 300, Log of Work-Related Injuries and Illnesses. This forms package contains modified Forms 300 and 300A which incorporate the additional column M(5) Hearing Loss. Employers required to complete the injury and illness forms must begin to use these forms on January 1, 2004.

In response to public suggestions, OSHA also has made several changes to the forms package to make the recordkeeping materials clearer and easier to use:

- On Form 300, we've switched the positions of the day count columns. The days "away from work" column now comes before the days "on job transfer or restriction."
- We've clarified the formulas for calculating incidence rates.
- We've added new recording criteria for occupational hearing loss to the "Overview" section.
- On Form 300, we've made the column heading "Classify the Case" more prominent to make it clear that employers should mark only one selection among the four columns offered.

The Occupational Safety and Health Administration shares with you the goal of preventing injuries and illnesses in our nation's workplaces. Accurate injury and illness records will help us achieve that goal.

Occupational Safety and Health Administration
U.S. Department of Labor

What's Inside...

In this package, you'll find everything you need to complete OSHA's *Log* and the *Summary of Work-Related Injuries and Illnesses* for the next several years. On the following pages, you'll find:

- ***An Overview: Recording Work-Related Injuries and Illnesses*** — General instructions for filling out the forms in this package and definitions of terms you should use when you classify your cases as injuries or illnesses.
- ***How to Fill Out the Log*** — An example to guide you in filling out the *Log* properly.
- ***Log of Work-Related Injuries and Illnesses*** — Several pages of the *Log* (but you may make as many copies of the *Log* as you need.) Notice that the *Log* is separate from the *Summary*.

- ***Summary of Work-Related Injuries and Illnesses*** — Removable *Summary* pages for easy posting at the end of the year. Note that you post the *Summary* only, not the *Log*.

- ***Worksheet to Help You Fill Out the Summary*** — A worksheet for figuring the average number of employees who worked for your establishment and the total number of hours worked.
- ***OSHA's 301: Injury and Illness Incident Report*** — A copy of the OSHA 301 to provide details about the incident. You may make as many copies as you need or use an equivalent form.

Take a few minutes to review this package. If you have any questions, ***visit us online at www.osha.gov Or call your local OSHA office.*** We'll be happy to help you.

An Overview: Recording Work-Related Injuries and Illnesses

The Occupational Safety and Health (OSH) Act of 1970 requires certain employers to prepare and maintain records of work-related injuries and illnesses. Use these definitions when you classify cases on the Log. OSHA's recordkeeping regulation (see 29 CFR Part 1904) provides more information about the definitions below.

The *Log of Work-Related Injuries and Illnesses* (Form 300) is used to classify work-related injuries and illnesses and to note the extent and severity of each case. When an incident occurs, use the *Log* to record specific details about what happened and how it happened. The *Summary* — a separate form (Form 300A) — shows the totals for the year in each category. At the end of the year, post the *Summary* in a visible location so that your employees are aware of the injuries and illnesses occurring in their workplace.

Employers must keep a *Log* for each establishment or site. If you have more than one establishment, you must keep a separate *Log* and *Summary* for each physical location that is expected to be in operation for one year or longer.

Note that your employees have the right to review your injury and illness records. For more information, see 29 Code of Federal Regulations Part 1904.35, *Employee Involvement*.

Cases listed on the *Log of Work-Related Injuries and Illnesses* are not necessarily eligible for workers' compensation or other insurance benefits. Listing a case on the *Log* does not mean that the employer or worker was at fault or that an OSHA standard was violated.

When is an injury or illness considered work-related?

An injury or illness is considered work-related if an event or exposure in the work environment caused or contributed to the condition or significantly aggravated a preexisting condition. Work-relatedness is presumed for injuries and illnesses resulting from events or exposures occurring in the workplace, unless an exception specifically applies. See 29 CFR Part 1904.5(b)(2) for the exceptions. The work environment includes the establishment and other locations where one or more employees are working or are present as a condition of their employment. See 29 CFR Part 1904.5(b)(1).

Which work-related injuries and illnesses should you record?

Record those work-related injuries and illnesses that result in:

- death,
- loss of consciousness,
- days away from work,
- restricted work activity or job transfer, or
- medical treatment beyond first aid.

You must also record work-related injuries and illnesses that are significant (as defined below) or meet any of the additional criteria listed below.

You must record any significant work-related injury or illness that is diagnosed by a physician or other licensed health care professional. You must record any work-related case involving cancer, chronic irreversible disease, a fractured or cracked bone, or a punctured eardrum. See 29 CFR 1904.7.

What are the additional criteria?

You must record the following conditions when they are work-related:

- any needlestick injury or cut from a sharp object that is contaminated with another person's blood or other potentially infectious material;
- any case requiring an employee to be medically removed under the requirements of an OSHA health standard;
- tuberculosis infection as evidenced by a positive skin test or diagnosis by a physician or other licensed health care professional after exposure to a known case of active tuberculosis.
- an employee's hearing test (audiogram) reveals 1) that the employee has experienced a Standard Threshold Shift (STS) in hearing in one or both ears (averaged at 2000, 3000, and 4000 Hz) and 2) the employee's total hearing level is 25 decibels (dB) or more above audiometric zero (also averaged at 2000, 3000, and 4000 Hz) in the same ear(s) as the STS.

What is medical treatment?

Medical treatment includes managing and caring for a patient for the purpose of combating disease or disorder. The following are not considered medical treatments and are NOT recordable:

- visits to a doctor or health care professional solely for observation or counseling;

What do you need to do?

1. Within 7 calendar days after you receive information about a case, decide if the case is recordable under the OSHA recordkeeping requirements.
2. Determine whether the incident is a new case or a recurrence of an existing one.
3. Establish whether the case was work-related.
4. If the case is recordable, decide which form you will fill out as the injury and illness incident report.

   You may use *OSHA's 301: Injury and Illness Incident Report* or an equivalent form. Some state workers compensation, insurance, or other reports may be acceptable substitutes, as long as they provide the same information as the OSHA 301.

How to work with the Log

1. Identify the employee involved unless it is a privacy concern case as described below.
2. Identify when and where the case occurred.
3. Describe the case, as specifically as you can.
4. Classify the seriousness of the case by recording the **most serious outcome** associated with the case, with column G (Death) being the most serious and column J (Other recordable cases) being the least serious.
5. Identify whether the case is an injury or illness. If the case is an injury, check the injury category. If the case is an illness, check the appropriate illness category.

U.S. Department of Labor
Occupational Safety and Health Administration

- diagnostic procedures, including administering prescription medications that are used solely for diagnostic purposes; and
- any procedure that can be labeled first aid. (*See below for more information about first aid.*)

What is first aid?

If the incident required only the following types of treatment, consider it first aid. Do NOT record the case if it involves only:

- using non-prescription medications at non-prescription strength;
- administering tetanus immunizations;
- cleaning, flushing, or soaking wounds on the skin surface;
- using wound coverings, such as bandages, BandAids™, gauze pads, etc., or using SteriStrips™ or butterfly bandages.
- using hot or cold therapy;
- using any totally non-rigid means of support, such as elastic bandages, wraps, non-rigid back belts, etc.;
- using temporary immobilization devices while transporting an accident victim (splints, slings, neck collars, or back boards).
- drilling a fingernail or toenail to relieve pressure, or draining fluids from blisters;
- using eye patches;
- using simple irrigation or a cotton swab to remove foreign bodies not embedded in or adhered to the eye;
- using irrigation, tweezers, cotton swab or other simple means to remove splinters or foreign material from areas other than the eye;
- using finger guards;
- using massages;
- drinking fluids to relieve heat stress

How do you decide if the case involved restricted work?

Restricted work activity occurs when, as the result of a work-related injury or illness, an employer or health care professional keeps, or recommends keeping, an employee from doing the routine functions of his or her job or from working the full workday that the employee would have been scheduled to work before the injury or illness occurred.

How do you count the number of days of restricted work activity or the number of days away from work?

Count the number of calendar days the employee was on restricted work activity or was away from work as a result of the recordable injury or illness. Do not count the day on which the injury or illness occurred in this number. Begin counting days from the day after the incident occurs. If a single injury or illness involved both days away from work and days of restricted work activity, enter the total number of days for each. You may stop counting days of restricted work activity or days away from work once the total of either or the combination of both reaches 180 days.

Under what circumstances should you NOT enter the employee's name on the OSHA Form 300?

You must consider the following types of injuries or illnesses to be privacy concern cases:

- an injury or illness to an intimate body part or to the reproductive system,
- an injury or illness resulting from a sexual assault,
- a mental illness,
- a case of HIV infection, hepatitis, or tuberculosis,
- a needlestick injury or cut from a sharp object that is contaminated with blood or other potentially infectious material (see 29 CFR Part 1904.8 for definition), and
- other illnesses, if the employee independently and voluntarily requests that his or her name not be entered on the log.

You must not enter the employee's name on the OSHA 300 *Log* for these cases. Instead, enter "privacy case" in the space normally used for the employee's name. You must keep a separate, confidential list of the case numbers and employee names for the establishment's privacy concern cases so that you can update the cases and provide information to the government if asked to do so.

If you have a reasonable basis to believe that information describing the privacy concern case may be personally identifiable even though the employee's name has been omitted, you may use discretion in describing the injury or illness on both the OSHA 300 and 301 forms. You must enter enough information to identify the cause of the incident and the general severity of the injury or illness, but you do not need to include details of an intimate or private nature.

What if the outcome changes after you record the case?

If the outcome or extent of an injury or illness changes after you have recorded the case, simply draw a line through the original entry or, if you wish, delete or white-out the original entry. Then write the new entry where it belongs. Remember, you need to record the most serious outcome for each case.

Classifying injuries

An injury is any wound or damage to the body resulting from an event in the work environment.

Examples: Cut, puncture, laceration, abrasion, fracture, bruise, contusion, chipped tooth, amputation, insect bite, electrocution, or a thermal, chemical, electrical, or radiation burn. Sprain and strain injuries to muscles, joints, and connective tissues are classified as injuries when they result from a slip, trip, fall or other similar accidents.

Classifying illnesses

Skin diseases or disorders

Skin diseases or disorders are illnesses involving the worker's skin that are caused by work exposure to chemicals, plants, or other substances.

Examples: Contact dermatitis, eczema, or rash caused by primary irritants and sensitizers or poisonous plants; oil acne; friction blisters, chrome ulcers; inflammation of the skin.

Respiratory conditions

Respiratory conditions are illnesses associated with breathing hazardous biological agents, chemicals, dust, gases, vapors, or fumes at work.

Examples: Silicosis, asbestosis, pneumonitis, pharyngitis, rhinitis or acute congestion; farmer's lung, beryllium disease, tuberculosis, occupational asthma, reactive airways dysfunction syndrome (RADS), chronic obstructive pulmonary disease (COPD), hypersensitivity pneumonitis, toxic inhalation injury, such as metal fume fever, chronic obstructive bronchitis, and other pneumoconioses.

Poisoning

Poisoning includes disorders evidenced by abnormal concentrations of toxic substances in blood, other tissues, other bodily fluids, or the breath that are caused by the ingestion or absorption of toxic substances into the body.

Examples: Poisoning by lead, mercury, cadmium, arsenic, or other metals; poisoning by carbon monoxide, hydrogen sulfide, or other gases; poisoning by benzene, benzol, carbon tetrachloride, or other organic solvents; poisoning by insecticide sprays, such as parathion or lead arsenate; poisoning by other chemicals, such as formaldehyde.

Hearing Loss

Noise-induced hearing loss is defined for recordkeeping purposes as a change in hearing threshold relative to the baseline audiogram of an average of 10 dB or more in either ear at 2000, 3000 and 4000 hertz, and the employee's total hearing level is 25 decibels (dB) or more above audiometric zero (also averaged at 2000, 3000, and 4000 hertz) in the same ear(s).

All other illnesses

All other occupational illnesses.

Examples: Heatstroke, sunstroke, heat exhaustion, heat stress and other effects of environmental heat; freezing, frostbite, and other effects of exposure to low temperatures; decompression sickness; effects of ionizing radiation (isotopes, x-rays, radium); effects of nonionizing radiation (welding flash, ultra-violet rays, lasers); anthrax; bloodborne pathogenic diseases, such as AIDS, HIV, hepatitis B or hepatitis C; brucellosis; malignant or benign tumors; histoplasmosis; coccidioidomycosis.

When must you post the Summary?

You must post the *Summary* only — not the *Log* — by February 1 of the year following the year covered by the form and keep it posted until April 30 of that year.

How long must you keep the Log and Summary on file?

You must keep the *Log* and *Summary* for 5 years following the year to which they pertain.

Do you have to send these forms to OSHA at the end of the year?

No. You do not have to send the completed forms to OSHA unless specifically asked to do so.

How can we help you?

If you have a question about how to fill out the *Log*,

- ❑ ***visit us online at www.osha.gov*** or
- ❑ ***call your local OSHA office.***

Classifying illnesses

Skin diseases or disorders

Skin diseases or disorders are illnesses involving the worker's skin that are caused by work exposure to chemicals, plants, or other substances.

Examples: Contact dermatitis, eczema, or rash caused by primary irritants and sensitizers or poisonous plants; oil acne; friction blisters, chrome ulcers; inflammation of the skin.

Respiratory conditions

Respiratory conditions are illnesses associated with breathing hazardous biological agents, chemicals, dust, gases, vapors, or fumes at work.

Examples: Silicosis, asbestosis, pneumonitis, pharyngitis, rhinitis or acute congestion; farmer's lung, beryllium disease, tuberculosis, occupational asthma, reactive airways dysfunction syndrome (RADS), chronic obstructive pulmonary disease (COPD), hypersensitivity pneumonitis, toxic inhalation injury, such as metal fume fever, chronic obstructive bronchitis, and other pneumoconioses.

Poisoning

Poisoning includes disorders evidenced by abnormal concentrations of toxic substances in blood, other tissues, other bodily fluids, or the breath that are caused by the ingestion or absorption of toxic substances into the body.

Examples: Poisoning by lead, mercury, cadmium, arsenic, or other metals; poisoning by carbon monoxide, hydrogen sulfide, or other gases; poisoning by benzene, benzol, carbon tetrachloride, or other organic solvents; poisoning by insecticide sprays, such as parathion or lead arsenate; poisoning by other chemicals, such as formaldehyde.

Hearing Loss

Noise-induced hearing loss is defined for recordkeeping purposes as a change in hearing threshold relative to the baseline audiogram of an average of 10 dB or more in either ear at 2000, 3000 and 4000 hertz, and the employee's total hearing level is 25 decibels (dB) or more above audiometric zero (also averaged at 2000, 3000, and 4000 hertz) in the same ear(s).

All other illnesses

All other occupational illnesses.

Examples: Heatstroke, sunstroke, heat exhaustion, heat stress and other effects of environmental heat; freezing, frostbite, and other effects of exposure to low temperatures; decompression sickness; effects of ionizing radiation (isotopes, x-rays, radium); effects of nonionizing radiation (welding flash, ultra-violet rays, lasers); anthrax; bloodborne pathogenic diseases, such as AIDS, HIV, hepatitis B or hepatitis C; brucellosis; malignant or benign tumors; histoplasmosis; coccidioidomycosis.

When must you post the Summary?

You must post the *Summary* only — not the *Log* — by February 1 of the year following the year covered by the form and keep it posted until April 30 of that year.

How long must you keep the Log and Summary on file?

You must keep the *Log* and *Summary* for 5 years following the year to which they pertain.

Do you have to send these forms to OSHA at the end of the year?

No. You do not have to send the completed forms to OSHA unless specifically asked to do so.

How can we help you?

If you have a question about how to fill out the *Log*,

- ❑ **visit us online at www.osha.gov** or
- ❑ **call your local OSHA office.**

Optional

Calculating Injury and Illness Incidence Rates

What is an incidence rate?

An incidence rate is the number of recordable injuries and illnesses occurring among a given number of full-time workers (usually 100 full-time workers) over a given period of time (usually one year). To evaluate your firm's injury and illness experience over time or to compare your firm's experience with that of your industry as a whole, you need to compute your incidence rate. Because a specific number of workers and a specific period of time are involved, these rates can help you identify problems in your workplace and/or progress you may have made in preventing work-related injuries and illnesses.

How do you calculate an incidence rate?

You can compute an occupational injury and illness incidence rate for all recordable cases or for cases that involved days away from work for your firm quickly and easily. The formula requires that you follow instructions in paragraph (a) below for the total recordable cases or those in paragraph (b) for cases that involved days away from work, *and* for both rates the instructions in paragraph (c).

(a) *To find out the total number of recordable injuries and illnesses that occurred during the year,* count the number of line entries on your OSHA Form 300, or refer to the OSHA Form 300A and sum the entries for columns (G), (H), (I), and (J).

(b) *To find out the number of injuries and illnesses that involved days away from work,* count the number of line entries on your OSHA Form 300 that received a check mark in column (H), or refer to the entry for column (H) on the OSHA Form 300A.

(c) *The number of hours all employees actually worked during the year.* Refer to OSHA Form 300A and optional worksheet to calculate this number.

You can compute the incidence rate for all recordable cases of injuries and illnesses using the following formula:

Total number of injuries and illnesses x 200,000 ÷ Number of hours worked by all employees = Total recordable case rate

(The 200,000 figure in the formula represents the number of hours 100 employees working 40 hours per week, 50 weeks per year would work, and provides the standard base for calculating incidence rates.)

You can compute the incidence rate for recordable cases involving days away from work, days of restricted work activity or job transfer (DART) using the following formula:

(Number of entries in column H + Number of entries in column I) x 200,000 ÷ Number of hours worked by all employees = DART incidence rate

You can use the same formula to calculate incidence rates for other variables such as cases involving restricted work activity (column (I) on Form 300A), cases involving skin disorders (column (M-2) on Form 300A), etc. Just substitute the appropriate total for these cases, from Form 300A, into the formula in place of the total number of injuries and illnesses.

What can I compare my incidence rate to?

The Bureau of Labor Statistics (BLS) conducts a survey of occupational injuries and illnesses each year and publishes incidence rate data by various classifications (e.g., by industry, by employer size, etc.). You can obtain these published data at www.bls.gov/iif or by calling a BLS Regional Office.

Worksheet

Total number of injuries and illnesses			Number of hours worked by all employees		Total recordable case rate
[ ]	X 200,000	÷	[ ]	=	[ ]

Number of entries in Column H + Column I			Number of hours worked by all employees		DART incidence rate
[ ]	X 200,000	÷	[ ]	=	[ ]

How to Fill Out the Log

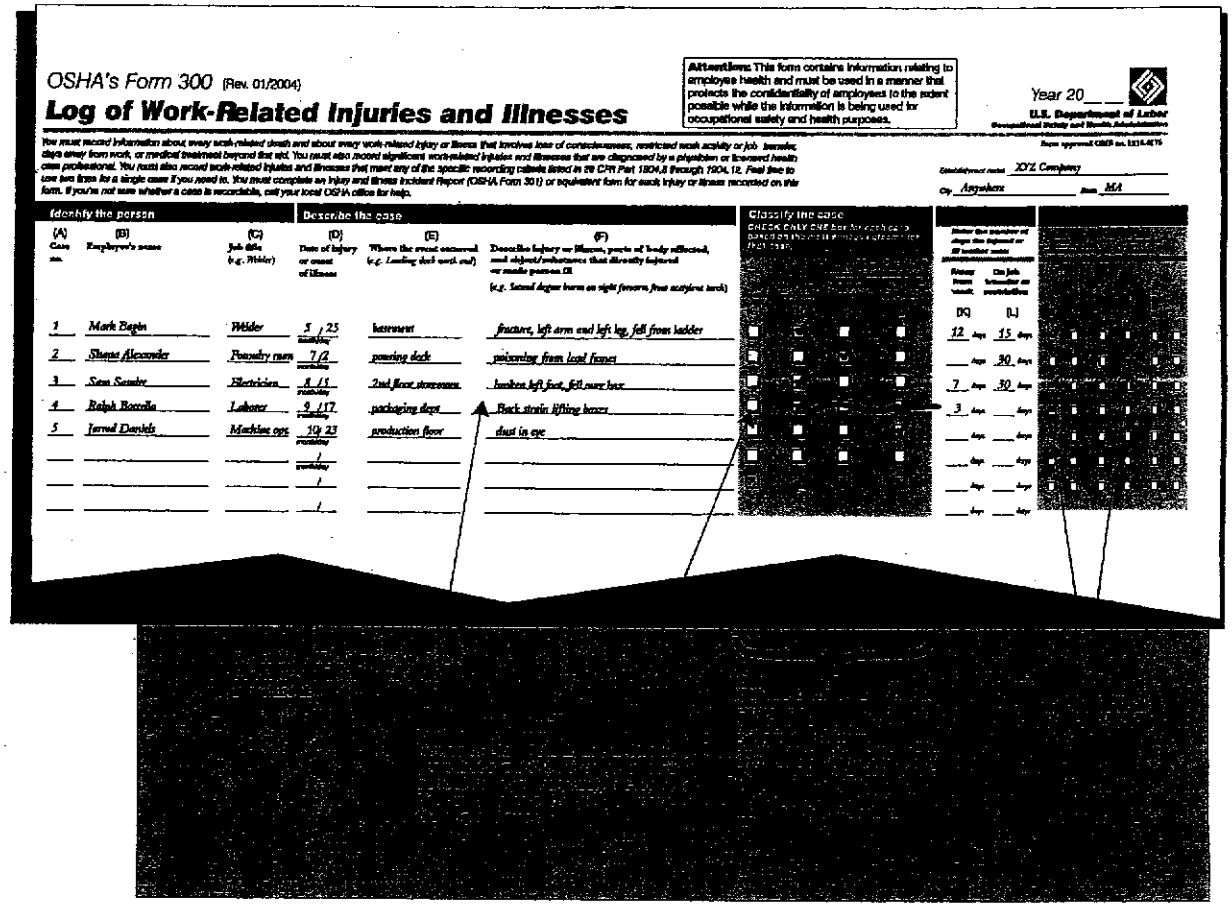
The *Log of Work-Related Injuries and Illnesses* is used to classify work-related injuries and illnesses and to note the extent and severity of each case. When an incident occurs, use the *Log* to record specific details about what happened and how it happened.

If your company has more than one establishment or site, you must keep separate records for each physical location that is expected to remain in operation for one year or longer.

We have given you several copies of the *Log* in this package. If you need more than we provided, you may photocopy and use as many as you need.

The *Summary* — a separate form — shows the work-related injury and illness totals for the year in each category. At the end of the year, count the number of incidents in each category and transfer the totals from the *Log* to the *Summary*. Then post the *Summary* in a visible location so that your employees are aware of injuries and illnesses occurring in their workplace.

You don't post the Log. You post only the Summary at the end of the year.



OSHA's Form 300 (Rev. 01/2004)

Log of Work-Related Injuries and Illnesses

Attention: This form contains information relating to employee health and must be used in a manner that protects the confidentiality of employees to the extent possible while the information is being used for occupational safety and health purposes.

Year 20___

U.S. Department of Labor

You must record information about every work-related death and about every work-related injury or illness that involves loss of consciousness, restricted work activity or job transfer, days away from work, or medical treatment beyond first aid. You must also record significant work-related injuries and illnesses that are diagnosed by a physician or licensed health care professional. You must also record work-related injuries and illness that meet any of the specific recording criteria listed in 29 CFR Part 1904.8 through 1904.12. Feel free to use two lines for a single case if you need to. You must complete an Injury and Illness Incident Report (OSHA Form 301) or equivalent form for each injury or illness recorded on this form. If you're not sure whether a case is recordable, call your local OSHA office for help.

Establishment name: XYZ Company

City: Anywhere State: MA

Identify the person			Describe the case			Classify the case				
(A) Case no.	(B) Employee's name	(C) Job title (e.g., Welder)	(D) Date of injury or onset of illness	(E) Where the event occurred (e.g., Loading dock north end)	(F) Describe injury or illness, parts of body affected, and object/substance that directly injured or made person ill (e.g., Second degree burns on right forearm from acetylene torch)				(G) Days away from work	(H) Job transfer or restriction
1	Mark Bapin	Welder	5/25	basement	fracture, left arm and left leg, fell from ladder				12 days	15 days
2	Shane Alexander	Foundry man	7/2	pouring deck	poisoning from lead fumes				days	30 days
3	Sam Sander	Electrician	8/15	2nd floor storeroom	broken left foot, fell over box				7 days	30 days
4	Ralph Borella	Laborer	9/17	packaging dept	Back strain lifting boxes				3 days	days
5	Jared Daniels	Machine ops	10/23	production floor	dust in eye				days	days
			/						days	days
			/						days	days
			/						days	days

U.S. Department of Labor
Occupational Safety and Health Administration

Have questions?

If you need help in filling out the *Log* or *Summary*, or if you have questions about whether a case is recordable, contact us. We'll be happy to help you. You can:

- Visit us online at: **www.osha.gov**
- Call your regional or state plan office. You'll find the phone number listed inside this cover.

U.S. Department of Labor
Occupational Safety and Health Administration

JOB SAFETY & HEALTH PROTECTION

The Occupational Safety and Health Act of 1970 provides job safety and health protection for workers by promoting safe and healthful working conditions throughout the Nation. Provisions of the Act include the following:

Employers

All employers must furnish to employees employment and a place of employment free from recognized hazards that are causing or are likely to cause death or serious harm to employees. Employers must comply with occupational safety and health standards issued under the Act.

Employees

Employees must comply with all occupational safety and health standards, rules, regulations and orders issued under the Act that apply to their own actions and conduct on the job.

The Occupational Safety and Health Administration (OSHA) of the U.S. Department of Labor has the primary responsibility for administering the Act. OSHA issues occupational safety and health standards, and its Compliance Safety and Health Officers conduct jobsite inspections to help ensure compliance with the Act.

Inspection

The Act requires that a representative of the employer and a representative authorized by the employees be given an opportunity to accompany the OSHA inspector for the purpose of aiding the inspection.

Where there is no authorized employee representative, the OSHA Compliance Officer must consult with a reasonable number of employees concerning safety and health conditions in the workplace.

Complaint

Employees or their representatives have the right to file a complaint with the nearest OSHA office requesting an inspection if they believe unsafe or unhealthful conditions exist in their workplace. OSHA will withhold, on request, names of employees complaining.

The Act provides that employees may not be discharged or discriminated against in any way for filing safety and health complaints or for otherwise exercising their rights under the Act.

Employees who believe they have been discriminated against may file a complaint with their nearest OSHA office within 30 days of the alleged discriminatory action.

Citation

If upon inspection OSHA believes an employer has violated the Act, a citation alleging such violations will be issued to the employer. Each citation will specify a time period within which the alleged violation must be corrected.

The OSHA citation must be prominently displayed at or near the place of alleged violation for three days, or until it is corrected whichever is later, to warn employees of dangers that may exist there.

Proposed Penalty

The Act provides for mandatory civil penalties against employers of up to $7,000 for each serious violation and for optional penalties of up to $7,000 for each nonserious violation. Penalties of up to $7,000 per day may be proposed for failure to correct violations within the proposed time period and for each day the violation continues beyond the prescribed abatement date. Also, any employer who willfully or repeatedly violates the Act may be assessed penalties of up to $70,000 for each such violation. A minimum penalty of $5,000 may be imposed for each willful violation. A violation of posting requirements can bring a penalty of up to $7,000.

There are also provisions for criminal penalties. Any willful violation resulting in the death of any employee, upon conviction, is punishable by a fine of up to $250,000 (or $500,000 if the employer is a corporation), or by imprisonment for up to six months, or both. A second conviction of an employer doubles the possible term of imprisonment. Falsifying records, reports, or applications is punishable by a fine of $10,000 or up to six months in jail or both.

Voluntary Activity

While providing penalties for violations, the Act also encourages efforts by labor and management, before an OSHA inspection, to reduce workplace hazards voluntarily and to develop and improve safety and health programs in all workplaces and industries. OSHA's Voluntary Protection Programs recognize outstanding efforts of this nature.

OSHA has published Safety and Health Program Management Guidelines to assist employers in establishing or perfecting programs to prevent or control employee exposure to workplace hazards. There are many public and private organizations that can provide information and assistance in this effort, if requested. Also, your local OSHA office can provide considerable help and advice on solving safety and health problems or can refer you to other sources for help such as training.

Consultation

Free assistance in identifying and correcting hazards and in improving safety and health management is available to employers, without citation or penalty, through OSHA-supported programs in each State. These programs are usually administered by the State Labor or Health department or a State university.

Posting Instructions

Employers in States operating OSHA approved State Plans should obtain and post the State's equivalent poster.

Under provisions of Title 29, Code of Federal Regulations, Part 1903.2(a)(1) employers must post this notice (or facsimile) in a conspicuous place where notices to employees are customarily posted.

More Information

Additional information and copies of the Act, specific OSHA safety and health standards and other applicable regulations may be obtained from your employer or from the nearest OSHA Regional Office in the following locations:

Atlanta, GA	(404) 347-3573
Boston, MA	(617) 565-7164
Chicago, IL	(312) 353-2220
Dallas, TX	(214) 767-4731
Denver, CO	(303) 844-3061
Kansas City, MO	(816) 426-5861
New York, NY	(212) 337-2378
Philadelphia, PA	(215) 596-1201
San Francisco, CA	(415) 744-6670
Seattle, WA	(206) 553-5930

Lynn Martin

Lynn Martin, Secretary of Labor

U.S. Department of Labor

Occupational Safety and Health Administration

Washington, DC
1992 (Reprinted)
OSHA 2203

To report suspected life hazards, imminent danger safety and health hazards in the workplace, or other job safety and health emergencies such as toxic waste in the

This information will be made available to sensory impaired individuals upon request.