SHMINA
BUILDING CONTRACTORS

Table of Contents

SHMINA

BUILDING CONTRACTORS

Section A

Qualifications, Experience and Accountability

March 22, 2022

Qualifications, Experience and Accountability

1.Qualifications and experience of the bidder and of key persons, management, and supervisory personnel to be assigned by the bidder.

See attached qualifications and experience of A.Z. SHMINA, INC.

2. References from individuals or entities the bidder has worked for within the last five (5) years including information regarding records of performance and job site cooperation.

See below references:

1. Brian Zybura, UM Project Manager – (734) 323-5969
2. Tom Walterhouse, UM Senior Project Manager – (734) 662-1496
3. Chris Englert, City of Ann Arbor Wastewater Treatment Services Engineer– (734) 794-6450 Ext. 43823
4. Jerry Schulte – UM AEC Associate Director of Construction – (734) 764-9289
5. Paul Wesenberg – A3C Architect – (734) 663-1910 Ext. 108

3. Evidence of any quality assurance program used by the bidder and the results of any such program on the bidder's previous projects.

See attached.

4. A statement from the bidder as to any major subcontractors it expects to engage including the name, work, and amount.

To be determined.

SHMINA

BUILDING CONTRACTORS

Section B

Workplace Safety

March 22, 2022

Workplace Safety

1. Documentation of an on-going, Michigan OSHA-approved safety-training program for employees to be used on the proposed job site.

See attached Summary of our onsite safety plan.

2. Evidence of the bidder's worker's compensation Experience Modification Rating ("EMR"). Preference within this criterion will be given to an EMR of 1.0 or less based on a three-year average.

See attached certification. Our current EMR is 0.72.

3. Evidence that all craft labor that will be employed by the bidder for the project has, or will have prior to project commencement, completed at least the OSHA 10-hour training course for safety established by the U.S. Department of Labor, Occupational Safety & Health Administration.

All our workers have OSHA 10hr or OSHA 30hr.

4. The safety record of bidder and major subcontractors, including OSHA, MIOSHA, or other safety violations.

See attached.

SHMINA

BUILDING CONTRACTORS

Section C

Workforce Development

March 22, 2022

Workforce Development

1. The ratio of masters or journeypersons to apprentices proposed to be used on the construction project job site, if apprentices are to be used on the project.

1 to 4

2. Documentation as to bidder's pay rates, health insurance, pension or other retirement benefits, paid leave, or other fringe benefits to its employees.

Signatory to Labor and Carpenters Unions. We use prevailing wages.

3. Documentation that the bidder participates in a Registered Apprenticeship Program that is registered with the United States Department of Labor Office of Apprenticeship or by a State Apprenticeship Agency recognized by the USDOL Office of Apprenticeship.

Signatory to Labor and Carpenters Unions.

SHMINA

BUILDING CONTRACTORS

Section D

Social Equity and Sustainability

March 22, 2022

Social Equity and Sustainability

1. A statement from the bidder as to what percentage of its workforce resides in the City of Ann Arbor and in Washtenaw County, Michigan. The City will consider in evaluating which bids best serve its interests, the extent to which responsible and qualified bidders are able to achieve this goal.

35% of our work force resides in Ann Arbor and in Washtenaw County.

2. Evidence of Equal Employment Opportunity Programs for minorities, women, veterans, returning citizens, and small businesses.

Our workforce consists of a variety of minorities, including women, veterans and we consistently work with and support other small businesses in the area.

3. Evidence that the bidder is an equal opportunity employer and does not discriminate on the basis of race, sex, pregnancy, age, religion, national origin, marital status, sexual orientation, gender identity or expression, height, weight, or disability.

Our workforce consists of a variety of minorities, including women, veterans and we consistently work with and support other small businesses in the area. We do not discriminate against any basis of race, sex, medical condition, age, religion, nationality, sexual orientation, identity or marital status.

4. The bidder's proposed use of sustainable products, technologies, or practices for the project, which reduce the impact on human health and the environment, including raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, and waste management.

We are planning on building per the plans and specs, which we believe to have sustainable products, technologies, and practices in the design.

5. The bidder's environmental record, including findings of violations and penalties imposed by government agencies.

We have no record of violations, penalties or issues imposed by government agencies, state or federal, regarding environmental issues.

SHMINA

BUILDING CONTRACTORS

Section E

Schedule of Pricing/Cost

March 22, 2022

Schedule of Pricing/Cost

Company: A. Z. SHMINA, INC.

Base Bid – *(use for lump sum bid)*

For the entire work outlined in these documents for **Fire Station 1 Renovation**, complete as specified, using equipment and materials only of the type and manufacturers where specifically named.

See hard copy proposal for cost and schedule estimate.
_____ ($_____)

Work is proposed to be completed in _____ calendar days starting at the Notice to Proceed, barring any lead time issues or supply chain issues that may be presented after bid time.

Clarifications:

Fire Alarm Scope is to be verified before contract award.

Addendums Noted:

Addendum #1

Addendum #2

SHMINA

BUILDING CONTRACTORS

Section F

Authorized Negotiator

March 22, 2022

Authorized Negotiator/Negotiable Elements (Alternates)

Authorized Negotiator: Andrew A. Shmina

as@azshmina.com

(810) 227-5100

Alternates:

March 22, 2022

SHMINA

BUILDING CONTRACTORS

Section G

Attachments

ATTACHMENT B
GENERAL DECLARATIONS

City of Ann Arbor
Guy C. Larcom Municipal Building
Ann Arbor, Michigan 48107

Ladies and Gentlemen:

The undersigned, as Bidder, declares that this Bid is made in good faith, without fraud or collusion with any person or persons bidding on the same Contract; that this Bidder has carefully read and examined the bid documents, including City Nondiscrimination requirements and Declaration of Compliance Form, Living Wage requirements and Declaration of Compliance Form, Prevailing Wage requirements and Declaration of Compliance Form, Vendor Conflict of Interest Form, Notice of Pre-Bid Conference, General Information, Bid, Bid Forms, Contract, Bond Forms, General Conditions, Standard Specifications, Detailed Specifications, all Addenda, and the Plans (if applicable) and understands them. The Bidder declares that it conducted a full investigation at the site and of the work proposed and is fully informed as to the nature of the work and the conditions relating to the work's performance. The Bidder also declares that it has extensive experience in successfully completing projects similar to this one.

The Bidder acknowledges that it has not received or relied upon any representations or warrants of any nature whatsoever from the City of Ann Arbor, its agents or employees, and that this Bid is based solely upon the Bidder's own independent business judgment.

The undersigned proposes to perform all work shown on the plans or described in the bid documents, including any addenda issued, and to furnish all necessary machinery, tools, apparatus, and other means of construction to do all the work, furnish all the materials, and complete the work in strict accordance with all terms of the Contract of which this Bid is one part.

In accordance with these bid documents, and Addenda numbered 1 & 2, the undersigned, as Bidder, proposes to perform at the sites in and/or around Ann Arbor, Michigan, all the work included herein for the amounts set forth in the Bid Forms.

The Bidder declares that it has become fully familiar with the liquidated damage clauses for completion times and for compliance with City Code Chapter 112, understands and agrees that the liquidated damages are for the non-quantifiable aspects of non-compliance and do not cover actual damages that may be shown and agrees that if awarded the Contract, all liquidated damage clauses form part of the Contract.

The Bidder declares that it has become fully familiar with the provisions of Chapter 14, Section 1:320 (Prevailing wages) and Chapter 23 (Living Wage) of the Code of the City of Ann Arbor and that it understands and agrees to comply, to the extent applicable to employees providing services to the City under this Contract, with the wage and reporting requirements stated in the City Code provisions cited. Bidder certifies that the statements contained in the City Prevailing Wage and Living Wage Declaration of Compliance Forms are true and correct. Bidder further agrees that the cited provisions of Chapter 14 and Chapter 23 form a part of this Contract.

The Bidder declares that it has become familiar with the City Conflict of Interest Disclosure Form and certifies that the statement contained therein is true and correct.

The Bidder encloses a certified check or Bid Bond in the amount of 5% of the total of the Bid Price. The Bidder agrees both to contract for the work and to furnish the necessary Bonds and insurance documentation within 10 days after being notified of the acceptance of the Bid.

If this Bid is accepted by the City and the Bidder fails to contract and furnish the required Bonds and insurance documentation within 10 days after being notified of the acceptance of this Bid, then the Bidder shall be considered to have abandoned the Contract and the certified check or Bid Bond accompanying this Bid shall become due and payable to the City.

If the Bidder enters into the Contract in accordance with this Bid, or if this Bid is rejected, then the accompanying check or Bid Bond shall be returned to the Bidder.

In submitting this Bid, it is understood that the right is reserved by the City to accept any Bid, to reject any or all Bids, to waive irregularities and/or informalities in any Bid, and to make the award in any manner the City believes to be in its best interest.

SIGNED THIS 21st DAY OF March , 202_.

A.Z. SHMINA, INC.
Bidder's Name

[signature]
Authorized Signature of Bidder

11711 Grand River Rd
Brighton MI, 48116
Official Address

Andrew A. Shmina
(Print Name of Signer Above)

810-227-5100
Telephone Number

as@azshmina.com
Email Address for Award Notice

ATTACHMENT C
LEGAL STATUS OF BIDDER

(The bidder shall fill out the appropriate form and strike out the other three.)

Bidder declares that it is:

* A corporation organized and doing business under the laws of the State of Michigan, for whom Andrew A. Shmina, bearing the office title of President, whose signature is affixed to this Bid, is authorized to execute contracts.

NOTE: If not incorporated in Michigan, please attach the corporation's Certificate of Authority

• A limited liability company doing business under the laws of the State of _____, whom _____ bearing the title of _____ whose signature is affixed to this proposal, is authorized to execute contract on behalf of the LLC.

* A partnership, organized under the laws of the state of _____ and filed in the county of _____, whose members are (list all members and the street and mailing address of each) (attach separate sheet if necessary):

_____

_____

_____

_____

_____

* An individual, whose signature with address, is affixed to this Bid: __ _____ (initial here)

Authorized Official

_____ **Date** 3/22, 2022

(Print) Name Andrew A. Shmina Title President

Company: A.Z. SHMINA, INC.

Address: 11711 Grand River Rd, Brighton MI 48116

Contact Phone (810)227-5100 Fax ( ) _____

Email as@azshmina.com

ATTACHMENT D
PREVAILING WAGE DECLARATION OF COMPLIANCE

The "wage and employment requirements" of Section 1:320 of Chapter 14 of Title I of the Ann Arbor City Code mandates that the city not enter any contract, understanding or other arrangement for a public improvement for or on behalf of the city unless the contract provides that all craftsmen, mechanics and laborers employed directly on the site in connection with said improvements, including said employees of subcontractors, shall receive the prevailing wage for the corresponding classes of craftsmen, mechanics and laborers, as determined by statistics for the Ann Arbor area compiled by the United States Department of Labor. Where the contract and the Ann Arbor City Code are silent as to definitions of terms required in determining contract compliance with regard to prevailing wages, the definitions provided in the Davis-Bacon Act as amended (40 U.S.C. 278-a to 276-a-7) for the terms shall be used. Further, to the extent that any employees of the contractor providing services under this contract are not part of the class of craftsmen, mechanics and laborers who receive a prevailing wage in conformance with section 1:320 of Chapter 14 of Title I of the Code of the City of Ann Arbor, employees shall be paid a prescribed minimum level of compensation (i.e. Living Wage) for the time those employees perform work on the contract in conformance with section 1:815 of Chapter 23 of Title I of the Code of the City of Ann Arbor.

At the request of the city, any contractor or subcontractor shall provide satisfactory proof of compliance with this provision.

The Contractor agrees:

(a) To pay each of its employees whose wage level is required to comply with federal, state or local prevailing wage law, for work covered or funded by this contract with the City,

(b) To require each subcontractor performing work covered or funded by this contract with the City to pay each of its employees the applicable prescribed wage level under the conditions stated in subsection (a) or (b) above.

(c) To provide to the City payroll records or other documentation within ten (10) business days from the receipt of a request by the City.

(d) To permit access to work sites to City representatives for the purposes of monitoring compliance, and investigating complaints or non-compliance.

The undersigned states that he/she has the requisite authority to act on behalf of his/her employer in these matters and has offered to provide the services in accordance with the terms of the wage and employment provisions of the Chapter 14 of the Ann Arbor City Code. The undersigned certifies that he/she has read and is familiar with the terms of Section 1:320 of Chapter 14 of the Ann Arbor City Code and by executing this Declaration of Compliance obligates his/her employer and any subcontractor employed by it to perform work on the contract to the wage and employment requirements stated herein. The undersigned further acknowledges and agrees that if it is found to be in violation of the wage and employment requirements of Section 1:320 of the Chapter 14 of the Ann Arbor City Code it shall has be deemed a material breach of the terms of the contract and grounds for termination of same by the City.

A.Z. SHMINA, INC.
Company Name

Signature of Authorized Representative — Date: 3/22/22

Andrew A. Shmina, President
Print Name and Title

11711 Grand River Rd, Brighton MI 48116
Address, City, State, Zip

(810) 227-5100 as@azshmina.com
Phone/Email address

Questions about this form? Contact Procurement Office City of Ann Arbor Phone: 734/794-6500

ATTACHMENT E

LIVING WAGE ORDINANCE DECLARATION OF COMPLIANCE

The Ann Arbor Living Wage Ordinance (Section 1:811-1:821 of Chapter 23 of Title I of the Code) requires that an employer who is (a) a contractor providing services to or for the City for a value greater than $10,000 for any twelve-month contract term, or (b) a recipient of federal, state, or local grant funding administered by the City for a value greater than $10,000, or (c) a recipient of financial assistance awarded by the City for a value greater than $10,000, shall pay its employees a prescribed minimum level of compensation (i.e., Living Wage) for the time those employees perform work on the contract or in connection with the grant or financial assistance. The Living Wage must be paid to these employees for the length of the contract/program.

Companies employing fewer than 5 persons and non-profits employing fewer than 10 persons are exempt from compliance with the Living Wage Ordinance. If this exemption applies to your company/non-profit agency please check here [___] No. of employees__

The Contractor or Grantee agrees:

(a) To pay each of its employees whose wage level is not required to comply with federal, state or local prevailing wage law, for work covered or funded by a contract with or grant from the City, no less than the Living Wage. The current Living Wage is defined as $14.05/hour for those employers that provide employee health care (as defined in the Ordinance at Section 1:815 Sec. 1 (a)), or no less than $15.66/hour for those employers that do not provide health care. The Contractor or Grantor understands that the Living Wage is adjusted and established annually on April 30 in accordance with the Ordinance and covered employers shall be required to pay the adjusted amount thereafter to be in compliance with Section 1:815(3).

Check the applicable box below which applies to your workforce

[___] Employees who are assigned to any covered City contract/grant will be paid at or above the applicable living wage without health benefits

[___] Employees who are assigned to any covered City contract/grant will be paid at or above the applicable living wage with health benefits

(b) To post a notice approved by the City regarding the applicability of the Living Wage Ordinance in every work place or other location in which employees or other persons contracting for employment are working.

(c) To provide to the City payroll records or other documentation within ten (10) business days from the receipt of a request by the City.

(d) To permit access to work sites to City representatives for the purposes of monitoring compliance, and investigating complaints or non-compliance.

(e) To take no action that would reduce the compensation, wages, fringe benefits, or leave available to any employee covered by the Living Wage Ordinance or any person contracted for employment and covered by the Living Wage Ordinance in order to pay the living wage required by the Living Wage Ordinance.

The undersigned states that he/she has the requisite authority to act on behalf of his/her employer in these matters and has offered to provide the services or agrees to accept financial assistance in accordance with the terms of the Living Wage Ordinance. The undersigned certifies that he/she has read and is familiar with the terms of the Living Wage Ordinance, obligates the Employer/Grantee to those terms and acknowledges that if his/her employer is found to be in violation of Ordinance it may be subject to civil penalties and termination of the awarded contract or grant of financial assistance.

A.Z. SHMINA, INC.
Company Name

11711 Grand River Rd
Street Address

Signature of Authorized Representative

3/22/22
Date

Brighton MI 48116
City, State, Zip

Andrew A. Shmina
Print Name and Title

(810) 227-5100
Phone/Email address

ATTACHEMENT G

Vendor Conflict of Interest Disclosure Form

All vendors interested in conducting business with the City of Ann Arbor must complete and return the Vendor Conflict of Interest Disclosure Form in order to be eligible to be awarded a contract. Please note that all vendors are subject to comply with the City of Ann Arbor's conflict of interest policies as stated within the certification section below.

If a vendor has a relationship with a City of Ann Arbor official or employee, an immediate family member of a City of Ann Arbor official or employee, the vendor shall disclose the information required below.

1. No City official or employee or City employee's immediate family member has an ownership interest in vendor's company or is deriving personal financial gain from this contract.
2. No retired or separated City official or employee who has been retired or separated from the City for less than one (1) year has an ownership interest in vendor's Company.
3. No City employee is contemporaneously employed or prospectively to be employed with the vendor.
4. Vendor hereby declares it has not and will not provide gifts or hospitality of any dollar value or any other gratuities to any City employee or elected official to obtain or maintain a contract.
5. Please note any exceptions below:

Conflict of Interest Disclosure*	
Name of City of Ann Arbor employees, elected officials or immediate family members with whom there may be a potential conflict of interest.	( ) Relationship to employee ( ) Interest in vendor's company ( ) Other (please describe in box below)
N/A	

*Disclosing a potential conflict of interest does not disqualify vendors. In the event vendors do not disclose potential conflicts of interest and they are detected by the City, vendor will be exempt from doing business with the City.

I certify that this Conflict of Interest Disclosure has been examined by me and that its contents are true and correct to my knowledge and belief and I have the authority to so certify on behalf of the Vendor by my signature below:		
A.Z. SHMINA, INC.		810-227-5100
Vendor Name		**Vendor Phone Number**
	3/21/2022	Andrew A. Shmina
Signature of Vendor Authorized Representative	**Date**	**Printed Name of Vendor Authorized Representative**

Questions about this form? Contact Procurement Office City of Ann Arbor Phone: 734/794-6500, procurement@a2gov.org

ATTACHMENT H

DECLARATION OF COMPLIANCE

Non-Discrimination Ordinance

The "non discrimination by city contractors" provision of the City of Ann Arbor Non-Discrimination Ordinance (Ann Arbor City Code Chapter 112, Section 9:158) requires all contractors proposing to do business with the City to treat employees in a manner which provides equal employment opportunity and does not discriminate against any of their employees, any City employee working with them, or any applicant for employment on the basis of actual or perceived age, arrest record, color, disability, educational association, familial status, family responsibilities, gender expression, gender identity, genetic information, height, HIV status, marital status, national origin, political beliefs, race, religion, sex, sexual orientation, source of income, veteran status, victim of domestic violence or stalking, or weight. It also requires that the contractors include a similar provision in all subcontracts that they execute for City work or programs.

In addition the City Non-Discrimination Ordinance requires that all contractors proposing to do business with the City of Ann Arbor must satisfy the contract compliance administrative policy adopted by the City Administrator. A copy of that policy may be obtained from the Purchasing Manager

The Contractor agrees:

(a) To comply with the terms of the City of Ann Arbor's Non-Discrimination Ordinance and contract compliance administrative policy, including but not limited to an acceptable affirmative action program if applicable.

(b) To post the City of Ann Arbor's Non-Discrimination Ordinance Notice in every work place or other location in which employees or other persons are contracted to provide services under a contract with the City.

(c) To provide documentation within the specified time frame in connection with any workforce verification, compliance review or complaint investigation.

(d) To permit access to employees and work sites to City representatives for the purposes of monitoring compliance, or investigating complaints of non-compliance.

The undersigned states that he/she has the requisite authority to act on behalf of his/her employer in these matters and has offered to provide the services in accordance with the terms of the Ann Arbor Non-Discrimination Ordinance. The undersigned certifies that he/she has read and is familiar with the terms of the Non-Discrimination Ordinance, obligates the Contractor to those terms and acknowledges that if his/her employer is found to be in violation of Ordinance it may be subject to civil penalties and termination of the awarded contract.

A.Z. SHMINA, INC.
Company Name

[signature] 3/22/22
Signature of Authorized Representative Date

Andrew A. Shmina President
Print Name and Title

11711 Grand River Rd, Brighton MI 48116
Address, City, State, Zip

(810) 227-5100
Phone/Email Address

Questions about the Notice or the City Administrative Policy, Please contact:
Procurement Office of the City of Ann Arbor
(734) 794-6500

BID BOND **Travelers Casualty and Surety Company of America**
Hartford, CT 06183

KNOWN ALL BY THESE PRESENTS, That we, **A. Z. Shmina, Inc., 11711 Grand River Road, Brighton, MI 48116**, as Principal, and **Travelers Casualty and Surety Company of America**, as Surety, are held and firmly bound unto **City of Ann Arbor, E. Huron St., Ann Arbor, MI 48104**, as Obligee, in the sum of **Five Percent of Accompanying Bid ----------** Dollars (**5%**) for the payment of which we bind ourselves, and our successors and assigns, jointly and severally, as provided herein.

WHEREAS, Principal has submitted or is about to submit a bid to the Obligee on a contract for **Fire Station 1 Renovation - Interior Renovations and Replacing Fire Alarm** ("Project").

NOW, THEREFORE, the condition of this bond is that if Obligee accepts Principal's bid, and Principal enters into a contract with Obligee in conformance with the terms of the bid and provides such bond or bonds as may be specified in the bidding or contract documents, then this obligation shall be void; otherwise Principal and Surety will pay to Obligee the difference between the amount of Principal's bid and the amount for which Obligee shall in good faith contract with another person or entity to perform the work covered by Principal's bid, but in no event shall Surety's and Principal's liability exceed the penal sum of this bond.

Signed this **22nd** day of **March**, **2022**.

A. Z. Shmina, Inc.

(Principal)

By: _____

Travelers Casualty and Surety Company of America

By: _____

Susan L Small, Attorney-in-Fact

TRAVELERS

Travelers Casualty and Surety Company of America
Travelers Casualty and Surety Company
St. Paul Fire and Marine Insurance Company

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint **Susan L. Small** of **FARMINGTON HILLS**, **Michigan**, their true and lawful Attorney(s)-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this **21st** day of **April, 2021.**

State of Connecticut

City of Hartford ss.

By: _____
Robert L. Raney, Senior Vice President

On this the **21st** day of **April, 2021**, before me personally appeared **Robert L. Raney**, who acknowledged himself to be the Senior Vice President of each of the Companies, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of said Companies by himself as a duly authorized officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission expires the **30th** day of **June, 2026**

_____
Anna P. Nowik, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of each of the Companies, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, **Kevin E. Hughes**, the undersigned, Assistant Secretary of each of the Companies, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this **22nd** day of **March**, **2022**.

_____
Kevin E. Hughes, Assistant Secretary

To verify the authenticity of this Power of Attorney, please call us at 1-800-421-3880.
Please refer to the above-named Attorney(s)-in-Fact and the details of the bond to which this Power of Attorney is attached.

SHMINA

Resume

11711 GRAND RIVER | BRIGHTON, MICHIGAN 48116 | P: 810.227.5100 | F: 810.227.5131 | AZSHMINA.COM

Andrew A. Shmina
President
as@azshmina.com

Background: Andy literally grew up in the construction industry. He started as a laborer at age 14 and worked his way through the ranks: field engineer, superintendent, estimator and project manager. In 1993, he became president of the company and remains actively involved in the success of each project.

Education: BSE, Civil Engineering, University of Michigan, 1986

Credentials/Associations:

- Chairman Emeritus – Associated General Contractors of Michigan
- Past President – Washtenaw Contractor Association
- Chair – Saint Louis Center Community Advisory Council
- Board Member – Holy Cross Services
- Board Member – Catholic Foundation of Michigan
- Past President – Legatus Ann Arbor

Past Board Associations:

Livingston County Catholic Charities, Father Gabriel Richard High School, St. Mary Pinckney, Winans Lake Association, AGC Detroit, Washtenaw Contractors Association

Key Projects: Andy has been involved in every project constructed by SHMINA since 1986, among them:

- Multiple Senior Living Communities for Silver Maples, United Methodist Retirement Communities, Glacier Hills and the Saint Louis Center Guanella Village
- More than 100 new construction and renovation projects for the University of Michigan ranging in size from $100,000 to $15 million
- Major projects for school districts, including Detroit, Toledo, Ann Arbor, Grosse Ile, Bedford, Dearborn Heights, and Lutheran Schools
- Major projects for the following higher educational institutions: University of Michigan, Michigan State University, Washtenaw Community College, University of Toledo
- Hospital construction and renovations and medical office facilities throughout Southeast Michigan
- Major waste water facilities for more than 30 municipalities
- Industrial facilities for GM, Ford, Chrysler, Pfizer and others
- Many church sanctuary, classroom and meeting facilities



SHMINA 100 YEAR ANNIVERSARY EST 1916

SHMINA

Resume

11711 GRAND RIVER | BRIGHTON, MICHIGAN 48116 | P: 810.227.5100 | F: 810.227.5131 | AZSHMINA.COM

Jason Hammond
V.P. - Operations
jh@azshmina.com

Background: Jason has worked in the construction industry since 1996. He is experienced in hospital, institutional, commercial and industrial construction.

Education:

BS, Construction Management, Lawrence Technical University, 2009
AD, Construction Engineering Technology, Lawrence Technical University, 2005

Credentials/Associations:

- Adjunct Professor Lawrence Tech, Presently
- OSHA 30 Hour Training
- First Aid/CPR Certified
- Confined Space Entry Certified
- Lead/Asbestos Awareness Training Certification
- ICRA Fundamentals
- Future Construction Leaders of Michigan/AGC
- Member – Lawrence Tech Construction Management Advisory Committee
- Member – Detroit River Regatta Association

Key Projects:

- Multiple Senior Living Spaces for Silver Maples, United Methodist Retirement Communities and the Saint Louis Center
- Multiple new construction and renovation projects for the University of Michigan Medical Center including OR Renovations, Linear Accelerators and various radiology projects
- Multiple new construction and renovation projects at these UM Campus – Athletics, Business, Central, Medical, North Campus Research
- Multiple projects in Toledo for Toledo Public Schools and the University of Toledo
- Multiple School projects for Ann Arbor Public Schools
- Multiple municipal water treatment facilities
- Multiple commercial facilities for these clients: A.M.E. Church of Ypsilanti, Abed Orthodontics, Barnes & Sweeney, Bridge Terminal Transport, Cateraid, Courtyard Manor Assisted Living Home, Delta Research, Kennedy Industries, Mitsubishi Automotive, Uniboring and Yale Material Handling



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SHMINA

Resume

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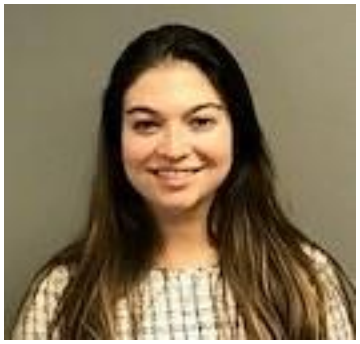

Michaela Zaenglein

Project Engineer
mz@azshmina.com

Background:

Michaela has been with A.Z. SHMINA for over three years. She interfaces with owners, architects and subcontractors while coordinating submittals, RFIs and all project documentation. As a degreed construction manager, she loves commercial construction and technology. She is a master user of PROCORE our PM System.

She also manages Pantera, our online plan room and bid solicitation solution, companywide.

Education:

- BS, Lawrence Technical University, Construction Management

Certifications:

- OSHA 30 Hour certification
- First Aid/CPR
- ICRA Fundamentals

Key Projects:

University of Michigan

- Home Med Pharmacy –$2M
- Detroit Observatory – $8M
- Multiple Michigan Medicine projects - $15M
- UMH South Unit 2 Central Sterile Renovation - $3M
- UMH South Unit 4 Renovation - $3.5M

St. Louis Center Village – Multiple Projects and Bid Packs - $12M

United Methodist Retirement Communities – PACE projects – $6M

Silver Maples Retirement Community $6M

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BUILDING CONTRACTORS

Current Projects

PROJECT	OWNER	ARCH	DELIVERY	CONT AMOUNT	SCOPE OF WORK	SCHEDULE
Ann Arbor Lift Station Replacement	City of Ann Arbor	HRC	GC	$ 1,400,000	Site Work and Existing Pump Station Replacements / Generator	2020
The Villas	Silver Maples of Chelsea	A3C	CM	$ 5,500,000	Site development and construction of 16 New Villas	2021
Metal Plating Treatment Facility	Ajax Metal Plating	CDG/MCI	CM	$ 1,500,000	New Industrial pretreatment faculty	2021
New Meeting Space	Great Lakes Buddhist	Lindhout	CM	$ 650,000	Renovations to their facility	2020
University of Michigan Life Sciences	University of Michigan	Smith Group	GC	$ 1,000,000	Interior Renovations to Level 1 Cryo EM Imaging Suite	2020
Northland Banquet Hall	Three Circle Group	Hobbs + Black	D/B	$ 1,500,000	Convert existing Credit Union into New Banquet Hall / Bar / Lounge	2020
UM Hospital MRI 3 Replacement	UM Hospitals	Project & Design Management	GC	$ 990,000	Hospital Renovation for new MRI	2020
Thome PACE Addition	United Methodist Retirement Communities	ADG	D/B	$ 1,200,000	New Day Room Addition and Existing Facility Improvements	2020
The Village at Saint Louis Center	Saint Louis Center	Midwestern Consultants	CM	$ 10,000,000	Site Development for New Intentional community for persons with IDD	2020
Huron Valley Pace	United Methodist Retirement Communities	ADG	CM	$ 6,000,000	Construction of 24,000 sf Pace Facility	2019
Detroit Observatory New Classroom Building	University of Michigan	HED	GC	$ 8,000,000	Construction of 10,000 sf, beautifully designed classroom building	2020
Home Med Pharmacy	UM Hospitals	IDS	CM	$ 3,500,000	Major pharmacy renovation	2020
Glacier Hills Renovation	Trinity Health	GMB	CM	$ 350,000	Third Floor Renovation & Zen Rooftop Garden	2019

SHMINA

BUILDING CONTRACTORS

Recent Projects

PROJECT	OWNER	ARCH	DELIVERY	CONT AMOUNT	SCOPE OF WORK	SCHEDULE
Convert TACU to two Patient Rooms	UM Hospitals	IDS	GC	$ 600,000	Hospital Renovation	2018
Emergency Room Psych Area Renovations	UM Hospitals	Stucky Vitale	GC	$ 300,000	Hospital Renovation	2018
Childcare Renovation	UM Hospitals	A3C	CM	$ 500,000	Off shift Renovation	2018
Auxiliary Services	University of Michigan	Smith Group	GC	$ 2,000,000	Thermal Hydraulics Lab	2018
Mott Central Sterile	UM Hospitals	Niagara Murano	GC	$ 1,400,000	Hospital Renovation	2018
SOC FY 18	UM Hospitals	IDS	CM	$ 524,000	JHACHO SOC Modifications	2018
Cancer Center Phlebotomy	UM Hospitals	A3C	GC	$ 650,000	Hospital Renovation	2018
South Unit 2 CSPS	UM Hospitals	A3C	GC	$ 3,000,000	Hospital Renovation of Central Sterile Facilities	2017
Clinical Simulation	UM Medical School	UM AEC	GC	$ 3,000,000	Med School Renovation for new Clinical Simulation space	2017
OR Expansion	UM Hospitals	HKS	GC	$ 12,000,000	Multiphase major hospital Renovation	2017
Chemistry Building	University of Michigan	UM AEC	CM	$ 800,000	Renovation of existing lab space for new NMR	2017
Simpson Circle Parking Structure	University of Michigan	UM AEC	GC	$ 600,000	Parking Structure Renovation	2017
Science Wing Renovation	Brother Rice High School	IDS	CM	$ 800,000	Summer Renovation at BRHS for new Science labs	2017
Gymnasium/Multiuse Facility	Father Gabriel Richard Catholic High School	Hobbs + Black	CM	$ 3,500,000	Gymnasium/Cafeteria, Athletic facility expansion	2017
Gymnasium/Multiuse Facility	Our Lady of Good Counsel	Neumann /Smith	GC	$ 5,500,000	New Gymnasium, Multipurpose facility	2017
Baggage Handling Facility	Detroit Metro Airport	Daifuku Webb	GC	$ 1,000,000	Building Trades for baggage handling	2017
UMH South Unit 4	University of Michigan Hospitals	Tower Pinkster	GC	$ 3,000,000	Renovate 50,000 hospital space	2017
CT-2 Replacement	University of Michigan Hospitals	A3C	GC	$ 600,000	Hospital Renovation for new CT	2017
SOC FY13 Year 3a	University of Michigan Hospitals	UM AEC	CM	$ 600,000	SOC Fire corrections throughout the hospital	2017
Chemistry Lab	University of Michigan	AEC	CM	$ 500,000	Chem Lab renovation	2017

SHMINA

BUILDING CONTRACTORS

IR-3 Replacement	University of Michigan Hospitals	IDS	GC	$ 800,000	Hospital Renovation for New IR Machine	2017
Taubman Center	University of Michigan Hospitals	A3C	CM	$ 750,000	Treatment Romm Renovation	2016
Gross Anatomy	University of Michigan Medical School	AEC	GC	$ 600,000	Lab Renovation	2016
Trilogy Grounds	Trilogy LLC	Hobbs + Black	CM	$ 600,000	Buildning Renovation for new HQ	2016
New Biosolids Facility	Genoa Osceola Twp.	Tetra Tech	GC	$ 3,500,000	WWTP renovations & expansion	2015
Randall Lab Renovation	UM Central Campus	UM AEC	CM	$ 600,000	Lab Renovation	2015
Linear Accelerator Replacement	University of Michigan Hospitals	IDS	GC	$ 600,000	Hospitals Renovation for new Accelerator	2015
UM, MI Memorial Phoenix Project	UM North Campus	Lord Aeck Sargent	GC	$ 600,000	Battery Research Lab	2015
UM Tunnel Structure repair	University of Michgan	UM AEC	GC	$ 500,000	U/G Concrete Tunnel Repair	2015
Michigan Stadium	UM Athletics	UM AEC	CM	$ 500,000	Misc. Stadium Upgrades	2015
East Quad	UM Housing	IDS	CM	$ 500,000	Misc. window & exit upgrades	2015
Truss Repair	University of Michigan	Wiss Janey	CM	$ 400,000	Truss reinforcing project	2015
NCRC Building 10 Elevator replacement	UM NCRC	UM AEC	GC	$ 355,000	Elevator replacement	2015
NCRC Building 10 Elevator replacement	UM NCRC	UM AEC	GC	$ 355,000	Elevator replacement	2015
Ross Academic Center	University of Michgan	UM AEC	CM	$ 300,000	Renovation for Student academic Center	2015
UM, MSRB III Install Sterilizer	UM Medical School	UM AEC	CM	$ 300,000	Renovation for Sterilizer Equip	2015
UM, MSRB III Install Sterilizer	UM Medical School	UM AEC	CM	$ 300,000	Renovation for Sterilizer Equip	2015
MSRB Steam Sterilizer	University of Michgan	UM AEC	CM	$ 250,000	Infrastructure renovation for new staem sterilizer	2015
Infusion Area Ceilings	University of Michigan Hospitals	UM AEC	CM	$ 250,000	Overnight Multiple Pharmacy Renovations	2015
Schembechler Hall Locker Room	UM Athletics	UM AEC	CM	$ 250,000	Locker room renovations	2015
JASS Studion	University of Michgan - Dearborn	Hamilton Anderson	GC	$ 200,000	Studio Renovation	2015
Randall Lab	University of Michgan	UM AEC	CM	$ 200,000	Lab Renovation	2015
NCRC Building B010 AHU Replacement	University of Michigan	HED	GC	$ 3,300,000	Major mechanical air handling upgrades	2014

SHMINA

BUILDING CONTRACTORS

Fr. Guanella Hall Additions & Renovations	Saint Louis Center Chelsea, MI	Kingscott Assoc.	CM	$ 2,000,000	Assisted Living Facility for senior IDD persons	2014
Modern Language Building Elevator Replacement	University of Michigan	UM AEC	GC	$ 1,000,000	Traction elevator replacement & building renovations	2014
Mott Door Repair	University of Michigan Hospitals	IDS	CM	$ 750,000	Major door renovation at Mott Hospital	2014
Chemistry Building	University of Michigan	UM AEC	GC	$ 587,000	Major Lab Renovation	2014
CC Little Science Building	University of Michigan	UM AEC	GC	$ 500,000	Lab Renovation	2014
Hospital Accelerator Replacement	University of Michigan Hospitals	FTCH	GC	$ 500,000	Hospital Renovation for new Accelerator	2014
Trotter House	University of Michigan	IDS	CM	$ 500,000	Major Exterior Restoration, paving	2014
Schembechler Hall	University of Michigan	Integrated	CM	$ 400,000	Commons Renovation	2014
Ross Business School	University of Michigan	UM AEC	GC	$ 310,000	A/V Classroom Upgrades	2014
Ross Business School	University of Michigan	A3C	GC	$ 309,000	Foundations & Site Prep	2014
NC Admin Complex	University of Michigan	HED	GC	$ 253,000	Call Center Tranformer & Backup Generator	2014
Electrical Engineering	University of Michigan	UM AEC	CM	$ 200,000	New Lab	2014
Goddard House	University of Michigan	UM AEC	GC	$ 110,000	FSE Renovation	2014
Pontiac Waste Water Treatment Plant	City of Pontiac	URS	GC	$ 8,500,000	Major treatment plant Renovation	2013
St. Fabian Expansion & Renovations	St. Fabian & Archdiocese of Detroit	IDS	CM	$ 2,500,000	Additions & Renovations	2013
Kraus Building Auditorium Renovation	University of Michigan	UM AEC	GC	$ 1,300,000	Auditorium Renovation	2013
SAB Renovations	University of Michigan	SHW	CM	$ 500,000	Suite Renovations	2013
Linear Accelerator	University of Michigan Hospitals	A3C	GC	$ 500,000	New Linear Accelerator foundations, site prep, MEP	2013
Mobile Linear Accelerator	University of Michigan Hospitals	A3C	GC	$ 500,000	Foundations & site improvements for new mobile	2013
Engineering Lab	Michigan State University	MSU Eng.	GC	$ 500,000	Engineering Lab Renovation	2013
NCRC Glass Washer Sterilizer	University of Michigan	UM AEC	GC	$ 250,000	Sterilizer Relocation & Renovation	2013
CC Little Science Building Renovation	University of Michigan	UM AEC	GC	$ 250,000	Engineering Lab Renovation	2013
Bunche Prek-8	Detroit Public Schools	RDG	D/B	$ 12,000,000	Historic renovation and new construction	2012

Safety Program

SHMINA
BUILDING CONTRACTORS

Safety Program

SAFETY POLICY STATEMENT

The leadership of A.Z. Shmina, Inc. and its subsidiaries, affiliates and divisions sincerely cares about its employees and is committed to working with our employees to provide and maintain a safe and healthful workplace in our offices, shops, field sites and in the services we provide through our maintenance operations. We believe all incidents and accidents are preventable and we are committed in assisting our employees to achieve this same mentality and outcome.

Our policy requires that each one of us take on the personal responsibility to properly understand the hazards we face in the execution of our work tasks and mitigating the hazard prior to commencement of the work at hand. We are all empowered to act to ensure our own safety. Should an employee face an unsafe condition they cannot mitigate and perform the work tasks safely, they are to report the matter at hand immediately to their supervisor and not proceed with the work. At no time should an employee proceed in an unsafe condition or environment. NO EXCEPTIONS. Employees must immediately report all accidents and injuries as well as allow the company to learn from the situation and avoid a repeat event in the future.

Employee recommendations to improve safety and health conditions are strongly encouraged. Each recommendation will be evaluated for possible application. A.Z. Shmina, Inc. will review each project at close as well as safety audits, employee input, near-misses, etc. to help improve safety on future projects.

It should be everyone's goal to ensure that all make it home safe to our family's each and every day. Like other non-negotiable elements of the company, Management will take disciplinary action against any employee who willfully violates safety rules or procedures. This action may include verbal or written reprimands and may ultimately result in termination of employment. Compliance with the company's commitment to safety and our procedures that are designed to promote a safe work environment will be required of all employees as a condition of employment. Policies and procedures contained within the Safety and Health Manual are incorporated as standard practice for A.Z. Shmina, Inc.

In an effort to ensure safety of all parties involved, we will pre-qualify all potential subcontractors through review of safety programs, safety training documents and safety statistics. All subcontractors will have an EMR below one.

The commitment to safety is across the board from management to field operations. From top to bottom, the primary focus on what we do will be on the presence of a safe working environment.

Thank you for your commitment to our company's overarching goal of eliminating all worker injuries.

DEFINITIONS

Contract: A written agreement between the Owner and A.Z. Shmina, Inc. (CM), between A.Z. Shmina, Inc. and a Subcontractor, between the Owner and Other Contractor(s), or between Other Contractor(s) and its/their Subcontractor(s).
Employer: Any contractor, supplier or vendor performing work under Contract at the project.
Project: The premises owned by the Owner as described in the contract between the Owner and A.Z. Shmina, Inc. (CM), and/or areas and ways contiguous thereto, including any work sites set up by the Owner for use by a contractor exclusively for the storage of material, or equipment, or for on-site fabrication of materials to be used on the job site, including temporary locations.
Owner: An entity that has a contract between themselves and A.Z. Shmina, Inc. or, between themselves and the Contractor.
Contractor: Any company performing work under Contract at the project.

PROJECT INTRODUCTION

(INSERT DESCRIPTION OF PROJECT AND MAP IF APPLICABLE)

ADMINISTRATION

MANAGEMENT POLICY STATEMENT

The A.Z. Shmina, Inc. **Safety Program** embodies the policies and procedures for prevention of injury, property damage, fire damage and occupational illness. **No single feature of our work is of greater importance.** It is A.Z. Shmina, Inc.'s intention to commit itself each day to the maintenance and assurance of an accident-free workplace. There is never an acceptable reason for compromising safety. This document, the A.Z. Shmina, Inc. contractor selection process, and site field activities are all designed to support and reinforce this goal.
It is A.Z. Shmina, Inc.'s policy to provide a safe place to work at all times and to conduct all operations in a manner as to provide protection for all individuals who might come into contact with these operations. The Owner's employees, A.Z. Shmina, Inc. employees, Contractor and Subcontractor employees, and all others employed on this project, as well as anyone who comes on the project for any reason during construction, are expected to conduct their work in a safe manner and are required to comply with established safety programs. By contract, every Contractor on this project is obligated to perform all work in a safe manner. By contract, every Contractor on this project is obligated to conform to the requirements of the Federal Occupational Safety and Health Act of 1970 (OSHA) and all additions and revisions thereto, as well as other applicable Federal, State and Local requirements and the Safety Program.
All supervisory employees must accept their responsibility for the prevention of accidents and for conducting all operations under their direction in a safe and efficient manner.
The results of our safety efforts will affect our overall success in constructing the project. **Our goal is accident-free work** with the traditional defect-free quality. We know this is the most efficient method and that all individuals working on this project will subscribe to the Safety Program.
With the cooperation, dedication and assistance of everyone, this will be a successful and safe project.

MANAGEMENT STATEMENT – STATEMENT OF FINAL AUTHORITY

All persons who come into the work area, for any reason during construction, will be required to comply with the established safety regulations that govern the project.
Contractors are committed by contract to observe and comply with all applicable safety regulations and procedures. Each Contractor will participate in the Safety Program.
If A.Z. Shmina, Inc. finds Contractor areas of work or individuals being, or acting in noncompliance with the Occupational Safety and Health Act of 1970 (OSHA), as amended, or any other applicable regulations, A.Z. Shmina, Inc. shall have the authority to order immediate correction and cessation of the non-compliant occurrence. **Non-compliance with project safety regulations will be grounds for Contractor dismissal and/or employee(s) being forbidden entry onto the site.** All costs of correction shall be forfeited by the Contractor deemed responsible.
A.Z. Shmina, Inc. shall have the final decision of who is the responsible party.

Nothing contained herein, however, shall serve to relieve the Contractor of his liabilities and/or obligations under the "Occupational Safety and Health Act of 1970" and all additions and revisions thereto, as well as all other applicable Federal, State and Local requirements.

RESPONSIBILITIES – A.Z. SHMINA, INC. PROJECT MANAGER

The Project Manager directs and administers the Safety Program for this project. All reports, surveys, accident reports and other information relating to safety are to be submitted to the Project Manager. The Project Manager shall have final authority over safety issues regarding all sub-contractors and employees.

The Project Manager establishes a safety organization to assure the involvement of all personnel in the safety effort and to provide for their participation. The Project Manager appoints the Project Superintendent, as his representative to monitor all safety activities on the project. The Project Manager evaluates individual Subcontractor's safety performance for compliance with all Federal, State, Local, A.Z. Shmina, Inc.'s and the Owner's safety requirements.

RESPONSIBILITIES – A.Z. SHMINA, INC. PROJECT SUPERINTENDENT

The Project Superintendent is responsible for the active control of the Safety Program. All work is to be done in compliance with the Safety Program, and shall be planned and overseen by the Project Superintendent.

The Project Superintendent shall conduct weekly inspections relating to safety which will be documented and submitted to proper personnel.

RESPONSIBILITIES – CONTRACTORS

The name of and resume for each Contractor's project-site safety representative will be provided to

A.Z. Shmina, Inc. for review prior to the Contractor starting work at the project site. Contractors with a staff and crew of 20 or more on site shall appoint a full time safety representative. Contractors with a staff and crew on site of less than 20 shall anticipate that the safety aspects of this position will encompass 20 hours or more of the work week and may occasionally require full time attention. For this reason, serious consideration shall be given to the ability of a superintendent or foreman to simultaneously meet the responsibilities of both positions.

Contractors must submit the resume to include any construction safety experience of the individual being considered for the role of safety representative.

Each Safety representative has the right and authority to stop any and all hazardous work being performed by their employer whenever imminent danger to life and health exists; and shall meet the OSHA definition of "Competent Person".

Conduct regular and frequent inspections for their Contractors work areas

Take immediate action to eliminate unsafe acts and/or conditions.

Ensure daily, that prior to the start of any work activity, every foreman has reviewed each task assignment with every affected employee to assure a comprehensive understanding of the safety requirements and precautions to be taken while performing this work.

Ensure that appropriate personal protective equipment is provided and its use enforced.

Each safety representative shall participate in accident and incident investigation involving their work and employees and those of their subcontractors.

Each safety representative shall attend safety meetings as scheduled by A.Z. Shmina, Inc. Contractor shall instruct each employee on project site in the recognition and avoidance of unsafe acts and/or conditions applicable to its work environment to control or eliminate injury or illness.

Site safety representatives are required to attend & provide proof of completion of an OSHA 30 Hour Hazard Recognition Course or approved equal prior to starting work on the project. Contractor is responsible for providing and requiring the use of appropriate personal protective equipment in all operations where there is an exposure to hazardous conditions. All records shall be maintained at a location accessible to A.Z. Shmina, Inc.

Contractor is responsible for notifying A.Z. Shmina, Inc. of any hazardous chemicals or substances that are brought or cause to have been brought on project site. Contractor shall provide A.Z. Shmina, Inc. with a copy of Contractor's Hazardous Communication Program, Chemical information list, and Material Safety Data Sheet(s) (MSDS) for the chemical(s) or substance(s) intended for use on the site. A.Z. Shmina, Inc. will provide a centrally located place for this information. Contractor is responsible for maintaining a copy of Contractor's Hazard Communication Program, Chemical

Information List, and Material Safety Data Sheet(s) on site for Contractor's own reference and employee training. The proper storage, use and disposal of wastes of any hazardous chemicals or substances are the responsibility of Contractor.

Contractor is responsible for conforming to OSHA and NFPA standards of fire protection and prevention practices. Contractor shall also comply with all fire and safety rules and regulations established on the project.

If Contractor fails to correct safety violations, A.Z. Shmina, Inc. will issue the Contractor written notification, outlining safety violations. Failure of the contractor to abate may result in the removal of the Contractor from the project site, and A.Z. Shmina, Inc. approved bidders list, or other appropriate measures.

Compliance with Federal, State, Local Laws and regulations is the contractual obligation of Contractors working on this project. Conflicts between current laws or contractual requirements shall be resolved by adhering to the more stringent requirement. Any project site safety regulations, which exceed the minimum standards established by OSHA, shall be incorporated in Contractor's safety program.

The Contractor shall ensure that its supervisors are aware of their responsibilities, which include:

Become familiar with the requirements of all accident prevention standards and safety rules pertaining to their job.

Be responsible for carrying out the procedures required by the Safety Program.

Ensure that each employee under their supervision has received the initial project safety orientation provided by A.Z. Shmina, Inc.

Explain to all employees applicable safe practice rules and regulations under their direct supervision.

Supervise the instruction and training of new employees either personally or through delegated experienced persons until the new employee satisfactorily demonstrates their ability to perform the work in a safe and efficient manner.

Be responsible for continuous housekeeping in their area and for the use and maintenance of all personal protective devices, equipment, and safeguards.

Notify their direct supervisor and/or the contractor’s safety representative concerning work areas where they believe protective devices are required.

NOTE: Such safety devices will include, but not limited to, the following: machine guards, operational shields, exhaust vent hoods and systems, welding shields, approved personal protective equipment, automatic stops and controls, barricades, railings, etc.

Report to their own direct supervisor all cases of employees who, in their opinion, are not qualified for the work to which they have been assigned or who engages in unsafe practices.

Attend and participate in all supervisors’ safety meetings.

Conduct or arrange for weekly "toolbox" safety meetings for all employees under their supervision as required. Minutes of Tool Box Talks are to be maintained and a copy of each Talk is to be given to A.Z. Shmina, Inc. before end-of -shift the day given.

Report immediately, all accidents in which personal injury, property damage or a near-hit occurs.

Should an accident occur involving a Contractor’s employee, the Principal/Owner of the Contractor shall attend a “Principals” meeting at the project location to review the incident. A.Z. Shmina, Inc. will conduct this meeting.

Assist in accident investigation and submit a report promptly on required forms. Lessons learned from such investigations shall be incorporated into all future daily activities and plans of the contractor.

In the event a contractor utilizes employees whose primary language is not English, the contractor shall provide for appropriate interpretation to assure complete comprehension.

Periodically analyze work methods in detail for the purpose of job simplification and for the establishment of safe work methods.

Site safety inspections are to be an ongoing process and documented at least weekly. Contractors should document inspections on the Site Audit Checklist or approved Contractor's form and submit to A.Z. Shmina, Inc.

Ensure that all hazards created in an area as a result of work activities are addressed before the crew leaves the area, including breaks or lunch.

RESPONSIBILITIES – EMPLOYEES

No employee shall be required or knowingly permitted to work in an unsafe environment except for the purpose of making safety corrections and then only after proper precautions have been taken for their protection.

Each employee is responsible for learning and abiding by those rules and regulations which are applicable to the assigned tasks and for reporting observed or anticipated hazards to their immediate supervisor. If the hazard is not immediately corrected, the affected employee will report the hazard to A.Z. Shmina, Inc.

All employees shall observe the following rules of conduct:

Courtesy: Employees shall observe standards of behavior and conduct their work in a manner to avoid offending any Owner employees or visitors. **Each individual on this project must be given the courtesy that would be extended to one's family or best friend.**

Personal Protective Equipment: All persons on the project will wear hard hats, eye protection, and work boots in good condition with substantial soles. All other personal protective equipment, including respirators or gloves, as appropriate to assigned tasks, shall be utilized in the proper manner at all times while there is exposure to the hazards.

Clothing: Clothing suitable for the weather and work shall be worn. Torn or loose clothing, cuffs or neckwear, which may be a hazard, are not allowed. Shirts must be worn and have sleeves. Pants must have legs (no shorts allowed). Clothing shall be maintained in a clean, neat and repaired fashion.

Vehicle: Employees shall park their vehicles in designated areas. ***There will be no on-site parking provided.*** Operation of vehicles on the project shall conform to all local traffic laws. The maximum speed limit on the project is 15 miles per hour. ***There will be no cell phone usage permitted while operating any type of vehicle.***

Smoking: Smoking or tobacco is NOT allowed on this project.

Intoxicants: Consumption of alcoholic beverages or controlled substances is not allowed on the project. All workers who are taking physician-prescribed or over-the-counter medication must be fit for work. **All employees are specifically directed to the "Drug Policy" which is a part of this Safety Program.**

Accidents: All employees must immediately inform their supervisor of any injury on the project or any non-injury accident, which involves damage to property, person or equipment. This incident must be reported to A.Z. Shmina, Inc. immediately.

Personal Conduct: Practical jokes, horseplay, scuffling, wrestling or fighting is prohibited.

Good Housekeeping: Good housekeeping on the project is mandatory and every employee must do their part daily to minimize dust and to clean up their work area to keep the project clean for safety and efficiency. **Controls shall be observant to ensure dirt is not tracked into areas outside the workspace.** Clean up methods shall follow prescribed techniques to minimize the distribution of dust into the air.

Authorized Access: Employees shall confine their activities to the areas designated as the work site. The employee's supervisor shall obtain permission from the A.Z. Shmina, Inc. representative prior to entry into any areas outside the work site.

Fire Protection: Employees shall adhere to all fire protection regulations, and shall conduct their work in a manner to preserve the fire safety integrity of the building.

Music: No televisions, radios, MP3 players, CD players or cassette tape players are allowed.

GENERAL REQUIREMENTS

ACCIDENT INVESTIGATION

For all injuries or near-misses, A.Z. Shmina, Inc. is to be notified immediately. Copies of **ALL** accident reports must be filed with A.Z. Shmina, Inc. immediately.

It will be each Contractor's responsibility to complete the First Report of Injury for his employees and to transmit copies of these reports immediately to A.Z. Shmina, Inc. Any accident or incident resulting in a lost-time injury, fatality, damage to property or equipment, a serious "near-miss" or the recognition of a potential hazard to health and environment is to be investigated by a committee comprised of the following, as appointed by the Project Manager, Project Superintendent, Project Safety Representative, Emergency/Health Safety Manager and Contractors supervisor or anyone familiar with the practices involved in the incident who can contribute to its analysis and make recommendations for action to prevent a reoccurrence. The investigation shall begin promptly after the incident. Results of the investigation and recommendations for preventative action shall be documented within five (5) workdays of the incident. If the Owner agrees, a brief news release shall be posted, to inform workers, covering fatalities and serious occurrences. The occurrences are to be discussed at the regular and/or special safety meetings. This investigation and

report shall be made immediately, but release may await any similar investigation and/or reports required by government regulations. A.Z. Shmina, Inc. shall also review first aid injuries to establish trends and practices that deviate from work standards, and shall report and take corrective actions.

A.Z. Shmina, Inc. shall provide the Owner with the Monthly Progress Report, a safety report covering safety activities for the preceding month. The report shall include:

- The accident experience, recordable, lost-time, first aid and near-hit incidents for the month.
- The relationship of accident experience to number of people employed using a recognized national standard for recordable injuries and lost-time injuries.
- Review and summary of the safety activities, problem areas and contemplated action, including fire hazards and environmental hazards.

ACCIDENT REPORTING PROCEDURES

For all fatalities, cases requiring hospitalization, OSHA recordable events or possible lost-time injuries, A.Z. Shmina, Inc. is to be notified immediately. A.Z. Shmina, Inc. will immediately notify Owner and proceed to follow A.Z. Shmina, Inc. Emergency Action Plan. A.Z. Shmina, Inc. will follow up with the insurance carrier's Claim Representative of all accidents and will immediately forward Employer's First Report of Injury Forms, General Liability Loss Notice Forms, subsequent inquiries or correspondence received relative to the matter, including Court Summons or other legal documents, to the Claim Representative with copies to the A.Z. Shmina, Inc. Corporate Attorney. Copies of **ALL** accident reports must be filed with the Project Manager immediately.

**AERIAL LIFT PLATFORMS

This section applies to equipment that has a primary function of elevating personnel, together with their tools and necessary materials, on a platform which is mechanically positioned. This equipment includes boom-supported elevating work platforms, manually propelled elevating work platforms, and self-propelled elevating work platforms. Common names for these items include: JLG Lifts, Boom Lifts, Scissors Lift and the like.

Construction and Design

Aerial work platforms shall be designed, constructed and tested so as to be in compliance with the requirements of the American National Standards Institute (ANSI).

Aerial work platforms shall not be field-modified for uses other than those intended by the manufacturer, unless the manufacturer has certified the modification in writing.

Directional controls shall be of the type that will automatically return to the off or neutral position when released, protected against inadvertent operation, and clearly marked as to their intended function.

Special workings, cautions, restrictions, rated workload and a clear statement of whether or not the aerial work platform is electrically insulated shall be clearly marked in a permanent manner on each aerial work platform.

Rotating shaft, gears and other moving parts that are exposed to contact shall be guarded.

Maintenance and Repair

Each aerial work platform shall be maintained, repaired and kept in proper working condition in accordance with the manufacturers or owner's operating or maintenance and repair manual or manuals.

Any aerial work platform found not to be in a safe operating condition shall have a tag affixed that reads "DO NOT USE" or similar wording and be removed from service until repaired.

All repairs shall be made by an authorized person in accordance with the manufacturers or owner's operating or maintenance and repair manual or manuals.

All danger, caution and control markings and operational plates shall be legible and not obscured or damaged in such a way to make markings and/or wordings unreadable.

The operating instructions shall be located and maintained on each aerial work platform.

Operator Permits/Certification

A.Z. Shmina, Inc. shall ensure that each employee who operates an aerial work platform has the proper training for the equipment in questions and that each operating employee has been issued an aerial work platform permit or operator certificate.

- A permit shall be carried by the operator or be available at the job site.
- A permit shall indicate the type of aerial work platforms an operator has been trained on and is qualified to operate.

- A permit shall be valid for a period of no more than three years from date of issuance.
- A permit shall contain the firm/company name, operator's name, name of issuing authority, types of aerial work platforms the operator is authorized to use, date of issuance and expiration date.

Instruction and Training

A.Z. Shmina, Inc. shall ensure that each employee who will operate an aerial work platform has completed instruction and training regarding the equipment he/she will operate. Such instruction shall comply with and contain the following:

- A qualified person shall deliver the instruction and training. The qualified person shall ensure that the training is documented and filed.
- Each operator shall be instructed in the intended purpose and function of each of the controls.
- Each operator shall understand by reading or by having a qualified person explain the requirements as outlined in this procedure.
- The training shall include a written test or opportunity for questions to ensure the operator comprehends the instruction and information presented.

Pre-operation Rules and Procedures

Before use on each shift, an aerial work platform shall be given a visual inspection by the operator. The operator will look for:

- Backup alarm must be audible and in working condition.
- Cracked welds.
- Bent or broken structural members.
- Hydraulic or fuel leaks.
- Damaged controls and cables.
- Loose wires.
- Tire condition.
- Fuel and hydraulic fluid levels.
- Platform is clean and free of existing debris, material, etc.
- Ensure safety gate and/or guardrails are in good condition and operate properly.
- Slippery conditions on the platform.
- Inspect all anchorage points for any cracked welds, bent members, etc.

Before use on each work shift, the operator will operate all platform and ground controls to ensure that they perform their intended function.

Before the aerial work platform is used, and during use on the job site, the operator shall inspect the work area for ditches, drop-offs, holes, floor obstructions, debris, overhead obstructions, power lines, extension cords, hoses and any similar conditions that may present an unsafe condition.

All unsafe items or conditions identified, as a result of the inspection of the aerial work platform and work area, shall be corrected before further use of the aerial work platform.

Operating Rules and Procedures

Aerial work platforms shall be used in accordance with the manufacturer or owner's operating instructions and safety rules.

A minimum of 20 feet clearance shall be maintained between the aerial work platform and energized electrical power lines operating at voltages up to 50kV. The local safety manager should be consulted before working under or near electric power lines operating at voltages greater than 50 kV.

The manufacturer's rated load capacity shall not be exceeded.

Only personnel, their tools and necessary materials shall be on or in the platform.

The platform guardrail system shall not be used to support materials, other work platforms or employees.

Personnel shall maintain firm footing on the platform while working on the platform.

Personnel shall not stand on the platform guardrail system.

The use of railings, planks, ladders or any other device on the platform for achieving additional height is prohibited.

See FALL PROTECTION/RESTRAINT for guidance in fall protection and restraint requirements when operating aerial work platforms.

Small compressed gas cylinders, 24 inches or less in length, can be placed on the platform deck. These cylinders must be positioned upright, rest on the platform deck, be secured and totally contained within the platform.
A fully charged and inspected fire extinguisher must be present on the platform deck with an aerial work platform is in use.
Do not travel horizontally in a scissor-type lift while the platform is in the extended position. The scissor-lift platform must be lowered to its lowest position before the lift can be moved.
Look in the direction of, and keep clear view of, the path of travel and make sure that the path is firm and level.
Maintain a safe distance from obstacles, debris, drop-offs, leading edges, holes, depressions, ramps, overhead obstructions, overhead electrical lines and other hazards.
Outriggers or stabilizers, when provided, are to be used in accordance with the manufacturer's instruction. Outriggers and stabilizers shall be positioned on pads or a solid surface.
Aerial work platforms shall be elevated only when on a firm and level surface or within the slope limits allowed by the manufacturer's instructions.
Platform gates or safety chains shall be closed while the platform is in the elevated position.
Stunt driving and horseplay on aerial work platforms is prohibited.
Altering, modifying or disabling safety devices or interlocks is prohibited.
Care shall be taken to prevent hoses, cords and ropes from becoming entangled in the aerial work platform.
Platform operators shall ensure that the area surrounding the lift is clear of personnel and equipment before lowering the platform.

Fall Protection/Restraint

When operating aerial work platforms, fall protection in the form of a full-body harness equipped with shock-absorbing lanyard shall be worn when the manufacturer instructions recommend such use and an approved anchorage point is provided as part of the platform.
When operating aerial work platforms, a full-body harness equipped with shock-absorbing lanyard shall be worn as a fall restraint when required by the customer, state or local codes/requirements or when required by contract.

**ASBESTOS AWARENESS

Usually asbestos is mixed with other materials to form products. Depending on what the product is, the amount of asbestos in asbestos-containing-materials (ACM) may vary from 1% to 100%. Examples of products that might contain asbestos are:

- Sprayed on fire proofing and insulation in buildings
- Insulation for pipes and boilers
- Wall and ceiling insulation
- Floor tile
- Putties, caulks and cements (such as in chemical carrying cement pipes)
- Wall and ceiling texture in older buildings and homes
- Cooling tower panels

Health Effects of Asbestos

The most common way for asbestos fibers to enter the body is through inhalation In fact, ACM is not generally considered to be harmful unless it is releasing dust or fibers into the air where they can become airborne and be inhaled or ingested. Many of the fibers will become trapped in the mucous membranes of the nose and throat where they can then be removed, but some may pass deep into the lungs, or, if swallowed, into the digestive tract. Once they are trapped in the body, the fibers can cause serious health problems.
Asbestos is most hazardous with it is friable. The term friable means that the asbestos is easily crumbled by hand, releasing fibers into the air. Sprayed on asbestos insulation is highly friable. Asbestos floor tile is not.
Because it is so hard to destroy asbestos fibers, the body cannot break them down or remove them once they are lodged in lung or body tissues. They remain in place where they can cause disease. There are three primary diseases associated with asbestos exposure: Asbestosis, lung cancer and Mesothelioma.

Avoid Asbestos Exposure

To avoid being exposed to asbestos, you must be aware of the locations it is likely to be found. If you do not know whether something is asbestos or not, assume that it is until it is verified otherwise. Remember, you cannot tell if floor tile or insulation contains asbestos just by looking at them. If you have reason to suspect that something is asbestos or ACM, either because it is labeled as such or because it is something that is likely to contain asbestos (9"x9" floor tile for example) - DO NOT DISTURB IT.

Never do the following to any ACM or suspected materials:

- Drill
- Hammer
- Cut
- Saw
- Break
- Damage
- Move
- Disturb

Asbestos Reporting

If anyone discovers or accidentally damages/disturbs suspected ACM, they should be instructed to:

Leave the area immediately and report the situation to the supervisor.

Post signs and control access to the area.

The supervisor must report the damage to the facility or project safety personnel.

ACM can be removed/abated by properly trained authorized personnel only.

Asbestos Awareness Training

All A.Z. Shmina, Inc. employees that have the potential to be exposed to asbestos will receive asbestos awareness training. The training will include a review of this document

All contractors will be required to train their personnel in asbestos awareness. If asbestos is present or suspected to be present on a project site, contractors must make all of their employees and subcontractors aware of the hazard.

**ASSURED GROUNDING/ELECTRICAL GROUND FAULT PROTECTION

When an electrical ground fault occurs, the current flows through the path with minimum impedance to the ground. It is imperative that an employee does not become the conductor of this current.

There are two approved methods for protecting workers from ground fault incidents:

- Use of a ground fault circuit interrupter, commonly referred to as GFCI of GFI.
- Implementation of an assured grounding program.

Ground Fault Circuit Interrupter (GFCI)

All 120 volt, single phase 15 and 20 amp receptacle outlets on work sites, which are not part of the permanent wiring of the building or structure and which are in use by employees, shall have an approved ground fault circuit interrupter for personnel protection.

Receptacles on a two-wire, single phase portable or vehicle-mounted generator, rated not more than 5 kW, where the circuit conductors of the generators are insulated from the generator frame and all other grounded surfaces, need not be protected with ground fault circuit interrupters.

Attention shall be given to the proper installation and maintenance of GFCIs within the National Electric Code (NEC). The system shall be tested prior to being put into service and the test results documented and kept on file.

If a fault trip-out occurs after the circuit has been tested and put into service, a thorough investigation must be made to determine the cause. The necessary repairs or corrections shall be made before reusing.

In purchasing GFCIs, they shall conform to the Underwriters Laboratories (UL), Standard 943, GFCI.

Each circuit protected by a circuit breaker GFCI requires its own neutral conductor.

Assured Equipment Grounding Program

An established and implemented assured equipment grounding program shall cover all cord sets, receptacles which are not part of the permanent wiring of the building or structure and equipment connected by cord and plug, which are available for use or used by employees.

Inspections of included equipment shall be conducted:

- Before each use
- Before equipment is returned to service following repairs
- Before equipment is used after any incident, which can be reasonably suspected to have caused damage to the equipment.

- Every calendar quarter

Each cord set, electrical tool, receptacle and piece of electrical equipment shall be tested to assure continuous ground circuit, and that the equipment- grounding conductor is connected to its proper terminal. The testing equipment shall be capable of testing for ground conductor continuity and resistance, line fault and proper connection of conductors and terminals. All testing equipment shall be calibrated and tested every three months and these results shall be documented.

Receptacles, which are a permanent part of the wiring of the permanent building or structure, are excluded from the quarterly testing and inspection requirement of this procedure. However, after installation and before initial use, each receptacle shall be tested.

To verify inspection and testing, a color coding system shall be developed. Each item inspected shall be coded with the appropriate color for that quarter. Colored tape affixed to the cord at the plug end is used to indicate a piece of equipment has been inspected and tested. The color coding system shall be in conformance with the following matrix:

COLOR	QUARTER
Yellow	1st (January to March
Green	2nd (April to June)
White	3rd (July to September)
Red	4th (October to December)

- Any electrical tool, cord set or piece of electrical equipment which bears an expired inspection color or is missing an inspection color shall be considered defective and shall be removed from service until it has been inspected and properly coded.
- Any individual who authorizes the use of expired equipment is subject to disciplinary action(s).
- Daily, each cord set, electrical tool or piece of electrical equipment shall be visually inspected by the user before use for signs of damage. Equipment found to be damaged or defective shall be immediately removed from service until repaired and processed through the electrical equipment testing protocol outlined in this section.

**BACK/LIFTING SAFETY

Avoid Lifting and Bending Simultaneously

Avoid lifting and bending whenever you can by following these steps

- Whenever possible, avoid back stress and the strain of lifting and bending. If you do not use your back like a lever, you avoid putting it under potentially damaging forces.
- Place objects off the floor. If you can place something down on a table or other elevated surface instead of on the floor, does it so you will not have to reach down to pick it up again?
- Raise/lower shelves. The best zone for lifting is between your shoulders and your waist. Put heavier objects on shelves at waist level, lighter objects on lower or higher shelves.
- Use carts and dollies to move objects instead of carrying them. Remember, it is better on your back to push carts that it is to pull them.
- Use cranes, hoists, lift tables and other lift assist devices anytime you can.

Proper Lifting

You cannot always avoid lifting, but there are ways to reduce the amount of pressure placed on the back when you do have to lift an object. By bending the knees, you keep your spine in a better alignment and you essentially remove the lever principle forces. Instead of using your back like a crane, allow your legs to do the work. Follow these steps when lifting:

- Take a balanced stance with your feet about shoulder width apart. One foot can be behind the object and the other next to it.
- Squat down to lift the object but keep your heels off the floor. Get as close to the object as you can.
- Use your palms (not just your fingers) for a secure grip on the load. Make sure you can maintain a hold on the object without switching your grip.
- Lift gradually (without jerking) using your legs, abdominal and buttock muscles. Keep the load as close to you as possible. Keep your chin tucked in so as to keep a relatively straight back and neckline.

- Once you are standing, change directions by pointing your feet in the direction of intended travel and turn your whole body. Avoid twisting at your waist while carrying a load.

Body Management

It is important to know your body's limitations and to be aware of your body position at all times. Learn to recognize situations where your back is at the most risk: bending, lifting, reaching, twisting, etc. Take measures to reduce the likelihood of an injury.

- Stretch first - If you know that you are going to be doing work that might place your back at risk, take the time to stretch your muscles before starting, just like a professional athlete would do before a workout. This will help you avoid painful strains and sprains.
- Slow down - If you are doing a lot of heavy, repetitive lifting, take it slowly if you can. Allow yourself recovery time between lifts.
- Rest your back - Take frequent, short breaks. Stretch. If you have ever been working in an awkward position for a long time, then stood up and felt stiffness and soreness, you know you have been in that position too long and your body is protesting. Take one-minute stretch breaks frequently to help avoid sore muscles.
- Sleep on a firm mattress - Also, the best sleeping position for many people is either on the back with the knees slightly elevated or on the side with knees slightly bent.

Get in shape - strengthen your stomach muscles, lose a little weight, increase your flexibility. Note: a physician should be consulted before starting an exercise program.

**CODE OF SAFE WORK PRACTICES

General Safety Rules

Immediately report any unsafe condition(s) or behavior(s), accidents, injuries and illnesses to your supervisor

If you are unsure of the safe method to do your job, STOP and ask your supervisor.

Keep your work area clean and free of debris.

Immediately clean up spilled liquids. Refer to Material Safety Data Sheet (MSDS) for proper PPE and handling of spilled liquid. Dispose of all waste and refuse properly. Ask your supervisor about the proper disposal method and check the Material Safety Data Sheet (MSDS).

Do not run in any project or office area.

Notify all individuals in your area who might be endangered by your work activity.

Do not operate equipment to which you are unfamiliar. Do not attempt to use such equipment until you are fully trained and authorized to do so.

Never bring firearms, illegal weapons, illegal drugs or unauthorized non-prescription drugs or alcoholic beverages on A.Z. Shmina, Inc. property or project sites.

Use of fall protection is required when a fall potential of six feet or greater exists.

Employees who are suspected of being under the influence of illegal or intoxicating substances, impaired by fatigue or an illness, shall be prohibited from working. Never work while under the influence of an illegal or intoxicating substance, fatigued or ill.

All liquids are to be in labeled containers. At the end of each shift, store all flammable materials in designated flammable storage areas.

A tag may indentify equipment that is NOT to be operated, energized or used. All tagout or lock-out notices and procedures must be observed and obeyed.

When handling hazardous materials, ensure that you follow prescribed safety procedures, refer to MSDS and use required safety precautions.

Do not block exits, fire doors, aisles, fire extinguishers, first aid kits, gas meters, electrical panels or traffic lanes.

Do not leave tools, materials or other objects on the floor which might cause others to trip and fall.

Do not distract others while working. If conversation is necessary, make sure eye contact is made prior to communicating.

All visitors must abide by all safety rules and be escorted by a responsible employee.

Never work under forklift loads or overhead crane loads.

Personal Protective Equipment

Determine the personal protective equipment required prior to starting a task.
Hard hats must be worn on all project sites at all times.
All employees and visitors MUST wear ANSI approved safety glasses at all times when on project sites and in the sop facilities.
Employees and visitors must wear sturdy work shoes appropriate for construction work when on project sites.
Be sure the protective clothing you wear will not hamper or restrict freedom of movement due to improper fit.
Do not wear loose, torn or frayed clothing, dangling ties, finger rings, dangling earrings or other jewelry items due to entanglement hazards.
If required, wear NIOSH approved respirators when applying paint, welding, grinding or working with chemicals. Refer to the MSDS for respirator recommendations.
Face shields with safety glasses are recommended when performing work that produces flying particles.

Facility Safety

Walkways and Exits:

- All exits are to be marked, clear and well lit. They are to be unlocked at all times during working hours.
- Always use handrails when walking up or down stairways. Do not take more than one step at a time.
- Always use ladders, ramps, gangways, stairways and paths intended for safe travel.

Electrical, Electric Panels and Lines:

- Keep access to electrical panels clear at all times.
- Use only properly rated electrical extension cords.
- Electrical cords must always be checked for bare wires and broken ground pins prior to being used. If the cord has exposed wires or broken ground pins, UNPLUG and then cut the end off and return for repair.
- Cords that must be placed across an aisle must be clearly marked and protected by a cover.
- Follow lock-out/tag-out procedures to secure electrical equipment at the power panel while maintenance is being performed and remove upon completion.
- Extension cords are intended for temporary use only with supervisor's authorization and are to be rolled back at the end of the work operation or at the end of the shift.

Air, Gas, Oxygen and Water Lines:

- Do not alter or modify air or water lines.
- Check all air hoses for cracks before use.
- If an air hose is in poor working condition, disconnect at then cut the end off and discard.
- Be sure that no oil or lubricant is on an oxygen line or coupler. If oil is present, wipe immediately. Failure to do so could cause an explosion.

Field Safety

The location of the nearest medical clinic or hospital is to be posted in the field office.
Keep your work areas free of debris. Remove debris from the work area to reduce tripping hazards.
Maintain awareness of potential hazards when walking around the project site
Keep tools, materials and equipment out of walkways and stairways at all times.
Do not lend or borrow tools from other companies/contractors.
When working on ladders and scaffolds, let people know you are working above them and follow ladder and scaffold safety rules.
Always erect barricades before removing floor or roof opening covers. Replace the covers before removing barricades.
Do not remove or work on any electrical equipment unless it is tagged and locked out.
Hard hats are required at all times.
Wear clothing that will protect you from adverse weather conditions without hampering your freedom of movement.
Do not disturb any asbestos or suspected asbestos containing materials. Stop work and report to supervisor. If you are unsure, stop and ask.
Wear shirts with sleeves and long pants at all times. Do not remove your shirt.
Wear safety glasses or other eye protection at all times.
Do not overload aerial work platforms. Do not operate lifts unless authorized.
Do not enter any confined space, manhole, underground vaults, chambers, tanks or other similar places until written

authorization has been posted and updated.
When working in hot areas or confined spaces, be sure to drink water frequently to properly hydrate you.

Office Safety

Computer monitors, keyboards and chairs shall be adjusted to provide maximum comfort while working.
Furniture, fixtures and equipment used by employees shall be in good working condition.
Do not place heavy objects on top of cabinets or shelves at any time.
Open one file cabinet drawer at a time and close immediately after use.
Do not lean back in chairs that are not designed to tilt back.
Extension cords are intended for temporary use only and should be rolled back at the end of the work operation or at the end of the shift.
When possible, put reading materials on a stand or easel instead on leaving them flat on your workstation.
Stand and stretch periodically to avoid back strain.
Immediately clean up spills.
Keep aisles free of tripping hazards.
Know the location of your nearest fire exit and fire extinguisher.

Housekeeping

Safe housekeeping practices are the responsibility of every employee.
Keep roads, walkways, grounds, aisles, stairs, platforms, ladders and fire doors clear or obstruction and debris.
Oily rags should be placed in closed metal containers until they can be cleaned or disposed.
Any oil or chemicals spilled should be cleaned up immediately using safe practices as outlined in the MSDS for the spilled oil or chemical.
Waste material should not be allowed to accumulate.
Broken glass should be immediately collected and placed in containers. It should be collected in such a manner as to avoid injury.
Keep your work area clean and safe.
Put items that might cause slips, trips or falls in proper receptacles.
Do not bring glass bottles into the work area.
Throw rubbish and waste materials in the can provided for this purpose.
Surplus bolts, nuts and welding rod stubs, tools, etc. should be removed promptly from the ground and floor areas.
Excess materials, cutting and tools must be removed as promptly as possible from the job site after completion of the work.
All hoses should be returned immediately after use to storage racks provided.
Materials are not to be stored or left in aisles or walkways.
Drains shall be covered properly and shall be kept free of debris to prevent clogging.
Spills shall be cleaned up immediately.
Floors should be kept clean and in good repair.
Clean and orderly storage areas shall be maintained.
All stacked material shall in straight rows and evenly stacked.

Manual Lifting Safety

Consider the weight and size of a load prior to picking it up.
Use material handling equipment such as carts or dollies whenever feasible.
If a load is too heavy or bulky to carry alone, ask someone for help.
Remember, in good lifting posture, your ears, shoulders and hips are aligned.
When you have to pick something off the floor, squat down, keeping your back straight rather than bending over at the waist.
While handling a load, instead of twisting your body, turn your whole body in the direction of intended travel.

Material Handling and Storage

Take care when lifting, moving or handling materials. Always use proper lifting techniques. Get help when lifting heavy, bulky or awkward loads.
Store flammable liquids, combustible materials and compressed gasses in designated areas only.

Use a cart to move compressed gas cylinders. Strap the cylinders securely in place.
Use a bottle carrier when using a forklift to move gas cylinders. Be sure to secure the cylinder properly.
Store all materials in a safe manner. Be careful not to overload floors, platforms or racks.
Protect your hands - wear gloves when appropriate.
To move heavy or bulky loads, use mechanical means whenever possible.
When transporting gases in vehicles, secure them to the vehicle in an upright position. Never transport cylinders lying down (horizontally).
When storing material in racks, observe all posted capacities and procedures.

Fire Prevention

Always take precautions to prevent fires which may be started from oily waste, rages, gasoline and other flammable liquids, acetylene torches, improperly installed electrical equipment and trash.
Firefighting equipment is to be inspected on a regular basis. All discharged, damaged or missing equipment is to be immediately reported to a supervisor.
Access to fire extinguishers must be kept clear at all times.
Never use gasoline for cleaning purposes.
Smoking is prohibited at all times within 20 feet of flammable substance storage.
Make note of the location of firefighting equipment in your work area.
Tampering with fire equipment is prohibited.
In case of fire, employees shall consider the safety of themselves and other individuals before saving property.

Chemical Safety

Read all the warning labels and MSDS before using any chemicals.
Hazardous materials shall be handled in accordance with the MSDS. MSDS contain personal protection and safety information and are available from your supervisor.
If protective equipment is required, review its use with your supervisor prior to beginning work.
Mixing of chemicals is prohibited at all times unless under the immediate direction of a supervisor. Before you mix, review all MSDS.
Always wash your hands thoroughly after handling chemicals, even if you were wearing protective gloves.
Use chemicals only in well ventilated areas.
Make sure acids are placed in a secure spot where they cannot be spilled.
Do not use glass containers for acid - use only approved shatterproof containers.
When using secondary containers filled by others, ensure that they are labeled as to their contents and hazards.

Vehicle Driver Safety

Only authorized employees are permitted to operate A.Z. Shmina, Inc. vehicles.
Drive defensively and obey all traffic and highway laws.
Always wear the seat belt - passengers and drivers.
Report all accidents as soon as possible to your supervisor and obtain a police report.
Keys must be removed from all unattended vehicles and the vehicles must be locked.
Report any vehicle defects, operating problems or missing parts to your supervisor.
No smoking while refueling.
Mobile phones should not be used when refueling.
Mobile phones should be turned off before exiting the vehicle when stopped in a refueling station.
If your driver's license is revoked or expired, immediately notify your supervisor and do not drive.

Hand Tools and Power Tools

Know your hand tool and hand power tool applications and limitations.
Do not use tools that are faulty or damaged in any way. Exchange them for safe tools immediately.
Hold cold chisels so that your knuckles will be protected in case the hammer misses the head. Chisels being struck by others should be held by vise grips or similar holding devices.
Never strike a chisel with a claw hammer or other tempered tools.
Do not use a screwdriver as a chisel.
Before using sledges, axes or hammers, be sure the handles are securely fastened with a wedge of sound material.

Do not use a handle extension on any wrench.
Files should be equipped with handles and should not be used as a punch or pry.
All power tools are to be plugged in to a grounded outlet or be of the double-insulated type.
Do not use power tools in damp, wet and/or explosive atmospheres.
Keep all safety guards in place and in proper working order.
Use clamps or vices to secure work pieces.
Only personnel authorized by their supervisor may operate power tools.
Do not force hand power tools. Apply only enough pressure to keep the unit operating smoothly. If overloading occurs, relieve the pressure.
Do not lift, lower or carry portable electrical tools by the power cord.
When working above other employees where handling power tools is a problem, the tool may be hung from a secure, stable object.
Return all tools and other equipment to their proper place after use.
Unplug all power tools before changing bits and/or grinding/cutting discs/wheels.
Remove chuck keys before operating tool.

Ladder Safety

Arrange your work so you are able to face the ladder and use both hands while climbing.
Keep portable stairways, ladders and step stools in good condition and use only in a safe manner.
Never repair a broken ladder, tag damaged ladders and remove them from service.
Only non-conductive ladders are permitted.
Make sure ladder feet are not placed on sandy or slippery surfaces. Clean or sweep the area where the ladder feet will be placed.
Secure portable ladders in place, at a pitch so that the distance from the wall to the base of the ladder is at least ¼ the vertical height of the ladder.
Do not carry tools or equipment while climbing a ladder. Climb the ladder and then hoist the tools or equipment with a line or a hoisting device.
Fall protection is required when working on ladders at or near shafts or leading edges.
Extension ladders shall extend at least 36 inches above any access level.
Do not place ladders in passageways, doorways, driveways or any location where they might be hit or jarred, unless protected by barricades or guards.
Be aware of the objects below you. Move or cover sharp objects.
Do not stand on or work from the 2nd rung from the top or above.
When using an extension ladder, follow manufacturer safety recommendations regarding minimum overlap. If not available, use the following guidelines: up to 36 feet- 3 foot overlap, 36 to 48 feet-4 foot overlap.
Do not step on cross bracing that is not intended for climbing.
Stepladders must be fully opened and locked when in use.
Ladders must be inspected prior to use.
Ladders with missing or damaged feet shall not be used.
The ladder must be placed in a position that will not require the user to lean or over extend their body past the side rails.
If the ladder needs to be adjusted in position or placement, the user must fully descend to make the required adjustments.
Planks shall not be used on ladders to create work platforms. Ladders shall not be used in the horizontal position as a platform, runway or scaffold.
Ladders shall be labeled as being designed and manufactured in accordance with the ANSI A-14.2 requirements.

Scaffold User Safety

Ladders shall be used for access to scaffold platforms. Scaffold rails or braces may only be used if specifically designed by the manufacturer as an access ladder.
Scaffold boards shall not be used as skips, ramps, runways, workbenches or any other purpose other than scaffold planking.
The safe working load on a scaffold shall not be exceeded.

Brick, tile, block or similar material may not be stacked higher than 24 inches on a scaffold deck.
Employees should never use scaffold handrails or braces as an attachment point for rigging equipment.
Workers shall not stand on any object such as stools, buckets or ladders to increase reach when on a scaffold.
Only scaffolds that are complete and tagged safe for use may be accessed.
Always use a safety harness when working on scaffolds unless other fall protection measures are implemented and maintained.
Report any damage to scaffolds immediately to the supervisor. Do not use damaged scaffolds.
Scaffolds are to be altered by scaffolding contractor only.
You are not permitted to ride on scaffolds being moved by other employees ("skateboarding"). Secure or remove all tools and materials before moving scaffold.
Always use guardrails on all scaffolds regardless of height.
Use only sound planking approved for scaffolding for scaffold decking and ensure the planks are secured to prevent shifting.
Always apply caster brakes when scaffolds are stationary.
At least two people are required to move rolling towers.
Do not use planks or guard rails as a temporary means of obtaining greater height.
Be aware of the objects below you. Move or cover sharp objects.

Aerial Work Platforms (Scissor and Boom Lifts)

Only authorized (those employees that have been properly trained and certified) employees shall operate aerial work platforms.
Aerial work platforms shall not be modified or altered without the modification of alterations being approved and certified in writing by the manufacturer.
Aerial work platforms shall be inspected prior to each use. Aerial work platforms that are not in proper operating condition shall be removed from service until repaired. A warning tag stating "DO NOT USE" shall be attached to the control panel in the platform.
Employees shall always stand firmly on the floor of the platform. Do not sit, climb or stand on the railing, install planking, use ladders or other devices to gain additional height.
When operating aerial work platforms, fall protection in the form of a full body harness equipped with shock-absorbing lanyard shall be worn when the manufacturer instructions recommend such use and an approved anchorage point is provided as part of the platform.
Stay within the manufacturer's load limits and angle limits for the lift.
When moving a man lift/boom lift, the boom should be in line with the direction of travel.
Aerial work platforms shall not be used as a fork truck to raise and/or lower material.
Aerial work platforms shall only be used on level surfaces that are capable of supporting the weight of the lift and its intended load.
Always be aware of overhead obstructions that could cause injury when raising the lift.
Identify overhead power lines and maintain minimum 20 feet clearance.
Ensure that safety chains and gates at platform access areas are properly secured.
Employees shall not tamper with and/or bypass safety mechanisms/devices.
Never move a scissor lift while the platform is in the elevated/extended position. The scissor lift platform must be lowered to its lowest position before lift can be moved.
Never place tools, cords, parts of your body or any object in between the scissors on the lift.

Forklift Truck Safety

Only properly trained and authorized drivers are permitted to operate forklift trucks. Safety belts MUST be worn at all times when in the operator's seat.
Inspect forklifts prior to using them. Inspect all hydraulic lines, cables, lights, tire conditions, audible devices (horn, reverse alarm) and correct defects or damaged parts. Immediately report to your supervisor and obvious defects or required repairs.
Do not overload the forklift trucks. Adhere to manufacturer's load chart that must be posted in the cab of the forklift truck.

Always use the proper size pallet with load properly secured. Position loads evenly on the forks for proper balance, utilizing the maximum possible fork width spacing.
Never elevate a load with the forklift truck tilted to one side.
Do not permit anyone to stand between or under elevated forks.
Keep hands and feet out of the mast assembly.
Do not elevate the load with the mast tilted forward.
Carry loads as close to the floor/ground as possible.
Keep the load against the backrest, with the mast tilted backwards.
Keep your forklift truck under control at all times. Unsafe driving and horseplay are prohibited while operating forklift trucks.
Go slow and sound the horn at corners.
Avoid running over loose objects.
Always watch load and mast for overhead and side clearances.
Keep hands and feet inside the forklift truck.
Watch that the rear end swing does not contact persons or materials.
For better vision with bulky loads, drive backwards.
Always drive on a ramp with the load facing uphill.
Do not use the forklift truck as a personal lift unless personnel lift basket is issued. Raise and lower personnel in baskets no faster than 2 feet per second. Operator must be at the controls at all times when personnel are in the lift basket.
Do not carry passengers.
Shut off your forklift truck when leaving it unattended.
No smoking while refueling.
Always look before backing up.
Forklift truck shall not be driven up to a person in front of a bench or other fixed object.
Know the rated capacity of the forklift truck you are operating and do not exceed its rated capacity.
Shut off the propane tank, remove the tank from forklift and secure outside of the building in the area provided at the end of the last working shift.

Lockout/Tagout Safety

Notify all affected employees that a lockout/tagout is required.
If the equipment is operating, shut it down by the normal stopping procedure (depress stop button, open toggle switch, etc.)
Operate the switch, valve or other energy isolating devices so that the energy source(s) (electrical, mechanical, hydraulic, etc.) is disconnected or isolated from the equipment. Stored energy, such as that in capacitors, springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas or water pressure, etc., must also be dissipated or restrained by methods such as grounding, repositioning, blocking, bleeding down, etc.
Lockout energy isolation devices with an individual lock.
After ensuring that no employees are exposed and as a check of having disconnected the energy sources, operate the push button or other normal operating controls to make certain the equipment will not operate. Caution - return operating controls to the neutral position after the test.
The equipment is now locked/tagged out. Install red lockout tag on operating controls.
After work on equipment is complete and the equipment is ready for testing or normal operation, check the equipment to see that all cover plates and safety devices have been reinstalled.
When the equipment is clear, remove all locks and tags. The energy isolating devices may be operated to restore energy to the equipment.

General Shop Machinery and Equipment Safety

Never operate, service, repair or adjust and machinery without proper instructions from your supervisor and without reading and understanding the instruction manual.
Do not remove or modify guards and/or other safety devices at any time.
If it is necessary to remove a guard for service, be sure to lock or block out the machinery prior to removing the guard. Replace the guard before unlocking or unblocking the equipment.

Report all missing guards promptly to a supervisor.
Check to see if guards and other protective devices are properly adjusted. Do not operate machine until it is properly guarded.
Do not repair or adjust machinery while in operation. Oiling of moving parts is also prohibited except on equipment that is designed or fitted with safeguards to protect the employee.
Follow the lockout/tagout procedure for all machinery and equipment prior to cleaning or repairing.
Remove and chuck keys prior to operating equipment.
Do not stand, sit or lean on any stationary or moving part of any machine during operation.
Only one qualified operator controls the operations of the machine.

Automated Punch Safety

Keep clear of the machine during operation. The carriage and the table move rapidly in both operation directions.
Do not touch the hydraulic unit - the unit can become hot enough to cause serious contact burns.
When working with an oversized worksheet or when zero-returning the table after automatic worksheet repositioning, take precautions because the worksheet may thrust out from the machine.
Whenever work must be down inside the turret head or on the table for a tooling change or scrap removal, be sure to turn the TOOL CHANGE switch to ON and/or press one of the STOP buttons before starting work.
Do not modify the control circuit or machine parts.
Clear the area around the machine table, particularly behind the machine, or people and obstacles before starting the machine.
Stop the machine instantly and determine the cause if it does not operate properly.
Inspect the machine and perform maintenance regularly to ensure trouble-free operation.
Only one qualified operator controls machine operations

Press Brake Safety

Be sure you know your press brake capacity, controls, operating modes and safeguarding.
Know and understand the job you are to perform, material placement, feeding and movement of material being formed.
Never place your hands in the die area.
Always cycle the press brake at least twice with the part in the dies before each shift and each job.
Keep the die area free of all unnecessary materials and tools.
Do not hand or place tools through the opening during any downward movement of the ram.
Light curtains, if available, are to be on and effective at all times.
Company provided tongs are available for forming parts that would otherwise require hands to be placed close to the point of operation (die opening). Use the tongs.
Make certain all persons, including you, are clear of machine and material movement before operating.
When you shut down the press brake at the end of the work operation or at the end of the shift, place ram at bottom of stroke or block under ram, turn controls OFF, turn power OFF.
Do not operate the press brake from behind the point of operation.
Always operate the press brake with the DOWN STOP ON.
Do not form off the end of the press brake to avoid light curtain.
All adjustments behind the ram opening must be made from the rear or with a tool that does not allow any part of your body to pass through the ram opening.
Parts should be inserted into the point of operation at the down stop position of the ram, with that position being a maximum of ¼ inch above material thickness. Your supervisor must approve any exception to this policy in advance.
Set the ram at the bottom of the stroke when leaving the press brake unattended.
Select die length as short as possible for the part being formed.
If a helper is required behind the press to prevent part from back breaking, he/she must maintain a minimum distance of two feet from the point of operation.
Only one qualified operator controls machine operation.

Shear Safety Rules

Never place any part of your body at the point of operation (under the hold down or the knife bar) or under the material being sheared.

Never operate the machine without pinch points guarded or without the point of operation guards or barriers installed at a minimum clearance.
Never place tools or scrap materials on the shear bed.
Always use the company provided tongs to position or remove small pieces.
Keep rear of the shear clear of scrap materials.
Shut the shear off at the end of the work operation and at the end of the shift.
Only one qualified operator controls machine operations.

Time Saver Conveyor Safety

Do not place hands or fingers between product and conveyor belt. Hands may become entrapped and pulled into machine. Do not wear gloves when feeding the machine.
Keep away from revolving rolls and conveyor belts.
Always feed product with care and never allow piece parts to overlap or ride on top of each other - kick out or product jam may occur.
Do not stand in line with the product flow. Stay out of the path of a product kick-out.
Adjust belt clearance setting for the correct material thickness.
Pinch rolls must always firmly hold piece parts being sanded onto feed conveyor, or kick-out may be experienced.
Light metal (aluminum, magnesium, etc.) swarf and sludge may be combustible. Handle with care. These materials present a hazard of fire or explosion.
Clean your sander filter daily. Excess swarf and sludge are potential fuel for a fire.
Keep sparks and flames (smoking, welding, etc.) at least 20 feet from sander.
Only one qualified operator controls machine operations.
Use receiving table with backstop in place.

Vertical and Horizontal Band Saw Safety

Always close saw wheel doors before telescoping band or starting the band in motion.
Make sure that saw band guard on post is adjusted as close to the work piece as possible and locked in place.
Check coolant lines for loose connections. Avoid splashing coolant.
If a small work piece is to be sawed - use a push stick.
Only one qualified operator controls the operations of the machine.
Never place hands directly behind the blade.

Welding and Cutting Safety

ARC WELDING SAFETY - Arc welding safety rules consist of the following:

- Make sure welding equipment is installed properly and grounded and is in good working condition.
- Always wear proper eye protection when welding or cutting.
- Always wear protective clothing suitable for welding.
- Keep your work area clean and free of hazards. Make sure that no flammable, volatile or explosive materials are in or near the work area.
- Do not weld in confined spaces without special precautions and/or supervisor's authorization.
- Do not weld on containers that have held combustibles without special precautions and/or supervisor's authorization.
- Use mechanical exhaust at the point of welding when welding lead, cadmium, chromium, manganese, brass, bronze, zinc or galvanized metals.
- Make sure all electrical connections are tight and insulated. Do not use cables with frayed, cracked or bare sports in the insulation.
- When the electrode holder or welding torch is not in use, hang it on brackets provided. Never let it touch a compressed gas cylinder.
- Dispose of electrode holder and wire stubs in proper container since stubs and rods on the floor are a safety hazard.
- Use weld curtains to shield others from the light rays produced by your arc.
- Keep you leads orderly and out of walkways. Suspend them whenever possible.
- Do not weld if your leads or machine is in or near water.
- Make sure a portable fire extinguisher is nearby.

RESISTANCE WELDING SAFETY - Resistance welding safety rules consist of the following:

- Make sure your resistance welding equipment is installed properly, grounded and in good working condition.
- Always wear protective clothing suitable for welding.
- Always wear proper eye and hand protection when operating the welding equipment.
- Keep your work area clean and free of hazards.
- Keep your fingers and hands clear of electrodes.
- Do not touch the weld spot until it has had time to cool.
- Position weld screens to protect others.

OXY-FUEL CUTTING AND WELDING SAFETY - Oxy-fuel cutting and welding safety rules consist of the following:

- Make sure that all of your gas welding equipment is installed properly and is in good working condition. Make sure that all connections are tight before lighting the torch. Do not use the flame to inspect for tight joints. Use a soap solution to detect leaks.
- Always wear protective clothing suitable for welding, brazing, soldering or flame cutting.
- Always wear proper eye protection when welding, brazing, soldering or flame cutting.
- Keep your work area clean and free of hazards. Flame cutting sparks can travel up to 30-40 feet. Do not allow flame cut sparks to hit hoses, regulators or cylinders.
- Handle all compressed gas cylinders with extreme care. Keep caps on when not in use.
- Make sure that compressed gas cylinders are secured to the equipment carriage, wall or other structural supports.
- Store compressed gas cylinders in a safe place with good ventilation. Acetylene cylinders and oxygen cylinders should be kept at least 20 feet apart.
- When compressed gas cylinders or fuel gas cylinders are empty, close the valve, install the cap and return to correct bottle storage area.
- Use oxygen, acetylene or other fuel gases with only the appropriate torches and tips.
- Oxygen should not be used for “AIR” in any way.
- Never use acetylene at a pressure in excess of 15 psi. Higher pressure can cause an explosion.
- Never use oil, grease or any other material on any apparatus or thread fitting in the oxyacetylene or oxyfuel gas system. Oil and grease in contact with oxygen will cause spontaneous combustion.
- Do not turn valve tee handle using excessive force.
- When assembling apparatus, crack gas cylinder valve before attaching regulators. This blows out accumulated foreign material. Make sure all threaded fittings are clean and tight.
- Always use the correct sequence and technique for assembling and lighting the torch.
- Always use the correct sequence and technique for shutting off a torch.
- Use mechanical exhaust at the point of welding when welding lead, cadmium, chromium, manganese, brass, bronze, zinc or galvanized metals.
- Do not weld in confined spaces without special precautions and/or supervisor’s authorization.
- Do not weld on containers that have held combustibles without special precautions and/or supervisor’s authorization.
- Use weld curtains to shield others from the light rays produced by your gas welding.
- Handle all compressed gas cylinders with extreme care. Replace protective caps when the cylinder is not in use.
- Make sure that compressed gas cylinders are secured to the equipment carriage, wall or other structural supports.
- When compressed gas cylinders are empty, close the valve, install the cap and return to correct bottle storage area.
- Make sure that all compressed gas connections are tight and check for leaks. Do not use hoses that are frayed or cracked.

SHMINA
BUILDING CONTRACTORS

VERIFICATION OF RECEIPT CODE OF SAFE WORK PRACTICES

I have received a copy of the Code of Safe Work Practices "General Safety Rules," which is a part of A.Z. Shmina, Inc. Safety Program. I understand it is my responsibility to comply with all the rules set forth in this document, and I agree to support the Safety Program to the best of my ability.

The rules and work practices contained in within this document are not intended to be the only and all- inclusive guideline for each category for work activity. Safety procedures and guidelines for specific categories of work activity are contained within the Safety and Health Manual. These procedures and guidelines should be reviewed and followed in addition to the safety rules and safe work practices contained in the Code of Safe Work Practices.

Employee Name (Print): _____

Signature: _____

Date: _____

Return this form to your supervisor after completion.

CONCRETE (CAST-IN-PLACE)

All equipment and materials used in concrete construction and masonry work shall meet the applicable requirements as prescribed in ANSI A10.9 most recent version, "Safety Requirements for Concrete Construction and Masonry Work".

CONFINED SPACE ENTRY

Contractor shall develop an entry procedure to be used when Contractor's employees are required to enter confined areas or spaces. Confined space entry procedures will conform to OSHA 1910.146 and the Owner's requirements.
A confined space entry permit must be completed and posted at the entrance to the confined area.
Documentation of appropriate formal training for all involved in the confined space activity (entrants, attendants, supervisors and rescue personnel) shall be submitted to A.Z. Shmina, Inc. for approval prior to any entry.

**CRANE SAFETY – GENERAL

Responsibility

Responsible Manager - The responsible manager shall designate a Competent Person to inspect cranes to ensure safe operating condition.

Competent Person - The designated Competent Person shall ensure that all deficiencies are repaired or defective parts replaced before any crane, hoist or lifting device is used. The Competent Person shall bring in a fully qualified person (manufacturer's representative or licensed professional engineer) to perform the annual inspections on all cranes, hoists and lifting equipment.

Operators - Operators shall inspect all equipment and gear before each use and shall not use equipment that fails the inspection. All damage to the rig as well as crane caused damage to structures or other equipment shall be reported to the Competent Person as soon as possible. In addition, operators are responsible for performing:

- Maintaining the operating license for every rig operated.
- Never attempt to handle any load that the machine may not be able to carry safely until a supervisor is consulted.
- Report all physical problems (illness, injuries or any condition that could interfere with safe operation) to the supervisor before beginning crane, hoist or lifting operations.
- Secure all equipment when leaving the machine, during maintenance or when repairs are being made (setting brake, securing boom, lowering bucket, removing drive mechanisms from gear, and/or any other actions to prevent movement of the machine during repair/maintenance).

Riggers - Riggers have joint responsibility with crane operators to secure all hitches and remove all loose material before loads are moved or lifted and shall take the following stops to ensure a safe operation:

- DO NOT USE DAMAGED EQUIPMENT
- Check all hardware, equipment, tackle and slings before use.
- Destroy defective equipment.
- Do not try to lengthen or repair damaged load chain.

Crane Operators - Crane operators shall be licensed for the rig they are operating and shall always take the necessary precautions to ensure their safety and the safety of others - including shutting down operations if necessary. Crane operators shall not eat, read, smoke or perform any other similar activity while operating the equipment and shall not operate the equipment when physically unfit or ill. Outdoor cranes and lifting equipment shall not be operated in high winds. The rig shall be secured whenever it is not in use.

Operating Manual

The operating manual for the rig shall be in the cab at all times

Cranes, Hoists and Lifting Devices

The rated load capability of all cranes, hoists and lifting devices shall be visibly marked on each side of the cab or boom and must never be exceeded. Operators shall lift/hoist only those loads whose weight is known. Outriggers on mobile equipment must be used at all times when lifting. Workers shall be warned of all overhead crane work before it begins. Work will be performed on level ground or on cribbing/matting that will support the load. Loads shall not be swung over workers and workers shall not work under overhead loads. Overhead crane electrical equipment shall not exceed 600 volts. Pendant pushbutton controls for overhead cranes shall not exceed 150 volts AC or 300 volts DC. Controls shall fail in the "safe" or neutral position and return to the off position when released. Guards for all electrical equipment in

overhead cranes shall have the capacity to support a 200 pound imposed load (i.e. a person). The crane operator or supervisor shall report all damage done to any part of a structure by the crane's operation to the Competent Person for correction as soon as reasonable possible.

Aerial Baskets for Electrical Work

All equipment using hydraulically operated booms to lift or raise aerial baskets or buckets in which employees work is considered aerial basket equipment. Users shall comply with the following precautions:

- When using the aerial basket as an insulating device, do not perform any work in which materials, tools or equipment could bypass any part of the insulation system.
- Do not use electric drills, electric soldering irons or similar corded tools. Use only hydraulic tools with approved insulated hoses that operate from the truck tools system of other hydraulic power source. Use only insulated tools on energized conductors and equipment.
- Gasoline powered chain saws may be used from an aerial basket but must be started and stopped outside of the aerial basket.
- Cover energized equipment with protective devices before allowing the aerial basket or boom to rest against it.
- When working from a vehicle boom, lower the boom insulator, ground the vehicle with the grounding cable supplied with the vehicle or isolate and barricade vehicle.
- Always use safety lanyards.
- DO NOT: move the vehicle while boom is elevated, stand on the rim of the basket, use a ladder in the basket or wear/use climbers in the basket.
- Ground-level controls shall be operated ONLY at the request of the person in the basket, except in emergencies.

Signals

Operators shall use a signal or sound warning to alert other workers to the presence of overhead loads. When using hand signals, the following should be considered:

- Each project and/or facility shall establish site-specific hand signals.
- Hand signal information shall be posted prominently in appropriate locations
- Hand signals shall be given to the operator by a clearly trained and designated person with the ability to see the load.

Load Control

The operator has the responsibility for all safety matters concerning the equipment. The operator and rigger have joint responsibility to secure all hitches and remove loose materials before loads are moved/lifted. Operators and riggers shall observe the following precautions:

- Suspended loads shall be controlled with tag lines whenever possible. Never use hands to control suspended loads and never leave a suspended load unattended.
- The swing radius of the counterweight must be barricaded at all times.
- Riggers must remain alert to shifting loads while hooking on and be alert to pinch points, keeping hands and feet clear of the sling while it is being tightened.
- Never guide lines by hand or foot onto drums - always use a stick or iron bar.
- The sling angle shall be kept over 45°. If this is not possible, consult with the Competent Person before proceeding with the lift.
- Gantry and overhead cranes shall have power control braking systems capable of maintaining safe lowering speeds of rated loads.
- Trolleys and bridges shall have effective braking systems.
- A safety line must secure all persons working out of a cage being hoisted or supported by a crane.

Booms

All booms must be kept at least 20 feet from high voltage lines unless the lines have been de-energized or effectively guarded to prevent accidental contact. Booms shall be marked with a load capacity that shall not be exceeded. Never subject booms to side loads. Telescopic boom cranes manufactured after February 28, 1992, shall be equipped with a device which automatically prevents damage from contact between the load block, overhaul ball, or similar component, and the boom tip (Anti-Two-Block).

Critical Lift Plan

A written procedure or lift plan shall be prepared prior to any heavy or otherwise critical lift. At a minimum, the written procedure will include:

- Plot plan showing entry of lifting equipment into the area, final location and working radius of lifting equipment, location of entry for items to be lifted and position of items during lift.
- Include the calculated weight of load to be lifted, sizes and certified ratings of all lifting equipment (cranes, hoists, cables, slings, blocks, deadmen, etc.)
- Include certifications/licenses for all operators and equipment.

Inspections of Cranes, Hoists, Aerial Baskets and Lifting Devices

The operator shall inspect the entire rig and equipment before each use to make adjustments to the mechanisms that could interfere with operations and ensure that all parts of the crane or hoisting system are properly operational. Include:

- Loose gears
- Trolley or bridge travel
- Clear runways
- Brakes
- Rings
- Limit switches
- Cables and similar items
- Hoisting and lowering
- Keys
- Railings
- Warning bells/alarms
- Chain drives
- Sheaves and/or drums

The following inspections shall be performed prior to crane use:

- Ensure no deterioration of leaks in lines, tanks, valves, drain pumps and other parts of the air of hydraulic system.
- Ensure that electrical testing is done for the dielectric integrity of the boom, basket and control assembly for insulating aerial basket equipment.
- Ensure that lifting hooks are not deformed, do not show excessive wear and are not cracked.
- Ensure the hoisting or load chains, including end connections, have no excessive wear, twist or distorted links that interfere with proper function or are stretched beyond the manufacturer's recommendations.

MonthlyInspections - shall be conducted as follows:

- Inspect cranes using Crane Inspection Record.
- Inspect hooks using Hook Replacement Criteria. The inspector's signature, hook serial number and date of the inspection shall be recorded.
- The load chain shall be inspected. The inspector's signature, chain identifier and date of inspection shall be recorded.
- A visual inspection of the supporting structure shall be conducted.

Annual Inspections - a qualified, licensed professional engineer or manufacturer's representative selected by the facility's Competent Person shall perform annual inspections. The inspector shall file a record of the results at the facility with the facility's Competent Person and Safety Representative.

Return-to-Service Inspections - shall be performed when a crane has been idle for an extended period of time. The crane shall be inspected prior to being returned to service. This inspection shall consider the following:

- If the crane is idle one to six months, perform monthly inspection.
- If equipped, a wire rope inspection shall be performed for rope diameter, broken outside wires, worn outside wires and the condition of end connections as well as kinking, crushing, cutting or unstranding.
- If the crane is idle for over six months, the facility's Competent Person shall perform all checks contained in the annual inspection. If the annual inspection is out-of-date, it shall be performed at that time per the annual inspection requirements.

For rented or non-company owned cranes, crane owners shall provide evidence of annual inspection by a third-party inspection agency not under the control or ownership of the crane owner and approved by the Safety Manager.

- All repairs and adjustments noted on the inspection shall be corrected prior to next use.
- Receipt of third part inspection shall be submitted and reviewed prior to use on the jobsite or project.

Training

Operators shall be licensed to operate the rigs to which they are assigned with the license filed at the facility. Operators shall be trained in the facility-specific accepted hand signals for crane and hoisting equipment operation.

Riggers shall be trained in the safe handling of slings, hitches, ropes, suspended loads and any other handling equipment as well as accepted hand signals for crane and hoisting equipment operation.

Recordkeeping

All current operators' licenses shall be filed at the facility.

Operator and rigger training records shall be retained at the facility for the duration of their employment in that capacity.

The following inspection records shall be retained for the previous calendar year and the current year:

- Monthly inspections for crane and hoists.
- Monthly hook inspections.
- Annual hoist, crane and insulated aerial basket inspections.

CRANE SAFETY AND RIGGING

Contractors whose activities require the use of cranes shall be responsible for their proper set up and operation, and shall advise A.Z. Shmina, Inc. prior to the arrival on-site.

The Contractor shall supply A.Z. Shmina, Inc. with documented evidence of their competent person's training.

Inspection

Contractors shall provide A.Z. Shmina, Inc. evidence of annual inspection by a third-party inspection agency not under the control or ownership of the crane owner and approved by the A.Z. Shmina, Inc. Safety Representative and/or Project Manager. All repairs and adjustments noted on the inspection shall be corrected prior to next use.

This applies to power-operated equipment used in construction that can hoist, lower and horizontally move a suspended load. Such equipment includes, but is not limited to: articulating cranes (such as knuckle-boom cranes), crawler cranes, floating cranes, cranes on barges, locomotive cranes, mobile cranes (such as wheel-mounted, rough-terrain, all-terrain, commercial truck-mounted, and boomtruck cranes), multi-purpose machines when configured to hoist and lower (by means of a winch or hook) and horizontally move a suspended load; industrial cranes (such as carry-deck cranes), dedicated pile drivers, service/mechanic trucks with a hoisting device, a crane on a monorail, tower cranes (such as fixed jib "hammerhead" boom, luffing boom and self-erecting), pedestal cranes, portal cranes, overhead and gantry cranes, straddle cranes, side-boom tractors, derricks, and variations of such equipment.

Daily and Pre-Shift Inspections

Daily and pre-shift inspections shall be performed by a competent person designated by the contractor in accordance with the manufacturer's recommendation and ANSI B30 Standard for the type of crane being inspected and the most current version. This inspection shall be completed prior to each shift starting work.

Operation

This certification will be for each crane and lifting device and associated rigging equipment brought onto the project. If one year has elapsed since the last inspection, or if the crane or its associated rigging has sustained any incident which may have resulted in damage, the crane and its associated rigging shall be fully re-inspected with proof of inspection provided to A.Z. Shmina, Inc.

No work shall proceed without evidence of a current annual inspection meeting A.Z. Shmina, Inc. requirements. No claims will be accepted for losses sustained by the Contractor for delays caused by failure to comply with these requirements.

Cranes and other powered lifting devices shall be inspected by the operator:

…After set-up and prior to initial lift.

…Before each shift.

…After every malfunction.

OPERATIONAL AIDS

Anti Two-Blocking Device

Telescopic boom cranes manufactured after February 28, 1992, shall be equipped with a device which automatically prevents damage from contact between the load block, overhaul ball, or similar component, and the boom tip (or fixed upper block or similar component). The device(s) must prevent such damage at all points where two-blocking could occur. *Temporary alternative measures:* Clearly mark the cable (so that it can easily be seen by the operator) at a point

that will give the operator sufficient time to stop the hoist to prevent two-blocking, and use a spotter when extending the boom.

Lattice Boom Cranes

Lattice boom cranes manufactured after February 28, 1992, shall be equipped with a device that either automatically prevents damage and load failure from contact between the load block, overhaul ball, or similar component, and the boom tip (or fixed upper block or similar component), or warns the operator in time for the operator to prevent two-blocking. The device(s) must prevent such damage/failure or provide adequate warning for all points where two-blocking could occur.

Lattice boom cranes, and derricks, manufactured one year after the effective date of this standard shall be equipped with a device which automatically prevents damage and load failure from contact between the load block, overhaul ball, or similar component, and the boom tip (or fixed upper block or similar component). The device(s) must prevent such damage/failure at all points where two-blocking could occur.

Exception: The requirements do not apply to such lattice boom equipment when used for dragline, clamshell (grapple), magnet, drop ball, container handling, concrete bucket, marine operations, and pile driving work.

Temporary Alternative Measures: Clearly mark the cable (so that is can easily be seen by the operator) at a point that will give the operator sufficient time to stop the hoist to prevent two-blocking, or use a spotter.

Special Procedures

A lift procedure shall be developed by the Contractor for the following and submitted to A.Z. Shmina, Inc. prior to the lift taking place:

- Critical Lift (defined as when lifting a load where the weights are at or over 50% of the rated capacity of the crane and rigging as determined by the manufacturer)
- Multi-Crane Lift
- 100 Tons or greater Lift
- Any application that deviates from the manufacturer's recommendations
- When special or unique hazards are under or adjacent to the load at any time during the lift
- When A.Z. Shmina, Inc .determines such a procedure is necessary

The lift procedure will include a Hazard Analysis developed by the Contractor and submitted to A.Z. Shmina, Inc. along with Pre-Lift Meetings, which shall be held at 30 days prior to the lift, the day prior to the lift and immediately prior to the lift with the actual crew doing the lift.

All concerned parties must be present for the meetings with minutes of the meeting recorded by A.Z. Shmina, Inc.

The lift procedure will include documentation of calculations which incorporates weight deductions of all rigging equipment, a load chart for the crane(s) that will be used, a project plan and layout sheet which will include the path of travel of the load, swing radius protection and any other necessary factors.

The crane operator(s) shall be proficient in the operation of the crane(s) and licensed in the State/City where the operation is being performed. Certification by the National Commission for the Certification of Crane Operators (NCCCO) is required.

Record Keeping

All records pertaining to crane inspections shall be kept with the crane or in the trade contractor's project field office.

If during any safety inspection, the operator or supervisor cannot produce the required crane inspection sheets, the crane shall be shut down as soon as possible and shall be inspected.

Where crane operators are required to be licensed by the State, where the project is being built, they shall have a current license and provide by a copy to A.Z. Shmina, Inc. when requested.

Duplicates of certification records shall be maintained on the project by the Contractor and made available to A.Z. Shmina, Inc. upon request. The Contractor shall provide evidence of competency of the operator to A.Z. Shmina, Inc.

Rigging

A competent rigger appointed by the Contractor shall inspect all rigging equipment. Inspection shall be done and documented prior to each shift starting work.

All defective or damaged rigging equipment shall be immediately removed from the project.

Chain slings are not permitted to be used for any lifting operation unless specifically designed for a unique application.

Tag lines shall be used on all loads.

DEMOBILIZATION

The Project Superintendent and each contractor shall organize and schedule the orderly removal of their project offices and trailer facilities, the termination of temporary utility services, the transfer of telephone services to their offices, and the forwarding of mail.

The project shall be left in the conditions specified by the contract documents.

The Project Superintendent shall inspect the project with the Owner to verify all permanent security and safety devices are in place and performing their intended function.

DISCIPLINE – ENFORCEMENT

All contractors and suppliers shall participate in the Safety Program. Should an eminent dangerous condition be discovered, all work in the area of danger will be stopped until corrective actions have been implemented.

Should A.Z. Shmina, Inc. find Contractor work areas or individuals being or acting in non-compliance with OSHA or the Safety Program, A.Z. Shmina, Inc. shall have the authority to order immediate corrective action of the non-compliant occurrence.

All costs of corrective action shall be paid by the trade contractor deemed responsible.

If more than one contractor is deemed responsible, A.Z. Shmina, Inc. division of responsibility shall be final.

Nothing contained herein, however, shall serve to relieve the Contractor of their liabilities and/or obligations under OSHA as well as other applicable Federal, State and Local requirements as well as the Safety Program.

A.Z. Shmina, Inc. may withhold payment to Contractor(s) for failure to follow the Safety Program policies and procedures.

A.Z. Shmina, Inc. shall issue a written, 24-hour notice in this regard requiring immediate response by the contractor.

Repeated violations or lack of cooperation with regard to the Safety Program by employees of a contractor will indicate non-compliance with provisions included in the contract and may be reason for the employee to be barred from the project and/or termination of the Contractor's contract.

At orientation, new employees are given their first warning: These are the rules; if you fail to abide by them, you will receive a citation.

1st Citations: Notice is sent to employer. Employee must come in and see A.Z. Shmina, Inc. to review violation so we can be sure the employee knows how serious this citation is and what corrective action must be taken. A fine to the Contractor will be imposed.

2nd Citations: The individual will be removed from the property. A fine to the Contractor will be imposed.

This constitutes three (3) warnings. Without delay, the individual will be banned from further access to the project.

'Immediate Removal from the Property' Citations will result when:

- … Any employee, supervisor or manager exposes themselves or others to eminent loss of life.
- … Any employee, supervisor or manager openly exhibits disregard, defiance or disrespect for the Safety Program.
- … Any employee, supervisor or manager knowingly falsifies any investigative document or testimony involved in an investigation.
- … Violent physical encounters (fighting) occur. All individuals involved in the incident are subject to removal.
- … Threats are made against any safety personnel performing their duties.
- … Theft or destruction of property occurs.
- … Any employee, supervisor or manager consumes, possesses, distributes or is under the influence of alcohol and/or drugs.

Other Citations: Violations of safety, traffic, housekeeping or material storage rules.

Dispute Resolution

A.Z. Shmina, Inc. shall have the final decision in the resolution of all disputes involving the Safety Program.

DISCIPLINE – FINES

Fines (Refer to Appendix A: Table of Fines)

The fines **are** **not** to be collected from the individual violator.

A.Z. Shmina, Inc.'s Project Manager will collect them from the Owner of the respective company at the monthly safety meeting. This is to be paid by a separate check.

These funds will be used to fund a reward/incentive program for those who work and are safe individuals or groups. Any money remaining at the completion of the project will be donated on behalf of all workers and companies employed on the project to a local charity.

**DISCIPLINARY POLICY

All employees are required to abide by the provisions of our safety program. Any act found to be in noncompliance with OSHA or any policy, or procedure, within our safety program shall be considered a "Safety Violation". Violations of these requirements or failure to follow safety instructions will be grounds for disciplinary action. A.Z. Shmina, Inc. and site supervisors/management shall be responsible for the enforcement of the disciplinary policy.

A foreman or general foreman who knowingly or negligently permits a violation of this safety program, any safety laws, rules, regulations, company rules, policies or instructions which results, or could result in serious personal injury, property damage or damage to company equipment or a safety citation shall, after a complete investigation, be subject to disciplinary action appropriate for the severity of the violations. The following shall be considered minimums:

- 1st Instance - verbal warning with written documentation place in the employee's personnel file.
- 2nd Instance - results in the employee being placed on probation. Written documentation must be placed in the employee's personnel file.
- 3rd Instance - termination of employment.

All other employees who knowingly violate this safety program, any safety laws, rules, regulations, company rules, policies or instructions which results, or could result in serious personal injury, property damage or damage to company equipment or a safety citation shall, after a complete investigation, be subject to disciplinary action appropriate for the severity of the violations. The following shall be considered minimums:

- 1st Instance - verbal warning with written documentation place in the employee's personnel file.
- 2nd Instance - results in the employee being placed on probation. Written documentation must be placed in the employee's personnel file.
- 3rd Instance - termination of employment

This disciplinary procedure shall be used for the minimum enforcement levels. The severity of violations may be grounds for more severe action, such as longer suspensions or immediate termination/discharge of the employee.

DRUG DETECTION/ENFORCEMENT POLICY

A.Z. Shmina, Inc. prohibits the use, possession, distribution, or sale on the project premises, facilities, or work places of any of the following: alcoholic beverages, intoxicants, drugs and related drug paraphernalia.

Workers must not report for duty or perform work while under the influence of any drug, alcoholic beverage, or intoxicant. Workers on the project premises will be subject to search as provided herein. Applicants and workers will be required to consent to drug testing as provided herein.

This policy will apply where state law or regulation and/ or collective bargaining agreements allow.

Definitions

Alcohol-Ethyl (Ethanol) - references to use or possession of alcohol include the use of any beverage, mixture, or preparation containing alcohol.

Drug - any substance (other than alcohol), including prescription drugs, which may impair mental or motor function; including, but not limited to, any psychoactive substance, controlled substance, marijuana, or designer or simulated drugs. This definition does not apply to prescription drugs, which have been disclosed to A.Z. Shmina, Inc. and the Controlling Employer by the worker and are approved for use within prescription limits.

Employee - any individual, salaried or hourly, who actually performs work for a Controlling Employer on the project premises.

Controlling Employer - any individual or firm that provides workers to perform work on the project premises and is responsible for their hiring, advancement, payment, discipline, and termination, including the client, the architect, A.Z. Shmina, Inc., all contractors, all sub-tier contractors, all vendors, all suppliers, all material dealers, any other contractors, and any others coming on the project premises.

Applicant - any individual who is referred or makes application for employment on the project premises.

Project Premises - all parts of any office, work site, or other work location, including parking lots under the control of the client and/or A.Z. Shmina, Inc.
Testing Facilities - a laboratory where a specimen can be tested for drugs and alcohol within threshold limits according to standards established by the U. S. Department of Transportation and is certified by the U. S. Department of Health and Human Services (HHS) under the National Laboratory Certification Program (NLCP) or in the case of a foreign laboratory is approved for participation by the U.S. department of Transportation with respect to Part 40.
Contraband - substances/items/materials including but not limited to the following: drugs, alcohol, and drug paraphernalia.
Drug Paraphernalia - any article for the use, storage, or sale of drugs.
Accident - any event resulting in injury to a person or property to which the A.Z. Shmina, Inc. believes a worker contributed as a direct or indirect cause.
Incident - any event, which A.Z. Shmina, Inc. determines, has all the attributes of an accident, except that no harm was caused to personnel or property.
Tobacco Products - any article containing tobacco, including but not limited to cigars, cigarettes, pipe tobacco, snuff, and chewing tobacco.
Worker(s) - any individual, salaried or hourly, of any employer who will be performing work on the project premises.

Right to Search

A.Z. Shmina, Inc. reserves the right, upon reasonable cause, to search any personal effects, vehicles, lockers, baggage, lunch boxes, toolboxes, or other suspect item for contraband.
An individual who enters the project premises is deemed to consent to this safety procedure. Searches will be conducted on an "as needed" basis as determined after consultation with A.Z. Shmina, Inc. corporate management. There will be a worker representative and/or other witnesses, which may include law enforcement officers, to all searches conducted by A.Z. Shmina, Inc.
A worker who refuses to submit to a search as described in this policy is subject to disciplinary action, up to and including immediate discharge by the A.Z. Shmina, Inc. Contractors and/or workers who refuse to submit to a search are subject to removal and denial of future access to the project premises.
A worker on the project premises, facility, or work place in possession of contraband is subject to disciplinary action, up to and including immediate termination by A.Z. Shmina, Inc. Contractors and/or workers who are in possession of contraband are subject to removal and denial of future access to the project premises.

Drug Detection Threshold Table

Drug, Drug Group or Drug Metabolites	Typical Detection Threshold, ng/ml
Amphetamines	300-1250
Cannabinoids (marijuana)	20-100
Cocaine metabolites	300
Opiates	300
Phencyclidine (PCP)	25-75
Benzodiazepine	200
Methadone	500
Phencyclidine	100
Propoxyphene	50

Prescription Drugs

Any worker using a prescription drug, which may impair mental or motor function, shall, as soon as possible, notify their supervisor and/or the Controlling Employer. For the safety of all workers, A.Z. Shmina, Inc. may direct the Controlling Employer to not permit the worker on the project premises until released as fit for duty by the prescribing physician. A.Z. Shmina, Inc. reserves the right to obtain a confirming medical opinion before allowing the worker to return to duty.

Worker Pre-Assignment Testing

All workers/subcontractors, salaried or hourly, who are hired, transferred or temporarily assigned to the project premises, shall be required to consent to drug testing prior to assuming project responsibilities. Controlling Employers shall certify to A.Z. Shmina, Inc. in writing on company letterhead signed by a Company Officer that their current workers have passed a drug test within the last three (3) months prior to assignment to working on the project premises or have been subject to a random drug/alcohol testing program which has tested a representative sample of at least twelve percent of the employer's workforce over the last year prior to commencing work on the project premises.

Worker Testing

After an accident or incident, A.Z. Shmina, Inc. will test all those involved, or request the Controlling Employer to test. A.Z. Shmina, Inc. will also test or request a test from the Controlling Employer, workers when a reasonable suspicion exists that the worker has been using drugs or alcohol. The maximum level of alcohol blood content shall not exceed 0.08 g/100 ml blood or equivalent.

Discipline and Rehabilitation

All subcontractors shall certify that they have a Drug Enforcement Policy which incorporates as a minimum the following requirements:

- When an applicant submits to pre-assignment testing and passes the required test, s/he will be eligible for further employment consideration.
- If the applicant fails the required test, s/he may reapply for employment consideration after a period of no less than sixty (60) calendar days have elapsed. A.Z. Shmina, Inc. or the Controlling Employer may waive this sixty-day waiting period if the applicant completes an acceptable drug/alcohol rehabilitation program and presents acceptable proof of completion of the program to A.Z. Shmina, Inc. or the Controlling Employer's personnel/safety office. An applicant who fails the second test will not be considered for employment at the project premises for a period of no less than one year.
- All workers who refuse to submit to a drug and alcohol test, or who fail to pass a drug and alcohol test will be removed from the project premises by A.Z. Shmina, Inc. or the Controlling Employer and will be referred to their personnel management for disciplinary action.

Financial Obligation of A.Z. Shmina, Inc. or the Controlling Employer

A.Z. Shmina, Inc. or the Controlling Employer will bear the cost of time, transportation, and testing for workers who are being given drug and alcohol tests.

Confidentiality

A.Z. Shmina, Inc. will take steps to maintain the confidentiality of information generated by the implementation and enforcement of this policy and these procedures. Disclosure will be made only in appropriate circumstances. A.Z. Shmina, Inc. or the Controlling Employer shall be responsible for maintaining the confidentiality of all information generated by the implementation and enforcement of this policy and these procedures for their own workers. A.Z. Shmina, Inc. shall have the right to audit compliance with this policy and these procedures by the Controlling Employer, which shall include access to this confidential information.

Training

Supervisors and management personnel will be trained to recognize appropriate symptoms and to administer the policy in a consistent, confidential, and intelligent manner.

Contractors and Suppliers

A.Z. Shmina, Inc. and all contractors will include the provisions of this policy and these procedures, or another acceptable program, in their contracts with contractors, suppliers, consultants, agents, and others involved in providing goods or services on the project premises, and will require that they do the same with respect to their lower-tier contractors, suppliers, etc.

Posting and Distribution

Significant sections of this policy and these procedures will be given to each applicant and worker upon request.

A warning notice will be posted in a conspicuous location on the project premises. This Minimum Drug Enforcement Policy will be included in each pre- bid and pre-construction meeting as well as an integral part of the project Safety plan and contract documents.

A.Z. Shmina, Inc. may revise and amend this policy and these procedures as required.

Procedures for Examination Post-Accident Screening

A supervisor is to accompany injured worker(s) or those involved in the accident or incident involving a worker to the clinic or medical facility. A Controlling Employer's supervisor will be required to accompany their injured worker(s) to the medical facility. Controlling Employers shall certify any worker(s) involved in an accident or incident tested negative for drugs and alcohol prior to allowing them to return to the project premises.

If the injured worker refuses to give a specimen of body fluid, the supervisor is to notify A.Z. Shmina, Inc. management. The worker is to be advised, again, that the refusal to submit to drug screening is a violation of the Project Safety Plan's drug, alcohol and other prohibited articles safety policy and that refusal will result in removal from the site.

Results of all drug screenings and analyses must remain strictly confidential.

Workers must report all injuries immediately to their supervisor, whether the injury requires medical treatment or first aid only. Late reporting may result in denial of a claim.

Random Testing Policy

Urine and/or blood drug screening analysis of workers and others on the project premises may be conducted on a random basis at periodic, unannounced intervals during the construction of the project. Controlling Employers must certify negative test results; otherwise worker shall not be permitted to return to the project premises.

ELECTRIC – TEMPORARY

All electrical work, installation and wire capacities shall be in accordance with the pertinent provisions of the National Electrical Code (most recent version), ANSI and OSHA standards.

All 120 volt, singe phase, 15 & 20 amp temporary power circuits (with the exception of temporary lighting) shall have ground fault circuit interrupters installed. In addition, all tools, cords and power sets shall have an assured equipment inspection program maintained on quarterly basis.

The color codes used for identifying inspected and tested equipment on this project are:

January, February, March	**White**
April, May, June	**Green**
July, August, September	**Red**
October, November, December	**Orange**

(NOTE: The cycle of colors is repeated for the following year)

Portable tools will have the appropriate color code affixed to the male (plug) end following inspection. Extension cords will have the appropriate color code affixed to both ends (plug and receptacle). The previous quarter's color code will be removed to avoid confusion.

When using permanent power, once established in new construction or in renovation work, Ground Fault Circuit Interrupters must be used in conjunction with the AEGC inspections.

All necessary open wiring must be made inaccessible to unauthorized employees or visitors and not be subject to damage. Open wiring in NOT acceptable for temporary lighting circuits.

Lighting on barricades, fences or sidewalk coverings shall be encased in metal raceway.

Temporary lighting must have guards to prevent accidental contact with the bulb except where the bulb is deeply recessed in the reflector.

Temporary lights shall not be suspended by the cord unless the fixture was specifically designed in that manner. Portable electric lighting used in moist or other hazardous locations such as drums, tanks, vessels, bins, bunkers, etc. shall be operated at a maximum of 12 volts (non-explosive).

All shop lighting and portable task lighting shall have a cover and guard installed when in use or available for use.

Extension cords used with portable tools must be a heavy-duty 3-wire type minimum 12ga. Flat extension cords are prohibited. Damaged electrical cords shall not be used.

All extension cords will be suspended seven feet (7') above finish floor or work platform.

Extension cords will not be fastened with staples, hung from nails, or suspended by non-insulated wire.

All non-current carrying parts of electrical equipment must be grounded or have an approved double-insulated setup. Grounded circuits must have enough capability to carry all currents likely to be imposed on it.

Contractor shall determine before operations start if there is any energized equipment or electrical circuit in the work area, which might have risk to the worker. Equipment and conductors that must be de-energized shall be identified to the A.Z. Shmina, Inc. who will arrange to de-energize the equipment under the Lockout/Tagout procedure/system.
Contractor shall use the project Lockout/Tagout procedure and strictly adhere to the use of this requirement. A.Z. Shmina, Inc. will monitor adherence to the procedure on a regular basis.
All temporary power panels shall have covers installed at all times. All open or exposed breaker spaces shall be adequately covered, and labeled.
All electrical equipment and wiring in hazardous locations must conform to the National Electrical Code standards. The frames of all cutting, welding (arc, heli-arc, gas-plasma-arc) machines shall be grounded.
Fish tapes or lines made of metal or any other conductive medium are prohibited. Nonconductive tapes and lines will be used in their place.
All temporary wiring shall be effectively grounded in accordance with the National Electrical Code (Articles 305 and 310).
All wiring used for temporary lighting shall be in accordance with the most recent NEC.
Electrical tie-ins shall be conducted only on de-energized (locked out/tagged out) systems.
If a condition makes this procedure impossible then a pre-task safety meeting with A.Z. Shmina, Inc. is required.
All such "live work" shall conform to NFPA 70E, most recent edition.

Defective Electrical Tools and Equipment

All electrical tools and extension cords found to be defective (Examples: missing or broken ground pins, exposed internal conductors) will immediately be rendered in-operative by cutting off the plug end or by immediately removing from the project.

**ELECTRICAL SAFETY – GENERAL

Detailed procedures cannot be written to cover every conceivable situation that may arise. In the absence of such procedures, when there is a question of safe working conditions or action, it shall be resolved before work begins and a job plan prepared. Knowledge in the specifics of this procedure in itself does not make a person qualified to work in proximity of energized or potentially energized exposed electrical parts. Work practices shall be established at each work area, which would include, at a minimum, the specific electrical safety concerns/activities referenced in this guideline.

Definitions

Alive or Live (Energized) - connected to a source of electrical energy. "Live" is often used in place of the term "current-carrying."
Bond - an electrical connection from one conductive element to another to minimize potential differences, provide conductivity for fault current or mitigate leakage current and electrolytic action.
Circuit Breaker - a device designed to open and close a circuit by non-automatic means and to open the circuit automatically on a predetermined over current without injury to itself when properly applied within its rating.
Dead (De-Energized) - free from electrical connection to a source of potential difference or electrical charge and not having a potential difference from earth.
Explosion Proof Apparatus - an apparatus enclosed in a case that is capable of withstanding an explosion of a specified gas or vapor and will not ignite a surrounding flammable atmosphere.
Fuse - an over current protective device with a circuit opening fusible section.
Ground - conductive body, usually the earth, to which an electric potential is referenced *or* a conductive connection by which an electric circuit or equipment is connected to reference ground *or* the connecting or establishment of a connection of an electric circuit or equipment to reference ground.
Ground Fault Circuit Interrupter (GFCI) - a device that interrupts the electric circuit to the load when a fault current to ground exceeds that required for operating the over current protective device of the supply circuit.
High Voltage - electrical current above 15,000 volts.
Insulated - separated from other conducting surfaces by a dielectric substance (including air space) offering a high resistance to the passage of current.
Low Voltage - electrical current from 0 to 600 volts.
Medium Voltage - electrical current from 601 to 15,000 volts.
Qualified Employee - a person who, through experience and/or training, is familiar with the electrical operation to be performed and the hazards involved.

Responsibility

Responsible Manager - The Responsible Manager shall identify tasks to be completed only by Qualified Employees and communicate specialized tasks to all employees.

Qualified Employees - Qualified Employees shall perform their work according to established safe work practices and procedures.

Safety Representative - The Safety Representative shall provide guidance on safe work practices and procedures.

PROCEDURE

**All electrical circuits shall be treated as live until their condition is known. Even low voltages shall be treated as dangerous. In addition, the following precautions shall be taken:

(1) All work on systems involving 600 volts or more shall be conducted by two persons and one of these must be a qualified electrician.

(2) Never overuse a circuit or oversize a circuit breaker

(3) Never enter a transformer bank/high yard enclosure except with a qualified electrician, and only when specifically authorized to enter.

(4) Conduct a tool count before beginning work and after work is completed on or around electrical equipment.

(5) All portable ladders shall have non-conductive side rails.

Rescue

When rescuing persons in contact with an electrical circuit, first disconnect the circuit, if possible, and ensure that rescuer is standing on a dry surface. Use a dry belt, coat, handkerchief, rope or other non-conducting material to loop over the victim's feet, hand or head and drag them away from the contact to safety. Immediately summon emergency medical services and then assess the condition of the victim and the need for CPR and first aid.

Work On or Near Exposed Energized Parts

It is the policy of A.Z. Shmina, Inc. that parts operating at 50 volts or above to which an employee may be exposed shall be de-energized before work is done on or near them, unless it can be demonstrated that de-energizing introduces additional or increased hazards. Additional or increased hazards would mean it would be a threat to human life and not merely the equipment or process - or they can demonstrate it is not feasible.

Before any work on or near exposed energized parts commences, all persons involved shall be briefed on the safety concerns and precautions regarding their work assignments. Whenever work conditions or methods change that could potentially compromise personnel safety, additional briefings shall be held.

Personnel performing work on exposed energized equipment and parts shall be qualified and have, at least, one other qualified person present, within either sight or sound, who is knowledgeable of the hazards in the work and applicable emergency procedures.

Electrical Testing and Measurement

Authorization to Perform Electrical Testing and Measurements

Employees are authorized to perform electrical testing and take electrical measurements only after they have met the following criteria:

- They have successfully completed an eight-hour electrical safety course approved by the safety department.
- They are familiar with the design and hazards related to the equipment to be tested.
- They have been deemed qualified to perform the testing or measurements by a supervisor qualified to perform electrical testing and measurements.
- Employees shall not perform any electrical testing or measurement that requires them to contact exposed energized parts or equipment operating at more than 480 volts, nominal.

Safe Use of Test and Measurement Equipment

- Test equipment should be checked for proper operation immediately before and immediately after this test.
- When using a volt meter ohmmeter (VOM), oscilloscope or other piece of test equipment, it is absolutely essential that the equipment be rated for the voltage of the system under test.
- Never use a VOM unless it has the fuse protection recommended by the manufacturer. Changing the size or type of fuse can change the safety characteristics of the device and present hazards.
- Remember, when taking a current reading, the VOM is placed in series with the circuit to measure amperage. The VOM is set in a low impedance mode in order to allow the current to flow. If the VOM is used in this mode to

measure voltage, the VOM acts as a short circuit. Be sure the correct fuse is in place to protect yourself.

- All test and measurement equipment shall be inspected prior to use. All probes and leads must be in good condition with no deterioration in the insulation. Defective equipment will not be used.
- The connecting and disconnecting of test leads and probes should be performed by a qualified customer representative whenever possible. The connecting and disconnecting of test leads and probes in switchgear presents added risk and shall be performed by a qualified customer representative or qualified subcontractor employee.
- Employees shall not contact exposed, electrically energized components unless they use adequate personal protective equipment, position themselves outside the minimum clearance zone and work with approved and suitably insulated test equipment and nonconductive tools.
- Never perform any work, including electrical testing, that you feel is unsafe.

Tools and Test Equipment

All tools and test equipment shall be maintained in proper working condition.

Only tools designed for the task shall be used. Meters should be rated for the voltage to which they will be exposed.

Insulated tools shall be used when working in proximity to energized electrical equipment. The tools should display the international 1000V symbol.

All tools and test equipment should be inspected prior to and after use.

All tools shall be maintained in top working order thereby minimizing the potential for slippage or breakage during use.

Only tools specifically designed for the task at hand shall be used

Insulated Tools

When working in proximity to energized conductors and exposed electrical parts, employees shall use insulated tools and equipment if the tools and equipment have the potential to make contact with such conductors and/or exposed electrical parts. Tools used as insulated must display the international 1000V symbol and be inspected prior to use.

Portable Power Tools

Portable power tools shall be properly stored when not in use. Electrical power tools shall be visually inspected before each shift's use for external defect such as deformed or missing pins or insulation damage and for indication of possible internal damage. Tools found to be defective or damaged shall be tagged "OUT OF SERVICE" and not used until repaired.

A grounding conductor that is contained within the same cable or cord as the circuit conductors shall ground electrical portable power tools (except for battery powered or double insulated types).

Tools shall be cleaned and maintained in accordance with manufacturer's instructions.

Personal Protective Equipment (PPE)

An employee, or others, who expose themselves to the risk of electrical shock, such as when in proximity to energized or potentially energized conductors or exposed electrical parts, shall use PPE.

PPE shall be appropriate for the specific parts of the body to be protected and for the work to be performed.

PPE shall be maintained in a safe and reliable condition and shall be inspected and/or tested before and immediately after use. Damaged PPE or PPE failing to pass test requirements, shall not be used and removed from service.

Selection of PPE

A.Z. Shmina, Inc. Safety Manager should be consulted for guidance in minimal PPE required when performing electrical testing and measurements.

Configuration of the workspace and other environmental factors may require wear of additional PPE.

PPE shall be applied according to adjacent electrical hazards if they are greater than the electrical hazards present in equipment being tested and measured.

Head Protection

Employees shall wear non-conductive head protection whenever work is being performed in proximity to energized or potentially energized electrical conductors and parts. Head protection shall conform to ANSI Z89.1 - *Safety Requirements for Industrial Protective Headgear for Electrical Workers, Class B.*

Hard hats shall be kept clean and in good condition and shall not be altered or defaced in any manner. Approved markings shall not contain conductive materials.

Eye and Face Protection

PPE for the eyes and/or face shall be used where there is danger of injury to the eyes and/or face from electrical arcs or flashes, or from flying objects or falling objects from an electrical explosion. Eye and face protection equipment shall

conform to ANSI Z87.1

- *Practice for Occupational and Educational Eye and Face Protection.* If the eye and/or face protective device exhibits broken parts, heat distortion or excessive scratches on the lens it shall not be used and removed from service.

Clothing and Apparel

It is recommended that all electrical employees wear 100% cotton clothing while engaged in all activities required in their job.

When performing work on exposed electrical equipment, do not wear any clothing with exposed zippers, buttons, metal fasteners or loose/flapping/baggy clothing.

Conductive articles of jewelry, such as watch bands, bracelets, rings, necklaces and oversized belt buckles shall not be worn when there is a danger of contact with energized parts.

Nomex shall be worn where there is a danger of an electrical explosion or severe arcing. The Nomex shall be examined by the craftsman for rips, tears and/or flaws in the material or workmanship prior to each use. If they are damaged in any way, they shall not be used and removed from service.

Rubber Insulated Protective Equipment

Those employees assigned PPE shall be responsible for the care and storage of the issued equipment

All new protective rubber equipment shall be tested by a certified testing laboratory and documented prior to being issued for service.

Rubber protective equipment shall be tested by a certified testing laboratory at intervals not to exceed the intervals listed below:

	AFTER ISSUED FOR USE	SHELF LIFE (NOT ISSUED)
GLOVES	6 MONTHS	12 MONTHS
BLANKETS	12 MONTHS	12 MONTHS

Rubber insulated protective equipment shall be inspected for damage before each shift's use and immediately following any incident that can reasonably be suspected of having caused damage. Insulating equipment with any of the following defects shall not be used and must be removed from service:

- A hole, tear, puncture or cut.
- Ozone cutting or ozone checking (the cutting action produced by ozone on rubber under mechanical stress into a series of interlacing cracks).
- An embedded foreign object.
- Any of the following texture changes: swelling, softening, hardening or becoming sticky or inelastic.
- Any other defect that damages the insulating properties.

Rubber Insulating Gloves

- When exposed to electrical hazards of 50 volts or greater, Class "0" (1000V rated) rubber insulating gloves shall be used. At no time shall the rating of the glove be exceeded. Gloves shall conform to ANSI/ASTM D120 and ASTM F496.
- Each craftsman shall test their rubber gloves at the start of the shift they are to be used. To test a glove for pinholes and other damage, fill the glove with air, roll up the cuff of the other glove to make a seal and squeeze the glove. Then hold the inflated glove close to the face and ear to feel and listen for air escaping.
- Gloves in service shall be kept in canvas glove bags. Gloves shall not be folded, creased or rolled while in storage. Gloves shall be protected from heat, ozone or prolonged exposure to direct sunlight and from contact with sharp articles or materials likely to damage gloves or cause deterioration of the rubber. Clean only with lukewarm water and mild soap detergent. Do not use solvents, oils or grease.

Rubber Insulating Blankets

- Rubber insulating blankets shall be used to provide additional protection when work is being performed adjacent to exposed electrical parts. Blankets shall conform to ASTM D1048 and ASTM F479.
- Defective blankets shall not be used and shall be removed from service. Blankets shall be stored in a cool, dark and dry location free from ozone, chemicals, oils, solvents, damaging vapors and fumes and away from electrical discharges. Blankets shall be stored in a bag, box, container or compartment that is designed for and used exclusively for them and shall not be kept folded, creased, distorted or compressed in any manner that will cause

stretching or compression.

- Blankets shall be cleaned as necessary to remove foreign substances and shall be wiped clean of any oil, grease or other damaging substances as soon as practicable. Clean only with lukewarm water and mild soap detergent. Rinse thoroughly with water to remove all of the soap or detergent.

Working Clearances

Sufficient access and working space shall be provided and maintained about all electric equipment to permit ready and safe operation and maintenance of such equipment.

The NFPA 70E states that a minimum of three feet be required in front of equipment rated 0 to 150 volts to ground. This is to ensure that any access to equipment requiring examination, adjustment, servicing or maintenance while hot should provide the worker with adequate workspace.

For voltages between 151 and 600 volts to ground, a three foot clearance is still required between exposed live parts and other surfaces. If the other surfaces are grounded, then the distance must be increased to 3 ½ feet. If there are exposed live parts on either side of the workspace, then a clearance of four feet is required.

Areas around electrical equipment with emphasis on those areas with access doors and panels must be kept clear of materials, equipment or any other article that will deter access to the electrical equipment. In many cases, the specific distance requirement will be posted on the face of the affected equipment.

For vehicles and other mechanical equipment, a clearance of at least 10 feet shall be maintained including overhead power lines, this includes working around and under lines.

Work Area Protection

In some instances, it will be necessary to appropriately barricade or otherwise identify work areas as containing exposed electrical hazards not normally encountered during routine maintenance of the equipment and/or conductors located therein. This normally will be the case during renovations and additions to installations where electrical equipment is located. By appropriately identifying the areas, persons are given a higher degree of hazard awareness.

If the work exposes energized parts that are normally protected, danger signage shall be displayed and suitable barricades shall be erected to restrict other persons from entering the area.

When determining the size of the safe work zone, the area where work is performed, consideration must be made as to the types and sizes for conductive materials and equipment to be used in the area.

Employees may not enter spaces containing exposed energized parts unless illumination is provided that enables the employees to perform the work safely.

Protective measures shall be taken within 10 feet of any vehicular and mechanical equipment.

Approach Distances for Qualified Employees to AC Voltage

Qualified employees shall maintain minimum approach distances when exposed to energized electrical parts. Table 5.5 of OSHA 29 CFR 1910.133 should be referenced to help determine approach distances.

Approach Distances for Unqualified Employees to AC Voltage

Unqualified employees shall maintain a minimum working clearance of ten feet from exposed and non-insulated electrical parts operating at up to 50,000 volts. In the event that operation of maintenance activities require an unqualified employee to come in proximity to parts energized at higher than 50,000 volts, A.Z. Shmina, Inc. Safety Manager should be consulted prior to start of the work.

Lighting/Illumination

When working with light bulbs and lighting fixtures, use only approved lighting equipment when working in vessels, boilers, confined spaces and other hazardous areas. Disconnect the circuit before changing light bulbs. Do not use oversized lamps in vapor-proof globes or other fixtures. Do not remove the outer globes of vapor-proof lights except when cleaning or replacing bulbs.

Illumination levels shall be provided so that at no time will the level of illumination become a factor contributing to a potential electrical accident.

Employees may not enter spaces containing energized electrical equipment until adequate illumination is provided.

Only 12 volt explosion proof lighting equipped with a GFCI may be used in confined spaces.

When lighting is used in wet conditions, the lighting must be equipped with a GFCI.

Lighting to be used in areas that may contain explosive gases or vapors must be approved for such use.

Cords

Visually inspect electrical cords before each use. Do not use worn or defective cords. Have damaged cords repaired or replaced immediately. In addition, the following precautions shall be taken when working with electrical cords:

- Do not use extension cords for permanent installations.
- Use only approved outlets and connections. Notify supervisor of the need to move or add and outlet.
- Ensure that the cord is properly connected, grounded and protected from traffic.
- Test all utility extension cords for continuity and grounding quarterly.
- When grounded electrical systems are not available, use only double insulated tools and equipment.
- Use care to prevent the cord from becoming a trip hazard by being wrapped around any part of the body.

Lockout/Tagout

Follow Lockout/Tagout procedures whenever working on electrically operated equipment. Reference the Lockout/Tagout section of this safety manual for specific procedures and further guidance.

Installation and Repair

Install generators, motors, control equipment and conductors in such a manner that exposed live parts are either properly guarded or insulated to provide adequate protection for all operating personnel. Guards and protective items removed during the repair of electrical equipment are to be replaced immediately after repair work is completed. Provide sufficient space (minimum three feet) for safe inspection, repair or replacement when installing electrical equipment.

Grounds

Appropriate grounds will be utilized for electrical equipment to ensure protection of employees, prevent damage to equipment and maintain continuity of electrical service. Qualified electricians will determine what grounds are appropriate and perform the installation of such grounds.

Training

Qualified Personnel

All training must be done prior to the commencement of work. Whether an employee is considered to be “qualified” will depend on various circumstances in the workplace. It is possible and, in fact likely, for an individual to be considered qualified with regard to certain equipment in the workplace but unqualified as to other equipment. All personnel to be qualified to perform work on electrical devices and systems shall be trained in, and be competent in, all safety related work practices, procedures and requirements that pertain to their respective work assignments. They shall also be trained in and be competent in any other safety practices including emergency procedures which are necessary for their safety. The training shall include, but not limited to:

- Skills and techniques necessary to distinguish exposed energized parts from the other parts of electric equipment.
- Skills and techniques necessary to determine the nominal voltage of exposed live parts.
- Knowledge and understanding of the clearance distances corresponding to voltages which employees will be exposed.
- Proper use of the special precautionary techniques, PPE, insulating and shielding materials and insulated tools associated with working on or near exposed parts of electric equipment.

Authorized Personnel

All non-qualified personnel who, in the performance of their job, would be required to enter a room of area containing exposed energized conductors or parts, or who must approach in proximity to exposed conductors must receive training to become “Authorized.” This training must contain the following:

- The ability to recognize potentially hazardous energy and its potential impact on workplace conditions.
- Skills and techniques necessary to distinguish exposed energized parts from the other parts of electrical equipment and machines, and know how to avoid them.
- Knowledge and understanding of the clearance distances to be maintained.

Affected Personnel

Persons who, in the course of performing their assigned tasks, come in contact with electrical power sources, tools and other portable electrical powered devices that are generally not found in the public domain, shall be trained in the following:

- The ability to recognize potentially hazardous energy and its potential impact on workplace conditions.
- Proper handling and use of portable electrical equipment.

- Proper techniques for opening and closing of circuits and necessary procedures to follow before replacing fuses or resetting breakers.

Training Type and Retraining

Re-training is required when an employee is found to be non-compliant with safety-related work practices.

Both lecture and hands-on training shall be used to deliver training.

Schedules shall be established to provide retraining of personnel to stay current on any work techniques and procedural changes.

Periods between retraining shall not exceed three years.

Records

All training records shall be retained for the duration of the employee's employment.

Inspections

Tool Inspections

- Tools used in servicing or maintaining electrical equipment shall be inspected before each use and periodically to ensure that they are safe for use.
- Tool inspection shall include utility extension cords.

ELEVATED WORK (OTHER THAN FALL PROTECTION)

Ladders

Manufactured ladders on the project shall comply with the regulations of ANSI-A14.1-1968 (or most recent version), Safety Code for Portable Wood Ladders or ANSI-A14.2-1972 (or most recent version), as required by OSHA. All ladders shall be used in the manner and for the purposes for which they were designed and constructed.

The side rails or extension shall extend 36 inches above the landing. When this is not possible, grab rails shall be installed. All ladders in use shall be tied, blocked, stabilized by a second worker or otherwise secured against accidental displacement. Where adequate anchorages are available, workers shall tie off using a Personal Fall Arrest System or utilize a different means of gaining access (i.e. scissor lift, scaffold, etc.)

Portable metal ladders shall not be used.

Scaffolding

All employees erecting, using and/or dismantling scaffolds shall be trained in the hazards present and the safe procedures to be followed to eliminate exposure to those hazards and shall be provided with fall protection when 6-feet or more above the next lower level. The person or persons erecting the scaffolding must be designated as a competent person. This person must be present during all aspects of the scaffolding being used and inspect such scaffolding before each use.

Concrete and Masonry

All equipment and materials used in concrete construction and masonry work shall meet the applicable requirements as prescribed in ANSI-A10.9-1970 (or most recent version) "Safety Requirements for Concrete Construction and Masonry Work".

Stairways

Upon delivery to the project, all office trailers and material storage trailers shall be provided with stairway access to all doorways and shall have landings with railings which allow for at least 20 inches of clearance in front of any door swing.

Hoists and Elevators

Temporary personnel elevators and materials hoists shall be constructed, installed and maintained in compliance with the manufacturer's instructions and the provisions of applicable statutes and regulations of governing authorities. No elevators or hoists are to be used for the movement of materials and personnel until the devices have been certified and licensed by a third party inspector qualified to approve the equipment. No person shall be allowed to ride on a material hoist except for the purposes of inspections and maintenance.

**EMERGENCY ACTION PLANS

Emergency Action Plans are intended to establish protocol for preparing and responding to an emergency that may arise out of business operations. This document outlines and reviews the basic principles for the development of an "Emergency Action Plan" to ensure the safety and efficiency when responding to emergencies.

An emergency action plan has the following objectives:

- To provide effective action to minimize injuries and loss of life among company personnel in the case of emergency during business hours.
- To protect company property.
- To implement, as soon as possible, recovery operations.
- To provide effective education to all personnel, in the area of preparedness, in case of an emergency during business hours.

In the event of an emergency, the Michael Schlenke shall be contacted immediately.

Emergency Calling Procedures

In case of an emergency, when outside emergency services are required, these steps should be taken:

- Pick up the nearest phone and dial 9-1-1 (for outside emergency services).
- Give the following information:
  - Your name
  - The Company's Name
  - Location (address, intersection, location on site)
  - Nearest cross street
  - Type of emergency (fire, medical, chemical spill)
  - Telephone number you are calling from
- Do not hang up until you are certain the person receiving the call has all the information necessary.

Evacuation Procedures

For each office, project and shop location, develop an evacuation plan. Designate specific responsibility to employees and supervisors.

Develop a communication system, which will alert employees of the need to evacuate. Train employees in the communication process.

Designate specific reunion/meeting locations

Conduct evacuation drill semi-annually.

Fire Procedures

Fire preparedness:

- Locate the fire extinguisher nearest to your work station.
- Be familiar with the locations of all emergency exits and evacuation routes. Keep exits and evacuation routes clear.
- Know what action to take in the event of a fire.

In the event of a fire near you:

- Upon discovery of a fire, notify the fire department by calling 9-1-1, giving them the following information:
  - Address you are calling from
  - Name
  - Phone number
  - Type of Emergency
  - Stay on the phone until the emergency operator hangs up.
- In the event of a fire and you elect to fight the fire by use of a fire extinguisher, you should know these steps:
  - Pull the pin off the fire extinguisher.
  - Aim the nozzle of the extinguisher so it discharges at the base of the fire.
  - Sweep the nozzle with a side to side motion across the entire width of the fire.
  - Always fight the fire with your back to an exit.
  - Do not allow yourself to become trapped.

After extinguishing the fire, move back and watch for a possible flashback of the fire. Do not turn your back on the fire or fire affected area. Always back away from the scene.

After the extinguisher is discharged, remember to have the fire extinguisher re-serviced and re-hang it. Never re-hang a used or discharged extinguisher.

If it is safe to do so, the fire should be fought with portable extinguishers until the fire department arrives. Keep in mind that your personal safety is of prime importance.

When Instructed to Evacuate

Evacuate by the nearest, safe exit and evacuation route.
Report to a designated reunion/meeting location.
Render assistance only when requested from the fire department or emergency services.

**EMERGENCY ACTION PLANS – INCIDENT INVESTIGATION

A.Z. Shmina, Inc. shall abide by the policy of "Do No More Harm". Scene safety shall have first priority. A.Z. Shmina, Inc. shall ensure no other person(s) is injured.
Investigations shall be conducted by the Michael Schlenke of A.Z. Shmina, Inc.
Investigations shall be conducted according to severity level of the incident.
The respect and dignity of the injured, the family, and all involved shall be preserved.
Operations shall be restored to "normal".
Incidents shall be reported within 8 hours to OSHA if a fatality occurs, or if 3 or more people are taken to the hospital (or nearest medical facility).
Incidents shall be reported immediately to A.Z. Shmina, Inc.'s safety representative and to the appropriate personnel of the host facility/client.
All documentation and communication shall be collect to create a "lessons learned"; which shall be reviewed to prevent recurrence.

Investigation

The injured person(s) shall have prompt and appropriate care.
The followings steps shall be taken when conducting an investigation:

- Stabilize and control the area. Place barriers, turn off power to equipment, stop activity, etc.
- Minimize discussion regarding details of the incident and written communication regarding the incident.
- Conduct interviews at the scene of the incident, if possible. Ensure that the witnesses discuss the incident in relative privacy. Begin with those who can contribute most. Get written statements from all witnesses. See SMHF002, Accident/Incident Form.
- Look for evidence. Preserve, collect and secure any evidence found.
  - All necessary equipment shall be made available to collect evidence.
  - All evidence shall be identified and assessed.
  - What is the equipment doing? Note settings of controls. Preserve and secure the evidence.
  - Any physical evidence from victim?
  - Note, and sketch, what you see. Provide all notes to the investigator.
  - Take pictures

Identify and take immediate corrective action where warranted.
After all evidence has been collected and witness statements documented, the incident report shall be completed. Copies of the incident report shall be made available upon request.

Training

All employees shall be trained in the Emergency Response procedures for each site they will be performing work.

- Evacuation route and muster areas
- Alarm systems
- Areas to avoid during emergencies

Site Supervisor Training:

- Evacuation route
- Muster areas
- Alarm systems
- Areas to avoid during emergencies
- Accident investigation and equipment (i.e. camera, tape ruler, notebook, pen, AZSI Forms)
- Reporting incidents

**EMERGENCY AND FIRST AID MEDICAL SERVICES

A.Z. Shmina, Inc. requires that emergency medical services be available on all project sites. A First Aid Program will also be maintained at each office and project site.

Services to be provided include:

- Employee access to emergency medical treatment
- Posted, written instructions, naming the person(s) to be notified in the event of an emergency with phone number(s), along with emergency services numbers, to include the following:
  - Ambulance
  - Fire Department
  - Hospital
  - Police Department
  - Servicing Physician/Emergency Facility/Urgent Care Center

First Aid/CPR Certified Individual – Duties and Responsibilities

Training and certification in First Aid/CPR and participation in the medical response team is voluntary.

First Aid/CPR certified employees will provide medical services to injured coworkers on a voluntary basis.

In the event, medical assistance is not accessible due to time and distance to worksite, First Aid/CPR certified employees shall be render first aid or medical services to injured coworkers.

First Aid/CPR certified employees will be designated at each project site where four or more A.Z. Shmina, Inc. employees are permanently assigned.

First Aid/CPR certified employees must be certified by an accrediting training entity (i.e. Red Cross, U.S. Bureau of Mines, Hospital, etc.) and such training must be current.

If a First Aid/CPR certified employee received equivalent training, documentation must be provided.

First Aid/CPR certified employees will complete a certified bloodborne pathogens course.

Procedure

First Aid Kit(s) must be in a weatherproof container and all items maintained in a sanitary condition. First Aid dressings shall be sterile and be contained in individually sealed packages for each item.

The contents of the First Aid Kit(s) shall be inspected regularly to ensure replacement of the expended items promptly.

First Aid Kit(s) shall be made readily available and easily accessible.

The Safety Representative shall assist in the selection and location(s) or first aid kits. Certain jobs/tasks may require specialty first aid items. At a minimum, the first aid kits shall conform to ANSI Z308.1. A recommended list of First Aid supplies is in the list below:

- Medium Sized Wall Unit:
  - Plastic Bandages, ¾" x 3" . . . . . 1 box
  - Fingertip Bandages, 40/box . . . . . 1 box
  - Knuckle Bandages, 40/box . . . . . 1 box
  - Elastic Strip, 50/box . . . . . 1 box
  - Tri Cut Tape . . . . . 1 roll
  - Gauze Pads, 2" x 2", 10/box . . . . . 1 box
  - 2" Rolled Gauze . . . . . 1 roll
  - Septi-Care Spray . . . . . 1 can
  - Burn Care Spray . . . . . 1 can
  - Surface-Heal Spray . . . . . 1 can
  - Eye Wash, 4oz . . . . . 1 bottle
  - Eye and Skin Neutralizer . . . . . 1 bottle
  - Cold Pack, Large Size . . . . . 1 box
  - Buffered Aspirin, 100/box . . . . . 1 box
  - Cold Tablets, 100/box . . . . . 1 box
  - Pain-Ease, 100/box . . . . . 1 box
  - Ammonia Inhalants . . . . . 1 each
  - Triangular Bandage . . . . . 1 each
  - Absorbent Gauze, 18" x 36" . . . . . 1 each
  - Pocket Fill for #8029 . . . . . 1 bag
  - Blood Pathogens Kit or Gang Box . . . . . 1 each

- Small Sized Truck Unit:
  - Plastic Bandage, 1" x 3" . . . . . 1 box
  - Fingertip Bandage, 10/box . . . . . 1 box
  - Knuckle Bandage, 10/box . . . . . 1 box
  - Adhesive Tape, ½" x 5 yds . . . . . 1 roll
  - Individual Gauze Pads, 2" x 2" . . . . . 10 each
  - 2" Rolled Gauze . . . . . 1 roll
  - Septi-Care Spray . . . . . 1 can
  - Burn Care Spray . . . . . 1 can
  - Eye Wash, 4oz . . . . . 1 bottle
  - Cold Pack, Small Size . . . . . 1 box
  - Individual Wipes . . . . . 6 each
  - Individual Antiseptic Wipes . . . . . 6 each
  - Ammonia Inhalants . . . . . 1 each
  - Triangular Bandage . . . . . 1 each
  - PVP Iodine Swabs, 10/box . . . . . 1 box
  - Kit Scissors . . . . . 1 each
  - Kit Tweezers . . . . . 1 each
  - First Aid Handbook/Reference . . . . . 1 each
  - Blood Pathogens Kit . . . . . 1 each

**Note - if a medical supply service is not utilized to maintain the First Aid Kits, assign a first aid trained employee to conduct inspections and replenish kit supplies.

If job task requires working with hazardous chemicals or corrosive materials, proper facilities or flushing stations shall be provided for quick drenching or flushing of eyes or body. Facilities or flushing stations shall be located in close proximity to work area. Affected employees will be made aware of location(s).

Policy

The following guideline is established to comply with OSHA 29 CFR 1910.1030, *Occupational Exposure to Bloodborne Pathogens.* A potential for exposure to employees could exist and will be identified by management prior to commencement of work activities.

Any person designated to administer first aid has the potential for exposure to blood or other bodily fluids. All employees designated as First Aid Providers are instructed that it is only at that employee's discretion to choose whether to administer first aid in any situation.

Bloodborne Pathogens Application

Applies to first aid providers who are occupationally exposed to blood or other potentially infectious materials or bodily fluids.

An occupational exposure is defined as: reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee's duties.

- Management/Supervision shall identify any/all workers that could have potential exposure and provide the following:
  - Be provided a copy of this policy. Employee may also be provided with a copy of the OSHA 29 CFR 1910.1030 standard upon their request.
  - Have training/information in occupational exposure to bloodborne pathogens.
  - Be offered the Hepatitis B vaccine, at no cost to the employee, at the initial time the employee is involved in an incident where blood or other bodily fluids are present
  - Have training/information in contraindications, adverse reactions and risks associated with the Hepatitis B vaccine.
  - Sign an acceptance or declination form for Hepatitis B vaccine.
  - Have training/information on proper protocol in the event of an exposure.
  - Have PPE available at all times provided at no cost to the employee. This shall include a rescue breathing mask with a one-way valve, disposable latex gloves, standard first aid kit and a bloodborne pathogen kit.

Occupational Exposure

In the event of an occupational exposure, the following procedure MUST be adhered to:

- Flush the exposed area with water for 15 minutes.
- The Safety Manager or Supervisor shall be notified immediately of the incident and shall:
  - Record the information related to the exposure and the exposed employee**.**
  - Verify that the employee has been directed to seek medical attention.
  - Notify the appropriate management personnel of the incident
- As with any other on-the-job injury or illness, the supervisor must complete First Report of Injury form promptly and forward it to the Safety Manager or Manager.
- The employee shall be directed to seek immediate medical attention from a licensed physician. A.Z. Shmina, Inc. shall supply the physician with the following:
  - Description of the employee's duties as they relate to the exposure incident.
  - The exact nature of the accident, including route of exposure, and the circumstances under which the exposure incident occurred.
  - All medical records relevant to the appropriate treatment of the employees; including vaccination status of the employee.
- After obtaining the employee's consent, the physician shall obtain appropriate HBV and HIV serologic baseline studies on the exposed employee. A.Z. Shmina, Inc. will cover the costs for these tests.
- The employee's personnel file shall be annotated to indicate the name and address of the evaluating physician.
- If the employee has any questions concerning the results and/or treatment, the employee shall be instructed to direct such queries to his/her treating physician.
- All medical records are to be kept confidential.
- OSHA regulations require that, within 15 days of the completion of the evaluation, A.Z. Shmina, Inc. must provide to the employee, a copy of the physician's written opinion. The written opinion shall indicate:
  - Whether Hepatitis B vaccine is indicated for the employee and if the employee has received such vaccination.
  - That the employee has been informed of the results of the evaluation.
  - That the employee has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials which require further evaluation or treatment. Any other findings or diagnoses shall remain confidential and shall not be included in the written report.

Information and Training

AIDS is perhaps one of the most devastating diseases known, and employees should be reminded that ALL bodily fluids, including but not limited to the blood, should be handled as though contaminated, and that PPE must be worn at all times when handling any bodily fluids.

A copy of 20 CFR 1910.1030 will be made available to the employee.

If an employee has a percutaneous (needle stick or cut) or mucous membrane (splash to eye, nasal mucous or mouth) exposure to bodily fluids, the employee shall be informed to IMMEDIATELY take the following steps:

- Bleed the puncture site freely by applying gentle pressure until the bleeding stops. Then wash thoroughly with disinfectant soap and bandage the wound.
- Wash the mucous membrane exposure with copious amounts of water.
- The employee and/or supervisor shall immediately notify the Safety Manager.
- Seek medical attention/treatment.

All employees are encouraged to complete an approved "Bloodborne Pathogen Training Course."

Recordkeeping

A.Z. Shmina, Inc. will maintain appropriate documents in the employee's medical file. These records, if necessary, shall be maintained for at least the duration of the employment plus 30 yrs.

- A copy of the employee's Hepatitis B vaccination status, including the dates of all Hepatitis B vaccinations and any medical records relative to the employee's ability to receive vaccination as described in the Hepatitis B section of this procedure.
- A copy of medical testing and the healthcare professional's written opinion.
- These documents are to be kept confidential and are not to be disclosed or reported without the employee's

expressed written consent to any person within or outside the workplace, except as may be required by law.

A.Z. Shmina, Inc. will maintain, for three years from the date on which the training occurred, a copy of all training records.

EMERGENCY PROCEDURES – MEDICAL: BLOOD-BORNE PATHOGENS

The Occupational Safety and Health Act (OSHA) 1910.1030, requires each employee exposed to blood and other infectious materials be advised of the potential blood-borne pathogen hazards and how to guard against those hazards.

Each contractor, and each subcontractor, whose employees are occupationally exposed to blood and other potentially infectious materials (including all bodily fluids in situations where it is difficult or impossible to differentiate between bodily fluids, etc.) must develop a list of such tasks on the project; instruct the employees in the potential risks involved; develop a labeling system for all infectious materials; train all potentially exposed personnel in the hazards and the proper controls for all listed tasks; provide safety materials and equipment; and offer appropriate medical treatment and advice for any exposure. These steps are outlined in detail in the following material.

Employee training for this requirement will be documented and acknowledged by signatures following each session using the documentation statement included in this Blood-Borne Pathogen Safety Program.

Exposure Control Plan

Every contractor will be responsible for development and maintenance of a list of tasks within the project operations, which involve occupational exposure to blood and other infectious materials.

Each contractor will be further responsible for training their employees, obtaining medical services for their employees, and maintaining medical records for their employees assigned to all such hazardous tasks.

One copy of the list identifying the hazardous tasks and each employee assigned to perform those tasks will be forwarded to A.Z. Shmina, Inc.

Employees will be allowed access to this Blood-Borne Pathogen Safety Program and to information regarding those specific tasks in their work area identified as involving exposure to blood and other infectious materials.

All questions relating to the Contractor's plan should be directed to the Contractor's Superintendent or safety officer.

All questions relating to the Safety Program are to be directed to A.Z. Shmina, Inc.

Employee Information and Training

All new and present employees will be given information regarding to the requirements of this Blood-Borne Pathogens Safety Program, the hazardous tasks present in their work place and the potential health risks of these tasks.

**This requirement must be met through orientation sessions for all employees prior to assignment to the specifically identified hazardous tasks and through annual refresher courses for all employees currently performing those tasks.

The information and training shall include the following elements:

- Risks and symptoms of exposure to blood-borne pathogens shall be identified
- How to determine the presence of blood or other infectious materials in the work place.
- Methods to be used to reduce or prevent the exposure to blood and other infectious materials, such as control procedures, work practices or personal protective equipment.
- Procedures to follow in the event of an exposure to blood or other infectious materials.
- Identification log maintained in the project office which lists all tasks involving occupational exposure to blood and other infectious materials on the project.
- When a task involves the handling of blood and other infectious materials, how those materials are to be contained, labeled and properly disposed.
- The necessity for proper housekeeping and personal hygiene techniques, including hand washing, shall be emphasized.
- Employees must have the opportunity to ask questions and obtain answers from the trainer, who must be knowledgeable in the subject matter.

Container Labeling and Disposal

The Contractor and A.Z. Shmina, Inc. will verify that all containers used to store or transport blood and other infectious materials generated at the project are clearly labeled with warning labels which include the orange or orange-red biohazard symbol and indicate the contents, the hazards involved and the name and address of the project. Red bags or

containers may be used instead of labeling, but employees specifically trained in this program shall control the management of these receptacles.

The Contractor and A.Z. Shmina, Inc. will ensure that all secondary containers of the blood and other infectious materials have clear warning labels with the same information as the original container.

Each contractor's Superintendent, or safety representative if one is assigned, shall perform the above responsibilities for all their material generated.

All containers of blood and other infectious materials shall be controlled until delivered to an authorized disposal facility for incineration or decontamination by legally approved means.

Arrangements may be made with a local hospital to receive and dispose of limited quantities of these regulated wastes in cases of first aid treatment.

Each contractor shall be responsible for proper disposal of all regulated wastes generated by their work.

Hazardous Non-Routine Tasks and Nearby Work

In the event an employee is assigned to perform a non-routine task, or is assigned to work in an area where a non-routine hazardous task to their work is being performed, the employee will be given the additional information and training related to the hazards, which may be encountered in the non-routine task.

This information and training will be provided as described elsewhere in this plan by the first-line foreman, contractor safety representative or a trainer who must be knowledgeable in this subject.

This information will include the specific hazards of the task, the controls and protective measures required, the types of personal protective equipment required, how to use the equipment, the nature of other work being performed in or near the non-routine task and what emergency procedures are involve with the task.

Universal Precautions

To ensure employees who work on tasks presenting an exposure to blood and other infectious materials are afforded the greatest protection available, the following policy has been established:

- Prior to starting work on any task involving blood and other infectious materials, all employees will review safety precautions, which should be taken.
- Universal precautions shall be observed which means treating all blood and other potentially infectious material as if infectious.
- Particular attention shall be given to contaminated sharp objects which may penetrate the skin including, but not limited to, needles, broken glass and exposed ends of wires.

Work practices and engineering controls shall be followed diligently including the provision and use of the following:

- Gloves, latex
- Masks and eye protection
- Resuscitation bags and mouthpieces
- Gowns, aprons or specialized clothing where required by established engineering practices
- Hand washing facilities and other decontamination where required by established engineering practices.

Trained personnel following approved procedures shall conduct decontamination with the above personal protective items.

Disposable items shall be discarded into red bags or properly labeled containers and delivered for disposal as required elsewhere in this plan.

Items, which are reusable, and any work areas, which were contaminated by blood and other infectious materials, shall be cleaned and disinfected with a solution containing a strong concentration of chlorine bleach.

Audit and Review

It will be the responsibility of A.Z. Shmina, Inc. to review the entire Blood-Borne Pathogen Safety Program at least annually, and revise and update the material contained herein to reflect all changes in the management, disposal, storage and handling of blood and other infectious materials generated at the project.

It will be the further responsibility of A.Z. Shmina, Inc. to periodically audit procedures in use on tasks identified as exposing employees to blood and other infectious materials in order that they meet the requirements as set forth in the OSHA 1910.1030 standards.

Each contractor's Superintendent, or safety representative, shall perform the above responsibilities for all of their tasks and procedures.

Hepatitis B Vaccination

Hepatitis B vaccinations shall be made available to all employees who have occupational exposure to blood within ten (10) working days of assignment, at no cost, at a reasonable time and place, under the supervision of a licensed physician or health care professional and according to the latest recommendations of the U.S. Public Health Service (USPHS).

Prescreening may not be required as a condition of receiving the vaccine.

Employees must sign a declination form if they choose not be vaccinated, but may later opt to receive the vaccine at no cost to the employee.

Should booster doses later be recommended by the USPHS, they must be offered to employees.

Post-Exposure Evaluation and Follow-Up

OSHA standard 1910.1030 specifies detailed procedures to be made available to all employees who have had an exposure incident.

An accredited laboratory, at no cost to the employee, must conduct these procedures and any laboratory tests.

Follow-up procedures must include a confidential medical evaluation documenting the circumstances of exposure, identifying and testing the source individual.

If feasible, testing the exposed employee's blood, with the employee's consent, post-exposure prophylaxis, counseling and evaluation of reported illnesses.

Health care professionals must be provided specific information to facilitate the evaluation and their written opinion on the need for Hepatitis B vaccination following the exposure.

Information such as employee's ability to receive the Hepatitis B vaccine must be supplied to the employer.

****ALL DIAGNOSES MUST REMAIN CONFIDENTIAL****

Record Keeping

Medical records shall be maintained on each employee, with occupational exposure to blood and other infectious materials, for the duration of employment plus thirty (30) years.

Medical records must be made available to the subject employee, anyone with written consent of the employee, OSHA and NIOSH.

Medical records are not available to the employer.

Disposal of medical records must be in accord with OSHA's standard covering access to records.

These employee medical records must be confidential and must include the following information:

- Employee's name and social security number
- Hepatitis B vaccination status, including dates
- Results of any examinations, medical testing and follow-up procedures
- Copy of the health care professional's written opinion
- Copy of the information provided to the health care professional

Training records shall be maintained for a period of three (3) years and must include the dates, contents of the training program or summary, trainer's name and qualifications, names and job titles of all persons attending the sessions.

EMERGENCY PROCEDURES – MEDICAL SERVICES

Contractor's Responsibilities

Prior to commencement of work, provisions must be made for prompt medical attention in case of serious injury.

Each Contractor shall have a minimum of one first aid/CPR trained individual on the project during work hours and inform A.Z. Shmina, Inc. of their name(s).

Ensure adequate first aid supplies shall be easily accessible when required.

Provide proper equipment for the prompt transportation of the injured person to a physician or hospital, or a communication system for contacting necessary ambulance service.

Telephone numbers and addresses of the physicians, hospital and ambulance shall be conspicuously posted.

Contractor shall complete and provide to A.Z. Shmina, Inc. an ""Employer's First Report of Injury" within 24 hours of any/all incidents involving work activities associated with the project.

Contractors are advised to maintain their own OSHA 300 Log as an OSHA requirement.

Contractor shall ensure that each of its lower-tier contractors meet these medical requirements.

If the injured employee is released by the doctor for light or restricted work duty, the Contractor shall make available restricted duty work for the injured employee.
Each occupational illness or injury shall be reported immediately by Contractor's employee to Contractor's first aid attendant and A.Z. Shmina, Inc.
Contractor's first aid attendant or other competent person shall treat the injured employee as often as necessary to ensure complete recovery, or until a decision is made to seek medical treatment.
Contractor must provide prompt transportation for the injured person, to a hospital or other emergency facility.
A representative of the Contractor shall drive the injured employee to the medical facility and remain at the facility until the employee is ready to return.
Contractor's representative shall carry necessary forms (i.e. authorization slips, return to work notices, etc.) to the medical facility.
If it is necessary for the Contractor's first aid attendant to accompany the injured employee, provisions must be made by Contractor to have another employee, properly trained and certified in first aid, available to render same during the absence of the regular first aid attendant.
If the employee is able to return to the project the same day, he/she must return with a statement from the doctor stating same and containing such information as date, employee's name and date of return to regular or restricted duty, date he/she is to return to doctor, diagnosis, signature and address of doctor.
If the injured employee is unable to return to the project the same day, the employee who transported him/her shall bring this information back to the project and report to A.Z. Shmina, Inc.
If it is necessary to call an outside medical facility, this call should be made by A.Z. Shmina, Inc. Project Manager while the injured employee is being transported.
Medical cases requiring ambulance services would be such cases as severe head injuries, amputations, heart attacks, severe bleeding, stopped breathing, etc.
Should ambulance service be necessary, the Contractor first aid attendant (or nearest employee properly trained and certified in first aid) and A.Z. Shmina, Inc. shall be contacted immediately.

EMERGENCY PROCEDURES – ALARMS, FIRE, BOMBS, WEATHER, ENVIRONMENTAL, PUBLIC DEMONSTRATION

To ensure emergency services may be performed promptly, each Contractor and Subcontractor shall post, in a conspicuous place, a list of emergency telephone numbers along with the type of information to be transmitted for each emergency situation.
All accidents are to be handled by the ranking person present, with whoever is available to assist.
The ranking person shall direct someone to notify first aid personnel, and to call for emergency services as necessary.
The Project Superintendent is to be notified as soon as this can be done without delaying assistance to the injured. The Project Superintendent will take appropriate action.
In accidents resulting in injury to personnel, individuals qualified to administer first aid will assist the injured, stabilize their condition and arrange for transportation to a hospital if further treatment is required.
Except when necessary to avoid further injury, or to prevent additional damage to the work, equipment will not be moved, or the position of items, parts, pieces, controls, etc. will not be changed until photographs have been made and notes taken by the Project Superintendent or the person designated to make the investigation and report.
As soon as the Project Superintendent can release the area from this constraint, Contractors concerned will clean up and make repairs to return to a normal situation.
**Where a specific procedure has not been established, reasonable judgment should be used in determining what course to follow.

Alarms

A.Z. Shmina, Inc. shall be notified of all emergencies and notify the appropriate emergency service of the incident and initiate appropriate action.
Fire alarms within the area of new construction will consist of three short blasts on an air horn or other suitable alarm located at the egress, stairway, ladder, or building entry.
Telephone notification to the first department will be initiated immediately after sounding the air horn alarm.
A.Z. Shmina, Inc. shall inform all concerned regarding the fire.

A continuous long blast on the air horn may be used to summon first aid assistance in the event of an accident.

Fire

The following procedures are to take effect in the event of a fire: "RACE"

- **R** **R**escue…anyone in immediate danger
- **A** **A**larm…activate pull station; go to phone and dial 911
- **C** **C**ontain…close doors and windows, isolate fire
- **E** **E**xtinguish…use correct extinguisher

Accident Involving Serious Injury or Death (Follow A.Z. Shmina, Inc.'s Crisis Management Policy)

The following procedures are established in the event of an accident involving serious injury or death to employees or members of the general public.

Individuals qualified to administer first aid will assist the injured, stabilize their condition and, if further treatment is required, arrange for transportation to the hospital emergency room.

A.Z. Shmina, Inc. is to be notified immediately. Immediate notification (within 8 hours) of the local OSHA office is required in the event of a fatality or serious injury, which may lead to a fatality.

All non-essential personnel shall be removed and/or kept back from the area.

Rescue personnel shall be provided assistance as requested.

No comments shall be made to the press/media. All inquiries shall be referred to the Project Manager.

No on-site photographs are to be taken without the specific approval of the Project Manager and the Project Superintendent.

A.Z. Shmina, Inc. shall make a full investigation and file an Accident/Injury Report within twenty-four (24) hours of the occurrence.

Within the immediate area of the accident scene, nothing is to be disturbed nor removed after proper evacuation of the injured personnel.

Except when necessary to avoid further injury, equipment will not be moved, or the position of items, parts, pieces, controls, etc. will not be changed until photographs have been made and notes taken by the Project Superintendent or other person designated to make the investigation and report.

As soon as A.Z. Shmina, Inc. can release the area from the above constraint, Contractors concerned will clean up and make repairs to return to a normal situation.

Property Damage Accidents

The following procedures are to take effect in the event of accident involving property damage:

- A.Z. Shmina, Inc. is to be notified as soon as this can be done without delaying efforts to prevent further damage; and will take appropriate action and direct other personnel to assist as necessary.
- Efforts shall be taken to protect against further damage where possible.
- All non-essential personnel shall be removed and/or kept back from the area.
- No comments shall be made. All inquiries shall be referred to A.Z. Shmina, Inc.
- No on-site photographs are to be taken without the specific approval of A.Z. Shmina, Inc.
- A.Z. Shmina, Inc. shall make a full investigation and file an Accident/Injury Report within twenty-four (24) hours of the occurrence.
- Within the immediate area of the accident scene, nothing is to be disturbed nor removed after proper evacuation of the injured personnel.
- Except when necessary to avoid further injury, equipment will not be moved, or the position of items, parts, pieces, controls, etc. will not be changed until photographs have been made and notes taken by A.Z. Shmina, Inc.

As soon as A.Z. Shmina, Inc. can release the area from the above constraint, Contractors concerned will clean up and make repairs to return to a normal situation.

Severe Weather

Since severe weather may be reasonably anticipated to occur during the duration of the project, yet without significant advance warning, all work activities and project conditions must be planned with a concern for emergency preparations. The following procedures are intended to prepare the project in the event of severe weather conditions:

- Each Contractor at the time of mobilization shall deliver to A.Z. Shmina, Inc. a complete list of the Contractor's supervisors with the complete after-hours telephone numbers. The list shall be kept up-to-date.

- Each Contractor shall ensure the field trailers, and Subcontractors' field trailers are anchored in at least three locations.

Upon notification of a Severe Weather Watch by the U.S. Weather Bureau, the following actions are to be initiated:

- Each Contractor having on-site generators which are fuel-powered is requested to notify A.Z. Shmina, Inc. of the numbers and wattage. Generators may be needed to provide temporary power for rescue or clean-up activities.
- All materials shall be secured to prevent them from becoming air borne during high winds.

Particular attention needs to be given to picking up scrap materials and hauling or covering trash containers.
Crawler and mobile cranes shall have booms lowered at the end of the shift.
Cranes not capable of lowering booms shall be permitted to weathervane or free swing.
**Check to ensure swinging booms will not come into contact with other objects such as power lines, structures, etc.
Sufficient flashlights, batteries, and bulbs, shall be provided to assigned emergency response personnel. A supply of fresh batteries shall be maintained at the project for use in an emergency.

Other Major Catastrophes

Examples of other major catastrophes include:

- Major fire
- Collapse of large portions of structures or large sections of scaffolds
- Heavy damage by winds or floods

The Owner's security or local authorities will be provided with an emergency call list to summon A.Z. Shmina, Inc. and the Contractor personnel to the project in the event of a major catastrophe outside working hours, on Saturdays or Sundays, etc.
The A.Z. Shmina, Inc. Project Superintendent, or the most-qualified alternate, will cooperate fully with the directives of the hospital staff or local emergency authorities in the event of a major catastrophe.
He/She will take any or all of the following actions as necessary:

- Initiate fire fighting, tie down building, etc.
- Call for assistance from outside (fire trucks, ambulances, electricians, life flight helicopters, Civil Defense Support, police, etc.)
- Stop work
- Call for site evacuation, to clear site access roads
- Issue instructions to supervisors and others, as necessary
- Set up security control at the disaster area
- Set up communications center in project trailers (i.e. radios, telephones, etc.)
- Call in operators for heavy equipment such as front loaders, cranes, etc.
- Other actions considered necessary in the particular situation

Bomb Threat

When a bomb threat is received, or if a suspicious article is found, A.Z. Shmina, Inc. will take the following actions.

- Work shall be stopped immediately.
- The project and office shall be evacuated of all personnel. A count will be made to assure that all are present.
- Local police, fire or bomb disposal authorities shall be notified. A search of the premises will be made as directed by appropriate authorities.
- If a suspicious article is found, DO NOT TOUCH IT; notify the appropriate authorities.
- Do not allow anyone except authorized personnel to re-enter the area.
- If necessary, to stop or detour traffic away from the affected area, local police or flagmen shall be utilized.
- No comments shall be made. All inquiries shall be referred to A.Z. Shmina, Inc.
- No on-site photographs are to be taken without the specific approval of A.Z. Shmina, Inc.
- A.Z. Shmina, Inc. shall make a full investigation and file a report within twenty-four (24) hours of the occurrence.
- If repeated threats occur within a short period of time, A.Z. Shmina, Inc. will evaluate the situation and take appropriate action. This action may include shutting down the project.

Environmental Spill

In the event of a spill of environmentally damaging materials, immediate response is required to prevent or minimize the impact this event will have upon the environment and the public welfare.

All personnel shall continue to observe standard precautions for handling the materials as detailed in the manufacturer's product Material Safety Data Sheet (MSDS), including the use of personal protective equipment.
Where conditions warrant, the Contractor shall have emergency spill containment supplies available for immediate use.
The following general procedures apply to the immediate response which must be initiated:

- Immediately, all personnel in the immediate area of the release shall be alerted to the hazardous material and the nature of the immediate danger to themselves and the environment.
- As soon as possible, A.Z. Shmina, Inc. shall be notified and requested to initiate emergency containment and clean up procedures.
- The Local Fire Department shall be notified to mobilize their hazardous materials response units and shall be given the necessary information regarding the materials which were released.
- If safe to do so, every effort shall be made to contain the materials, by absorbent materials, or through other appropriate means, until proper handling and disposal personnel may be mobilized at the project. Particular attention needs to be taken to avoid contamination of surface water, storm sewers, sanitary sewers, ground, plants and animals.
- All non-essential personnel shall be removed and kept back from the area.
- No comments shall be made. All inquiries shall be referred to the Project Manager.
- No on-site photographs are to be taken without the specific approval of the Project Manager and the Project Superintendent.
- A.Z. Shmina, Inc. shall make a full investigation and file an Accident/Injury Report within twenty-four (24) hours of the occurrence.
- Within the immediate area of the accident scene, nothing is to be disturbed nor removed after proper evacuation of the injured personnel.
- Except when necessary to avoid further injury, equipment will not be moved, or the position of items, parts, pieces, controls, etc. will not be changed until photographs have been made and notes taken by the Project Superintendent or other person designated to make the investigation and report.
- A.Z. Shmina, Inc. shall be notified to initiate the response of available Environmental Remediation Contractors, who are under standby contract.
- As soon as the Environmental Remediation Contractor has cleared the project, the Project Superintendent will release the area for contractors concerned to clean up and make necessary repairs to return to a normal situation.

Public Demonstrations

When a public demonstration is expected or occurs, A.Z. Shmina, Inc. will take the following actions:

- Work on the project shall continue where not encumbered by the public demonstration; however work in the immediate area shall be stopped and all project employees shall be evacuated. A count will be made to assure all are present.
- Local police shall be notified, and all employees shall cooperate fully with the law enforcement authorities.
- Do not allow anyone except authorized personnel to enter the project. All visitor passes are revoked and all visitors shall be escorted from the project.
- If necessary, to stop or detour traffic away from the affected area, local police or flagmen shall be utilized.
- No comments shall be made. All inquiries shall be referred to the Project Manager.
- No on-site photographs are to be taken without the specific approval of A.Z. Shmina, Inc.
- A.Z. Shmina, Inc. shall make a full investigation and file a report within twenty-four (24) hours of the occurrence.
- If repeated public demonstrations occur within a short period of time, A.Z. Shmina, Inc. will evaluate the situation and take appropriate action. This action may include shutting down the project for that day or obtaining a judicial restraining order.

ENVIRONMENTAL – ASBESTOS

Occupational Safety and Health Administration (OSHA) regulations have been promulgated to protect workers from exposure to airborne asbestos fibers.
Under the Asbestos Control and Licensing Act, a contractor must be licensed by the Department of Labor and the State in which the work is being performed in order to remove asbestos.

Notification

Before starting asbestos removal work, the United States Environmental Protection Agency (USEPA) and the Local Department of Environmental Management must be notified in writing by the Contractor and appropriate permits must be on file. A.Z. Shmina, Inc. and/or its agent will verify this information by way of contract requirements.

Training

Employees of the Contractor must be appropriately trained and licensed prior to the removal of any asbestos contaminated material**. All Contractors employee(s) on-site must be trained in the recognition of hazards and appropriate controls.**

Posting

Asbestos material removal area shall be cordoned off to discourage entry.

Appropriately worded caution signs must be posted at all approaches to the area at such interval to allow individuals to take any necessary protective steps before entering the removal area.

Asbestos Handling

The encapsulation, removal and/or disposal of ACM shall be performed by a Contractor licensed to do such work in which the work is being performed and in accordance with all applicable Federal, State and Local Regulations per approved abatement plans.

Work Practices

Asbestos containing materials shall be worked in a wet state sufficient to prevent the emission of airborne fibers in excess of the permissible exposure limits.

Work areas are to be adequately protected through appropriate enclosures, to ensure no asbestos contaminated material will be permitted to leave the controlled area.

Personal Protective Equipment

In instances where reusable clothing is used, the following precautions must be followed:

- Contaminated clothes must be appropriately bagged and labeled. Notification and transportation to authorized laundries and haulers.
- All employees working in asbestos removal areas shall wear appropriate personal protective equipment.

Cleanup

There shall be no dry sweeping of asbestos material. Use floor coverings to prevent debris from falling to lower floors and to speed up housekeeping.

Labeling and Waste Disposal

Appropriately worded labels must be affixed to all materials, waste, debris, etc. containing asbestos materials.

Asbestos waste and/or asbestos contaminated material must be collected and discarded in sealed, labeled, impervious containers by contractor.

The following label content is acceptable to both the EPA and OSHA:

CAUTION:

CONTAINS ASBESTOS FIBERS

AVOID CREATING DUST BREATHING ASBESTOS DUST MAY CAUSE SERIOUS BODILY HARM

A.Z. Shmina, Inc. shall be provided with copies of all air monitoring reports and certified disposal receipts prior to final payment.

ENVIRONMENTAL – LEAD

Lead Painted Components

Lead based paint can possibly be identified on numerous surfaces throughout these facilities. In keeping with the requirements of the Occupational Safety & Health Administration's (OSHA's) Lead Exposure in the Construction Industry Standard (29 CFR 1926.62), every painted surface shall be considered a potential lead hazard.

A potential source of lead emission is the disturbing of painted surfaces of structures and components within these facilities.

Typical activities which would significantly disturb a painted surface include the following:

- Removal of all, or part of, the paint by hand or power tools
- Removal of all, or part of, the paint by blast cleaning

- Removal of all, or part of, the paint by other means such as the use of chemical strippers or a heat gun
- Structural work to the surface such as welding, burning, cutting, or drilling
- Manual demolition of buildings, portions of buildings, or the building components

The primary consideration when specifying work methods shall be the requirement to protect workers from exposure to lead above the Permissible Exposure Limit (PEL).

Further considerations when specifying work methods shall be the effort to reduce the release of lead into the air, water and soil, and to reduce to a minimum the generation of debris.

At all times, when activities which disturb paint are in process, the project competent person for lead shall have unrestricted access to the work area for inspection.

The competent person shall have the authority to stop work when the control measures being utilized are not as specified in this section or the OSHA Standard, if the control measures are not adequately controlling exposures or if other hazards are identified which require work to be stopped.

All air monitoring conducted by the project competent person for lead, or other qualified representative, shall be performed in accordance with the OSHA Standard.

Detailed and accurate records of all monitoring and other relevant data used in conducting employee exposure assessments shall be kept and maintained in accordance with the OSHA Standard.

Signs shall be posted in each work area where work on painted surfaces disturbs the paint in such a way so as to expose personnel to lead contaminated dust, debris, or lead fumes. At minimum they shall read: "**WARNING: LEAD WORK AREA POISON. NO SMOKING OR EATING"**

All worker protection requirements will, at minimum, meet the current OSHA Standard. These requirements include but are not limited to:

- Signage, Barriers and Access
- Exposure Monitoring
- Respiratory Protection
- Medical Surveillance and Records
- Education and Related Training
- Decontamination and Clearance

All work involving lead removal or re-coating shall be conducted in a manner that minimizes the release of lead and lead containing materials into the environment.

All lead containing hazardous wastes that are generated shall be contained, collected, segregated, labeled and held at a location designated or approved by the Owner or A.Z. Shmina, Inc. pending the appropriate disposition.

Contractor shall provide for proper disposal of waste, including EPA identification number, notification, certification, manifest, etc.

All waste containers must be leak proof and capable of being securely covered.

All waste containers shall be clearly labeled with weather resistant labels using indelible ink to identify the type of waste they contain. **Everyone on site not removing lead must have a current lead awareness training cert. on file with A.Z. Shmina, Inc. on-site Safety Reps.**

ENVIRONMENTAL – ON-SITE HAZARDS

Material designated as a hazardous substance requires special attention by the Contractor and workers to minimize the exposure.

A plan addressing the proper handling, storage and disposal of hazardous material must be developed. A.Z. Shmina, Inc. and the Owner must be immediately notified of any hazardous material leak or spill.

Any Contractor-caused oil spills must be reported immediately to A.Z. Shmina, Inc.

ENVIRONMENTAL – SILICA

Contractors shall submit their silica protection program for review by A.Z. Shmina, Inc. prior to the pre-construction conference.

As a minimum, the Contractor's silica protection plan shall comply with OSHA regulations and shall address the following items:

- Statement of the Contractor's commitment to prevent silicosis and to comply with OSHA's standards.

- Description of air monitoring to determine the silica levels generated by tasks to provide a basis for:
  - Selecting engineering controls,
  - Selecting respiratory protection,
  - Selecting work practices to reduce dust, and
  - Determining if a medical surveillance program is necessary.
- Description of engineering controls proposed for the project to eliminate or reduce the amount of silica in the air and the build-up of dust on equipment and surfaces.
- Description of less hazardous materials than crystalline silica proposed for abrasive blasting and automatic blast cleaning machines or tools to be utilized.
- Description of high-efficiency particulate air filter vacuums to be used by employees and work practices to vacuum, hose down, or wet clean work areas and equipment.
- Description of warning slips and other barriers proposed to identify work areas where breathable silica may be present and to limit access to only authorized employees.
- Description of personal protective equipment and clothing to be provided to employees and changing facilities if needed by the level of silica dust exposure.
- Certification of training provided to employees about health effects of silica exposure, engineering controls and work practices that reduce dust, the importance of maintenance and good housekeeping, as well as the proper type and fitting of respirators; and include a statement that the employee is or is not enrolled in a medical surveillance program.

ENVIRONMENTAL – POWERED EQUIPMENT INSIDE ENCLOSED STRUCTURES

If internal combustion engines are used on powered equipment in enclosed areas, the Contractor is responsible for monitoring the quality of breathing air for harmful contaminants and adequate oxygen and is responsible for providing adequate ventilation. **(Bio diesel fuel only to be used on this site)**

**EXCAVATIONS AND TRENCHES

This guideline is intended to prevent potentially serious accidents involving workers from being engulfed by unsupported sides of excavations. The proper preparation of earth support of the open sides of excavations is outlined. This guideline outlines the terminology, responsibilities and reviews the basic principles to ensure safety and efficiency.

Definitions

Benching - cutting the sides of an excavation to form one or a series of horizontal levels of steps. Also referred to as "terracing."

Competent Person - individual who can identify existing and reasonable predictable hazards in the surroundings or working conditions. This person is authorized to take prompt corrective measures to eliminate such hazards.

Excavation - any man-made cut, cavity, trench or depression in an earth surface formed by earth removal.

Protective System - any support, sloping, benching or shield system used to protect employees from cave-ins caused by material that could fall or roll from an excavation face into an excavation and cause the collapse of adjacent structures into the excavation.

Shoring - any metal, hydraulic, mechanical, timber or other structures supporting the sides of an excavation and is engineered to prevent cave-ins.

Sloping - cutting excavation sides in a manner in which they are inclined away from the excavation to prevent cave-ins. The angle of the incline required to prevent a cave-in varies with soil type, environmental conditions of exposure and application of surcharge loads.

Soil Classification System - a method of categorizing soil and rock deposits in a hierarchy including stable rock, Type A, Type B and Type C in decreasing order of stability. The categories are determined based on an analysis of the properties and performance characteristics of the deposits and on the characteristics of the deposits and the environmental conditions of exposure.

Support System - the underpinning, bracing, shoring or other means supporting an adjacent structure, underground installation or side of an excavation.

Trench - a narrow excavation less than 15 feet wide (measured at the bottom) and generally deeper than its width.

Responsibility

Responsible Manager - The Responsible Manager is responsible for designating, in writing, a Competent Person for the safe oversight of excavation and trenching activities.

Project Manager - The Project Manager is responsible for gathering all available information on utilities and structures in the area of the excavation/trench and notifying landowners, utilities and owners of any underground structures that may be affected by the excavation. The Project Manager shall provide the crew performing the excavation with all pertinent information.

Competent Person - The Competent Person shall determine whether or not the excavation constitutes a permit-required confined space. A daily inspection of the excavation site shall be performed to assess current conditions, following which the Competent Person shall declare the excavation safe for employees to enter at the beginning of each shift. The Competent Person is also responsible for ensuring the following tasks are accomplished:

- Determine the classification of the soil in each layer of the excavation.
- Perform air quality test for excavations deeper than four feet to establish that there is adequate oxygen and no toxic gases and/or vapors are present.
- Obtain a licensed, professional engineer's assistance when an excavation is deeper than twenty feet.
- Determine if Emergency Rescue Services will be needed for each excavation, and if so, arrange for rescue services to be "on call." All members of the excavation crew shall be informed of the proper method for summoning emergency help.

Employees - Employees shall be familiar with the Competent Person for the excavation by name and by sight and shall enter the excavation only after the Competent Person has given approval. Employees shall report any of the following conditions to the Competent Person immediately upon discovery:

- Water accumulation.
- Cracks/Fissures in sidewalls of excavation.
- Sloughing of sidewall material.
- Changes in air quality in the excavation.

Safety Representative - The Safety Representative is responsible for ensuring that this guideline is being followed. Further responsibilities include:

- Provide or locate training for the Competent Person for excavations.
- Provide awareness level training for all A.Z. Shmina, Inc. employees entering the excavation.
- Assist the Competent Person in locating an appropriately trained Emergency Rescue Team, if required.

General Rules

The following rules shall be considered when working around excavations:

- No one shall be allowed in the excavation until the Competent Person has approved entry for that shift.
- The Competent Person shall determine the classification of the soil at each layer that is uncovered. The classification shall be updated as needed.
- All excavations deeper than five feet must be shored or slopes according to the drawings in Examples of Sloping, Benching and Shielding based on the classification of the soil as determined by the Competent Person.
- The quality of air in excavations deeper than four feet shall be tested before each work shift with attention to oxygen and heavier-than-air toxic gases/vapors.
- A means of egress (ladder, stairs, walkable ramp, etc.) shall be available within 25 feet lateral travel of all personnel who enter the excavation.
- Water accumulation shall not be allowed. Personnel shall not work in standing water in an excavation without specific approval from the Competent Person. Pumps shall be used to remove water that enters the excavation and their operations shall be continuously monitored. If the excavation interferes with the natural drainage of surface water (streams or runoff), dikes or diversions shall be used to prevent surface water from entering the excavation.
- Barricading, signal guards, stop logs or other warning systems shall be in place if mobile equipment will be used around the excavation.
    - Nothing shall be stockpiled within two feet of the edge of the excavation. Spoils (loose soil) must be laid back more than two feet from the edge.
- Pedestrian and vehicle traffic shall be kept from the edge of the excavation at a distance to be adjusted to reflect the

weight and frequency of the traffic.

- Where employees or equipment are allowed to cross over and excavation, adequate walkways with guardrails and toe boards are required.
  - Materials for sheeting, shoring or bracing the sidewalls shall be in good condition. Timbers shall be sound, free of large or loose knots and of adequate dimension.
- Mechanical support systems shall be removed from the bottom first when the excavation is being backfilled.

Soil Classification and Identification

The Competent Person shall classify soils in the field based on the results of at least one visual and at least one manual analysis performed by the Competent Person.

Visual Analysis - visual analysis shall be conducted to determine qualitative information regarding the excavation site and the soil as follows:

- Identify excavated soil and the surface area adjacent to the excavation, as well as soil in the sides of the excavation.
- Estimate the range of particle sizes and the relative amounts of the particle sizes.
- Soil that is primarily fine-grained material that remains in clumps when excavated is cohesive material.
- Soil that is coarse-grained sand or gravel that breaks up easily and does not stay in clumps is granular material.
- Crack-like openings indicate fissured material. If chunks of soil spall off a vertical side, the soil could be fissured.
- Small spalls are evidence of moving ground and are indicators of potentially hazardous situations.
  - Identify previously disturbed soils.
  - Observe the opened side of the excavation to identify layered systems to determine if the layers slope toward the excavation. Estimate degree of slope of the layers.
  - Examine area adjacent to and within the excavation for evidence of the following:
    - Existing utility and other underground structures.
    - Surface water, water seeping from the sides of the excavation or the location of the level of the water table.
    - Sources of vibration that may affect stability of the excavation face.

Manual Analysis - manual analysis shall be conducted to determine the quantitative properties of soil and to provide more information to classify soil properly:

- *Plasticity* - mold a moist sample of soil into a ball and attempt to roll into thread as thin as 1/8-inch diameter. Cohesive material can successfully be rolled into threads without crumbling and can be held on one end without tearing.
- *Dry Strength* - if the soil is dry and crumbles on its own or with moderate pressure into individual grains or fine power, it is granular. If the soil is dry and falls into clumps that break up into smaller clumps, but the smaller clumps can only be broken up with difficulty, it may be clay in any combination with gravel, sand or silt. If the soil breaks into clumps that do not break up into small clumps that can only be broken with difficulty and if there is no visual indication that the soil is fissures, the soil may be considered unfissured.
- *Thumb Penetration* - used to estimate the unconfined compressive strength of cohesive soils. The thumb can readily indent Type A soils, however, the thumb, only with very great effort, can penetrate them. Type C soils can be easily penetrated several inches by the thumb and can be molded by light finger pressure. Thumb penetration should be conducted on an undisturbed soil sample as soon as practicable after excavation to minimize the effects of exposure to drying influences. If the excavation is later exposed to wetting influences such as rain or flooding, the classification of the soil must be changed accordingly.
- *Other Strength Tests* - estimates of unconfined compressive strength of soils can be obtained by the use of a pocket penetrometer or by using a hand-operated shear vane.
- *Drying Tests* - used to differentiate among cohesive material with fissures, unfissured cohesive material and granular material. Dry a sample of soil that is one-inch thick and six-inches in diameter until it is thoroughly dry and make the following determinations:
  - If the sample develops cracks as it dries, significant fissures are indicated.
  - Samples that dry without cracking are to be broken by hand. If considerable force is necessary to break a sample, the soil has significant cohesive material content. The soil can be classified as an unfissured cohesive material and the unconfirmed compressive strength should be determined.
  - If a sample breaks easily by hand, it is fissured cohesive material or a granular material. Pulverize the dried

clumps of the sample by hand or by stepping on them. If the clumps do not pulverize easily, material is cohesive with fissures. If they pulverize easily into very small fragments, material is granular.

- *Soil Classification* - each soil type encountered in excavation shall be classified per:
- *Rock* - presents the most stable excavation walls. No wall support is needed.
- *Type A Soil* - includes cohesive soils such as clay, silty clay, sandy clay, clay loam and in some cases, silty clay loam. Cemented soils such as hard pan are Type A soils. Soil is NOT Type A if it falls in any of the following categories:
  - Fissure soil.
  - Soil subject to vibration from heavy traffic, pile driving or similar effects.
  - Soil that is part of a sloped, layered system where the layers dip into the excavation on a slope of four to one (horizontal to vertical) or greater.
  - Soil subject to other factors requiring it to be classified as less stable material.
- *Type B Soil* - included cohesive soil and granular cohesionless soils including angular gravel (crushed rock), silt, silt loam, sandy loam and in some cases silty clay loam and sandy clay loam. Type B soil includes material that is part of a sloped, layers system where the layers dip into the excavation on a slope less than 4:1 but only if the material would otherwise be classified as Type B.
- *Type C Soil* - includes granular soils such as gravel and sand (alone or mixed), loamy sand, submerged soil or soil from which water is freely seeping as well as submerged rock that is unstable.

Maximum Slope by Soil Type - the following table presents the maximum slope by soil type allowed for the sidewalls of excavations less than twenty feet deep, based on the soil classification. If this degree is sloping is not possible, support systems must be used. Note - sloping requirements may vary from state to state if the state has a state run OSHA plan.

SOIL CLASSIFICATION	MAXIMUM ALLOWABLE SLOPE	
ROCK/STABLE ROCK	**VERTICAL**	**90°**
TYPE A SOIL	**.75 : 1**	**53°**
TYPE B SOIL	**1 : 1**	**45°**
TYPE C SOIL	**1.5 : 1**	**34°**

Subcontractors Involved in Excavations

Subcontractors involved in excavations, either through creation of or work in excavations shall utilize their own excavation procedure and Competent Person. The subcontractor's procedure should be submitted to A.Z. Shmina, Inc. for review and approval prior to start of work.

Training

The Competent Person (for excavations) shall receive initial training in excavations, air monitoring, soil classifications, support systems and rescue teams.

All excavation entrants shall receive awareness training on excavation safety prior to entering any excavation.

Emergency rescue teams, whether in-house or external, shall be specifically trained in excavation rescue. The Competent Person, working in conjunction with the Safety Representative, shall determine the adequacy of the training of external Emergency Rescue Teams for responding to excavation emergencies. This training shall include:

- Hazards of using equipment for recovery.
- Maintenance of air supply to the trapped.
- Continuance of water removal measures.
- Red Cross Emergency First Aid, or equivalent.
- Cardiopulmonary Resuscitation (CPR).

Records

When there has been an incident, records of the Competent Person's daily inspection notes shall be retained for the duration of the investigation and an additional three years thereafter.

When there has been no incident, the records shall be retained only until the excavation has been backfilled.

**EXPOSURE CONTROL PLAN

In the course of performing work that involves or may involve direct contact/exposure to contaminated materials, items and/or surfaces at hospitals and other medical facilities, employees could be exposed to blood or other infectious

materials.
This exposure control plan must be utilized when work that involves or may involve direct contact/exposure contaminated materials, items and/or surfaces is performed at hospitals and other medical facilities.

Definitions

Blood - human blood, human blood components and products made from human blood.

Bloodborne Pathogen - pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

Contaminated - the presence or the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface.

Decontamination - the use of physical or chemical means to remove, inactivate or destroy bloodborne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use or disposal.

Exposure Incident - a specific eye, mouth or other mucous membrane, non-intact skin or parenteral contact with blood or other potentially infection materials that results from the performance of an employee's duties.

Hepatitis B - hepatitis B is the most common serious liver infection in the world. The hepatitis B virus (HBV) that attacked the liver causes it. The virus is transmitted through the blood and bodily fluids that contain blood.

Occupational Exposure - reasonably anticipated skin, eye, mucous membrane or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee's duties.

Parenteral - piercing mucous membranes or the skin barrier though such events as needlesticks, human bits, cuts and abrasions.

Regulated Waste - liquid or semi-liquid blood or other potentially infectious materials:

- Contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed
- Items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling
- Contaminated sharps
- Pathological and microbiological wastes containing blood or other potentially infectious materials.

Sharps - a non-needle sharp or a needle device used for withdrawing body fluids, accessing a vein/artery or administering medications or other fluids (e.g. syringes, IV needles, etc.)

Universal Precautions - an approach to infection control. According to the concept of universal precautions, all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV and other bloodborne pathogens.

Responsibility

Responsible Manager/Supervisor/Foreman - The Responsible Manager/Supervisor/Foreman shall ensure that employees comply with the provisions of this guideline

Employees - Employees shall comply with the provisions of this plan and exercise constant awareness of potential exposure when performing work that involves or may involve direct contact/exposure to contaminated materials, items and/or surfaces in hospitals and other medical facilities. Employees shall have access to the Exposure Control Plan.

Safety Representative - The Safety Representative shall monitor the use of this guideline to assure compliance and understanding by employees. The Safety Representative shall also provide guidance in implementation of this plan

Occupational Exposure Determination

The work of plumbers, pipe fitters, welders, sheet metal workers, helpers, laborers, apprentices and foreman may, on occasion, involve or may involve direct contact/exposure to contaminated materials, items and/or surfaces at hospitals and other medical facilities. Not all employees of a particular category can reasonably be expected to perform such work however. Therefore the operations manager and safety representative shall make a determination of which employees at their operating company can reasonably be expected to perform work that involves or may involve direct contact/exposure to contaminated materials, items and/or surfaces in hospitals and other medical facilities. The employees identified will be considered as having occupations exposure and therefore should receive exposure control training and be offered the HBV vaccine series.

Universal Precautions

All human blood and potentially infectious materials will be considered to be infectious for bloodborne pathogens regardless of the perceived status of the source or individual.

Engineering Controls and Work Practices

Engineering and work practice controls will be utilized to eliminate or minimize exposure to employees. The following engineering and work practice controls will be utilized:

Hygiene and Sanitation - After removal of personal protective gloves, employees shall wash hands and any other potentially contaminated skin area IMMEDIATELY or as soon as feasibly possible with soap and water.

Where practical, the area and equipment to be services will be cleaned and decontaminated by the facility owner prior to starting work activities. Hand washing facilities will be accessible to employees. The use of hand sanitizing products in addition to hand washing is encouraged. Employees that encounter any waste or other material that they know or expect to contain human blood or other infectious materials should stop work and notify the supervisor or facility owner immediately. The use of disposable coveralls is encouraged to minimize soiling of the clothing. All personal protective equipment will be removed prior to leaving the work area for the end of the shift, day or at break/meal times.

Tools and Equipment - All tools and equipment used in work that involves or may involve direct contact/exposure to contaminated materials, items and/or surfaces in hospitals and other medical facilities will be disinfected after use. The following procedure will be used:

- While wearing required personal protective equipment such as safety glasses and latex gloves, tools and equipment will be placed in the same proximity.
- Disinfect the tools/equipment with either of these two methods:
  - Apply Lysol ® or other EPA-registered disinfectant to the tools/equipment. Ensure the disinfectant is applied to all sides of the tool/equipment. OR-
  - Soak the tools/equipment in a 10% (minimum) solution of chlorine bleach for at least 10 minutes.

Tools and equipment will not be placed back into boxes, gang-boxes or cases until they have been disinfected.

Work Area Restrictions - In work areas where there is a reasonable likelihood of exposure to blood or other potentially infectious materials, employees shall not eat, drink, apply cosmetics or lip balm, smoke, chew tobacco or handle contact lenses. Food and beverages are not to be kept in refrigerators, freezers, shelves, cabinets or on counter tops where blood or other potentially infectious materials are present.

Housekeeping - All work areas and equipment will be maintained in a clean and sanitary condition. Work activities will cease if blood or other potentially infectious materials are identified. Work will not restart until clean and decontamination have been completed.

Contaminated Laundry or Clothing - All laundry or clothing contaminated with blood or other potentially infectious materials will be disposed of in a regulated waste container.

Personal Protective Equipment (PPE)

PPE will be provided without cost to employees. PPE will be selected based on the anticipated exposure to blood or other potentially infectious materials.

The PPE will be considered appropriate only if it does not permit blood or other potentially infectious materials to pass through or reach the employee's clothing, skin, eyes, mouth or other mucous membranes under normal conditions of use.

Protective clothing will be distributed to employees by their immediate supervisor. An adequate supply of PPE will be maintained at the shop/office or at the work location.

PPE used in the elimination or minimization of exposure will include but not limited to the following:

- Impervious gloves
- Face shields
- Safety glasses
- Surgical masks
- Goggles
- Aprons
- Disposable coveralls

Employees are expected to utilize PPE in occupational exposure situations.

Hepatitis B Vaccine

Those employees identified as having occupational exposure due to work that involves or may involve direct contact/exposure to contaminated materials, items and/or surfaces in hospitals and other medical facilities will be offered the Hepatitis B vaccine series. The vaccine will be offered within 10 working days of an employee being identified as having potential for occupational exposure to blood or other potentially infectious materials.
The vaccination shall be administered only after the identified employee has had training as outlined in this procedure.
All employees who are offered the Hepatitis B vaccine must read and sign a Consent or Rejection form that indicates their choice in regard to receiving the vaccination.
Employees who initially decline the vaccine but who later wish to have it may then have the vaccine provided at no cost to the employee.
The branch or subsidiary manager or their designee shall ensure that the vaccine is offered and related paperwork is completed and filed.
The Hepatitis B vaccine series will be administered by local clinic or a licensed physician.

Exposure Incidents

Should an exposure incident occur, the following procedure MUST be followed:

- Flush the exposed area with water for 15 minutes.
- The Project Manager and/or Safety Representative shall be notified immediately of the incident and shall:
  - Record the information related to the exposure incident and the exposed employee.
  - Verify that the employee has been directed to seek medical attention.
  - Notify the appropriate management personnel of the incident.
- The supervisor of the exposed employee must complete an Exposure Incident Investigation Form and forward it to the Project Manager and/or Safety Representative.
- The employee shall be directed to seek immediate medical attention from a licensed physician. The operating company shall supply the physician with the following;
  - A description of the employee's duties as they relate to the exposure incident.
  - The exact nature of the incident, including the route of exposure and the circumstances under which the exposure incident occurred.
  - All medical records relevant to the appropriate treatment of the employee including vaccination status of the employee.
- After obtaining the employee's consent, the physician shall obtain appropriate HBV and HIV serologic baseline studies on the exposed employee.
- The employee's personnel file shall be annotated to indicate the name and address of the evaluating physician.
- If the employee has any questions concerning these results and/or treatment, the employee shall be instructed to direct such questions to their treating physician.
- All medical records to be kept confidential.

Post-Exposure Evaluation and Follow-Up

All employees who incur and exposure incident will be offered post-exposure evaluation and follow-up in accordance with the OSHA standard. Evaluation and follow-up to include the following:

- Documentation of the route of exposure and the circumstances related to the incident.
- Results of testing of exposed employee or source material.
- The employee will be offered the option of having their blood collected for testing of the employee HBV/HIV serological status. The blood sample will be preserved for up to 90 days to allow the employee to decide if the blood should be tested for HIV serological status. However, if the employee decides prior to that time that testing will or will not be conducted, then the appropriate action can be taken and the blood sample discarded.
- The employee will be offered post exposure prophylaxis in accordance with the current recommendations of the U.S. Public Health Service.
- The employee will be given appropriate counseling concerning precautions to take during the period after the exposure incident. The employee will also be given information on what potential illnesses to be alert for and to report any related experiences to appropriate personnel.
- The following person(s) have been designated to assure that the policy outlined here is effectively carried out as well as to maintain records related to this policy:

- The branch or subsidiary safety representative
- The branch manager or their designee
- The corporate director of safety and loss control

Training

Training for employees identified as having occupational exposure will be conducted prior to initial assignment to tasks where occupational exposure may occur and within 1 year of previous training. Training will be conducted in the following manner:

- Review OSHA standard for Bloodborne Pathogens.
- Discuss epidemiology and symptomatology of bloodborne pathogens.
- Explain modes of transmission of bloodborne pathogens.
- Review this Exposure Control Plan - points of the plan, lines of responsibility, implementation of the plan, etc.
- Procedures which might cause exposure to blood or other potentially infectious materials.
- Control methods that will be used at the facility to control exposure to blood or other potentially infectious materials.
- Explain PPE that is available at the facility and who should be contacting concerning selection and usage.
- Review the post-exposure evaluation and follow-up.
- Explain signs and labels used for infectious materials.
- HBV vaccination program

Training will be documented on a Bloodborne Pathogen Training Form.

Recordkeeping

All medical records required by the OSHA Bloodborne Pathogen standard will be managed and maintained by A.Z. Shmina, Inc. for the duration of employment, plus 30 years.

All training records required by the OSHA Bloodborne Pathogen standard will be managed and maintained by A.Z. Shmina, Inc. for no less than 3 years.

EYE AND FACE PROTECTION

Appropriate eye protection meeting the requirements of ANSI Z87 (most recent version) with side shields are required to be worn in a manner to protect the eyes while in construction areas at all times.

In addition, approved eye and face protection is required as follows:

Goggles, welding hoods and shields, or face shields will be required to be properly worn at all times when in the area of operations, such as when welding, burning, grinding, chipping, chemical handling, corrosive liquids or molten materials, drilling, sawing, driving nails, power actuated tools, concrete pouring, tampers and gasoline fueled hand operated equipment (i.e. chain saws).

This section will also apply to those employees of Contractors who are assisting any worker as an apprentice or helper.

Prescription glasses must meet the requirements of ANSI Z87 (most recent version), or be covered with over-the-glass safety glasses or face shield. **(No dark lens safety glasses used indoors)**

**EYE AND FACE PROTECTION – SELF-PERFORM

Care should be taken to recognize the possibility of multiple and simultaneous exposure to a variety of hazards. Adequate protection against the highest level of each hazard should be provided:

- Eye protection devices do not provide unlimited protection.
- Face shields and welding helmets should be worn over primary eye protection (approved safety glasses or goggles).
- Protection from light radiation is directly related to filter lens density. Select the darkest shade that allows task performance.
- While performing work on customer property, customer eye and face protection requirements may differ from those presented in this policy.
- If customer requirements do differ from those in this policy, the more stringent requirement shall be followed. The safety manager can help in making a determination.

Responsibility

Employees - All employees shall comply with the policy outlined in this document.

Supervisors - Supervisors shall ensure that employees under their supervision comply with this policy.

Managers - Managers shall ensure that employees within their area of management are performing their responsibilities as outlined in this document.

Safety Glasses

Safety glasses meeting ANSI Z87.1 standards equipped with permanently affixed sideshields shall be worn as standard eye protection.

Eye/Face protection in addition to safety glasses may be required for certain tasks.

The following safety glasses are approved for use by A.Z. Shmina, Inc. employees:

- Clear plastic safety glasses meeting ANSI Z87.1 standards equipped with sideshields.
- Prescription safety glasses meeting ANSI Z87.1 standards.
  Note: prescription safety glasses meeting ANSI Z87.1 standards shall have "Z87" stenciled in the temple bar of the glasses. The "Z87" stencil is a requirement of the standard. Prescription safety glasses that do not have "Z87" stenciled on the temple bar are not approved safety glasses.
- Equipped with permanently affixed sideshields.
- Tinted plastic safety glasses meeting ANSI Z87.1 standards equipped with sideshields (only for outdoor work during daylight hours).
- Photo-Gray .5 or less prescription safety glasses meeting ANSI Z87.1 standards equipped with permanently affixed sideshields.
  Note: Photo-Gray lenses are designed to darken when exposed to sunlight and lighten when exposed to indoor lighting.
- Tinted safety glasses are not approved for use indoors.
- Tinted safety glasses are approved for outdoor work during daylight hours when sun glare presents a hazard.
- Approved safety glasses must be worn on the project at all times. No exceptions. This includes indoors and in the field.
- Approved safety glasses shall not be required while driving vehicles in field locations unless required by customer policy.
- Approved safety glasses must be worn in office, plant, field or outside of project areas when there is the potential for exposure to flying particles.
- Approved safety glasses must be worn in areas designated with "Safety Glasses Required" or "Eye Protection Required" signage.

Goggles

Chemical goggles must be worn when there is a potential for exposure to irritant chemical splash or mist. If the chemical presents a severe hazard or is destructive to skin tissue, a faceshield must be worn over the goggles.

Goggles must be worn when there is a potential for exposure to nuisance dust. Examples would include: sandblasting, using hot glass shot machines, woodworking, sanding and generally dusty conditions.

Welding goggles or welding faceshield must be worn when doing gas welding.

Faceshields

Clear faceshields must be worn over approved safety glasses when using pedestal grinders and portable grinders.

Clear faceshields must be worn when there are potentials for exposures to severe hazard chemicals or chemicals that are destructive to skin tissue.

Clear faceshields and goggles must be worn when making "first breaks" on lines that contain hazardous chemicals.

Welding or filtered lens faceshields must be worn with using torches or "rosebuds."

Welding Helmets

Welding helmets must be worn when performing electric arc welding.

Welding helmets must be worn when performing electric arc gouging.

Welding helmets used for electric arc welding or gouging shall be equipped with lenses rated from 10-4.

Training

Training shall be provided as part of an employee's initial orientation and when it is determined that the employee does not have the understanding and skill required to properly use the eye and face protection required for the task.

Any training in the eye and face protection shall be documented to reflect, at a minimum:

- Name of trainee
- Date of training

- Subject of training

The employee's supervisor shall ensure that employees receive required training before they are exposed to eye and face hazards.

FALL PROTECTION

A Fall Protection Plan must be developed by the Contractor for all work with a fall exposure greater than 6-feet with a copy provided to A.Z. Shmina, Inc. prior to start of work.

"Controlled Access Zones", "Safety Monitoring" and "Warning Lines" are not permitted.

Personal Fall Arrest System shall be worn and attached to the manufacturer's approved anchorage when working in aerial lifts and to vertical drop lines when working from suspended scaffolding.

Only one individual shall use a vertical safety line at a time.

When wire rope is used as a guardrail providing fall protection, all connections and splices shall be loop-type connection with a minimum of two (2) wire rope clamps when used as a guardrail.

Turnbuckles shall be installed at suitable intervals to maintain the required tautness of the wire rope but in no instance less than one per side.

When wire rope is used as a horizontal lifeline, it shall be designed by a registered professional engineer and installed and maintained by a competent person. It shall be designed, installed and maintained to meet, at a minimum, the requirements of OSHA as contained in 29 CFR.1926.502.

To eliminate the potential of a fall when working on a flat roof or deck, a warning barrier meeting the requirements of 1926.502(f) may be used 15 feet from the fall hazard. If a worker is between the warning barrier and the fall hazard, a positive means of fall protection must be used.

Warning tape is not allowed as a warning barrier.

Roof Access

All roof access must be approved by A.Z. Shmina, Inc. site safety, all trades accessing roof must attend Roof Access orientation before working on any roofs on this project.

Steel Erections

Refer to section titled "Steel Erection".

Precast/Prestressed Concrete

Refer to section titled "Precast/Prestressed Concrete".

**FALL PROTECTION

Definitions

Anchorage - a secure point of attachment for lifelines, lanyards or shock absorber devices. The anchorage shall be independent of any anchorage being used to support or suspend platforms and capable of supporting at least 5,000 pounds per employee attached.

Body Harness - straps secured about the employee that will distribute the fall stopping force over the body. The body harness has a means for attaching it to other components of a personal fall arrest system.

Connector - a device which is used to connect part of the personal arrest system, positioning or restraint systems together. It may be an independent component such as a carabiner or it may be an integral component of the body harness (D-Rings) or lanyards (snap-hooks).

D-Ring - a connector located on the back of the body harness which is designed to be the connection point for lanyards and lifelines.

Leading Edge - the edge of a floor, roof or formwork for a floor or other walking/working surface which changes location as additional floor, roof, decking or formwork sections are placed, formed or constructed.

Lanyard - a flexible line of rope, wire rope or strap that has a connector at each end for connecting a body harness to a shock absorbing device, lifeline or anchorage.

Lifeline - a flexible line for connection to an anchorage at one end to hang vertically (vertical lifeline) or for connection to anchorage at both ends to stretch horizontally (horizontal lifeline).

Personal Fall Arrest System - a system used to stop an employee's fall consisting of an anchorage, connectors and a body harness and may include a lanyard, a shock absorbing device, a lifeline or a suitable combination of any/all of the above items.

Personal Floatation Device (PFD) - a life vest or life preserver that is capable of supporting a person and keeping them afloat in water.
Rope Grab - a deceleration device that travels on a lifeline and automatically, by friction, engages the lifeline and locks so as to arrest the fall of an employee.
Self-Retracting Lifeline/Lanyard - a deceleration device containing a drum-wound line, which can be slowly extracted from, or retracted onto, the drum under slight tension during normal employee movement, and which, after onset of a fall, automatically locks the drum and arrests the fall.
Shock Absorbing Device - any mechanism such as a rope grab, rip-stitch lanyard, specially woven lanyard, tearing or deforming lanyard and others, which serves to dissipate energy during a fall. These mechanisms will also arrest and limit the energy imposed on the employees as they are stopped.
Snaphook - a connector comprised of a hook-shaped member with a normally closed keeper or similar arrangement that may be opened to permit the hook to receive an object, and when released, automatically closes to retain the object.
100% Tie-Off Lanyard - two legged lanyard with an integral shock absorber which allows workers to be tied-off to one anchorage point at all times even while moving from one location to another. Each leg of the lanyard is terminated by a connector and a center connector (usually a snap hook) attaches to a back D-ring of the harness.

Responsibility

Safety Manager/Site Safety Representative - The Safety Manager/Site Safety Representative shall monitor the use of this guideline to assure compliance and understanding by employees. The Safety Manager/Site Safety Representative shall also provide guidance in the selection and use of fall protection systems. When requested, the Safety Manager/Site Safety Representative shall assist the Project Manager in their completion of the Project Fall Protection Assessment Checklist. The Safety Manager/Site Safety Representative shall develop the site specific plan.
Project Manager - The Project Manager shall ensure that a Project Fall Protection Assessment Checklist is completed prior to the start of their project. The Project Manager shall distribute copies of the checklist to all foreman and trade supervisors for review and use in the field.
Foreman and Trade Supervisors - Foreman and Trade Supervisors shall ensure that employees under their supervision/direction are following safe work practices as outlined on this guideline and the Project Fall Protection Assessment Checklist.
Employees - Employees shall exercise constant awareness of and respect for fall hazards and shall use fall protection devices when appropriate. Employees shall inspect fall protection equipment before every use and remove defective/damaged equipment from use.

General

Fall protection systems or practices, such as guardrails, fall restraint systems, personal fall arrest systems, warning lines or safety monitors are required under the following conditions:

- When a fall exposure hazards of six feet or more exists
- When a fall exposure hazards of less than six feet exists under particularly hazardous circumstances such as work over objects or equipment that present physical hazards.

All fall protection equipment adheres to applicable ANSI, ASTM, or OSHA requirements.

Fall Exposure Hazards

The following are common fall exposure hazards:

- Areas of metal deck during installation and when floor openings are made to accommodate elevators, ladder openings and mechanical/ventilation shafts.
- Unprotected sides and edges such as on roofs, ramps and platforms at elevations greater than six feet.
- Leading edges created during the installation of floor, roof, decking or formwork.
- Excavations six feet deep or deeper.
- Wall openings where a fall exposure of six feet or more exist and the inside bottom edge of the wall opening is less than 39 inches above the walking/working surface.
- Skylights located on roofs or where a fall potential of six feet or greater exists. Work on articulating booms lifts (man-lifts, JLG's) at heights greater than six feet.

Approved Fall Protection Systems and Practices

The systems and practices listed below are approved for use in protecting employees from fall exposure hazards:

- Personal fall arrest systems.
- Warning line systems.
- Safety monitoring systems
- Guardrail systems
- Covers for holes

Site conditions and configurations may require the use of multiple systems and practices to protect employees from fall exposure hazards. Fall protection systems and practices may be used in tandem to provide additional levels of fall protection. For example, a warning line system in conjunction with a safety monitor may be used on rooftops during equipment setting operations.

Project Fall Protection Assessment

The designated Project Manager shall ensure that a fall protection assessment is completed prior to the start of the project. Completion of the checklist during or prior to the pre-construction/kick-off meeting is preferred.

The Project Fall Protection Assessment is completed to identify potential fall exposure hazards and corresponding fall protection systems and practices that will be utilized to protect employees for identified fall exposure hazards.

A Project Fall Protection Assessment Checklist form will be used to document the fall protection assessment. See Project Fall Protection Assessment Checklist

The completed Project Fall Protection Assessment Checklist will be distributed to all project foreman and trade supervisors for review and to be used to address fall exposure hazards.

The Project Manager shall post the completed Fall Protection Assessment Checklist on the project safety bulletin board for review by all employees.

Personal Fall Arrest Systems

Personal Fall arrest systems and their use shall comply with the following requirements:

- Connectors shall be drop-forged, pressed or formed steel, or of equivalent material.
- Connectors shall have a corrosion-resistant finish and all surfaces and edges shall be smooth to prevent damage to interfacing parts of the system.
- D-Rings and snaphooks shall have a minimum tensile strength of 5,000 pounds.
- D-Rings and snaphooks shall be proof tested to a minimum tensile load of 3,600 pounds without cracking, breaking or taking permanent deformation.
- Snaphooks shall be a locking type snaphook designed and used to prevent disengagement of the snaphook by the contact of the snaphook keeper with the connected member.
- Horizontal lifelines shall be designed, installed and used, under the supervision of a qualified person, as part of a complete personal fall arrest system, which maintains a safety factor of at least two.
- Vertical lifelines shall be installed and used, under the supervision of a qualified person, as part of a complete personal fall arrest system, which maintains a safety factor of at least two.
- Vertical lifelines shall have a minimum breaking strength of 5,000 pounds.
- Vertical lifelines to which rope grabs will be attached shall be of synthetic material and be between 5/8 and 3/4 inches in diameter.
- Lifelines shall be protected from being cut or abraded.

Personal fall arrest systems are generally not required when working on the following structures or equipment (always check with supervisor or safety manager):

- Permanent platforms enclosed by proper handrails.
- Complete and inspected scaffolding equipped with proper decking and guardrails.
- Fixed cage ladders.
- Portable ladders that are properly placed and secured.

Warning Line Systems

Warning line systems and their use shall comply with the following requirements:

- The warning line shall be erected around all sides of the roof area.
- When mechanical equipment is not being used, the warning line shall be erected not less than six feet from the roof edge.

- When mechanical equipment (forklift, pallet jacks, etc) is being used, the warning line shall be erected not less than six feet from the roof edge which is parallel to the direction of mechanical equipment operation, and not less than ten feet from the roof edge perpendicular to the direction of mechanical equipment operation.
- Points of access, material handling areas, storage areas and hoisting/landing areas shall be connected to the work area by an access path formed by two warning lines.
- When the part to a point of access is not in use, a rope, wire, chain or other similar barricade, equivalent in strength and height to the warning line, shall be placed across the path at the point where the path intersects the warning line erected around the work area, or the part shall be offset such that a person cannot walk directly into the work area.

Warning lines shall consist of ropes, wires or chains, and supporting stanchions erected as follows:

- The rope, wire or chain shall be flagged at not more than six foot intervals with high- visibility material.
- The rope, wire or chain shall be rigged and supported in such a way that its lowest point (including sag) is not less than 34 inches from the walking/working surface and its highest point is not more than 39 inches for the walking/working surface.
    - After being erected, with the rope, wire or chain attached, stanchions shall be able to resist, without tipping over, a force of at least 16 pounds applied horizontally against the stanchion, 30 inches above the walking/working surface, perpendicular to the warning line, and in the direction of the floor, roof or platform edge.
- The rope, wire or chain shall have a minimum tensile strength of 500 pounds.
- The line shall be attached at each stanchion in such a way that pulling on one section of the line between stanchions will not result in slack being taken up in adjacent sections before the stanchion tips over.

No employee shall be allowed in the area between a roof edge and a warning line unless the employee is protected from fall exposure by other approved fall protection system.

Safety Monitoring Systems

Safety monitoring systems and their use shall comply with the following requirements:

- The foreman or trade supervisor shall designate a competent person to monitor the safety of other employees
- The safety monitor shall be competent to recognize fall hazards.
- The safety monitor shall warn the employee when it appears that the employee is unaware of a fall hazard or is acting in an unsafe manner.
- The safety monitor shall be on the same walking/working surface and within visual sighting distance of the employee(s) being monitored.
- The safety monitor shall be close enough to communicate orally with employee(s).
- The safety monitor shall not have other responsibilities, which could take the monitor’s attention from the safety monitoring function.

Guardrail Systems

Guardrail systems and their use shall comply with the following provisions:

- Top edge height of top rails, or equivalent guardrail system members, shall be 42 inches plus or minus 3 inches above the walking/working level. When conditions warrant, the height of the top edge may exceed the 45 inch height, provided the guardrail system meets all other criteria of this section.
- Midrails, when used, shall be installed at a height midway between the top edge of the guardrail system and the walking/working level.
- Intermediate members (such as balusters), when used between posts, shall be not more than 19 inches apart.
- Other structural members (such as additional midrails and architectural panels) shall be installed such that there are no openings in the guardrail system that are more than 19 inches wide.
- Guardrail systems shall be capable of withstanding, without failure, a force of at least 200 pounds applied within 2 inches of the top edge, in any outward or downward direction, at any point along the top edge.
- Midrails, screens, mesh, intermediate vertical members, solid panels, and equivalent structural members shall be capable of withstanding, without failure, a force of at least 150 pounds applied in any downward or outward direction at any point along the midrail or other member.

- Guardrail systems shall be so surfaced as to prevent injury to an employee from punctures or lacerations, and to prevent snagging of clothing.
- The ends of all top rails and midrails shall not overhand the terminal posts, except where such overhang does not constitute a projection hazard.
- Steel banding and plastic banding shall not be used as top rails or midrails.
- Top rails and midrails shall be at least one-quarter inch nominal diameter or thickness to prevent cuts and lacerations. If wire rope is used for top rails, it shall be flagged at not more than 6-foot intervals with high-visibility material.
- When guardrail systems are used at hoisting areas, a chain, gate or removable guardrail section shall be placed across the access opening between guardrail sections when hoisting operations are not taking place.
- When guardrail systems are used at holes, they shall be erected on all unprotected sides or edges of the hole.
- When guardrail systems are used around holes used for the passage of materials, the hole shall have not more than two sides provided with removable guardrail sections to allow the passage of materials. When the hole is not in use, it shall be closed over with a cover, or a guardrail system shall be provided along all unprotected sides or edges.
- When guardrail systems are used around holes which are used as points of access (such as ladderways), they shall be provided with a gate, or be so offset that a person cannot walk directly into the hole.

Covers for Holes

Covers for holes in floors, roofs, and other walking/working surfaces shall meet the following requirements:

- Covers shall be capable of supporting, without failure, at least twice the weight of employees, equipment, and materials that may be imposed on the cover at any one time.
- Covers shall be secured when installed so as to prevent accidental displacement by the wind, equipment, or employees.
- Covers shall be color coded or they shall be marked with the word "HOLE" or "COVER" to provide warning of the hazard.

Work Over Water

The potential for drowning is an additional hazard to be considered when working on a water intake, water discharge structures, dock facilities or any other location over water. The following precautions shall be taken:

- A PFD capable of lifting the mouth of an exhausted or unconscious person out of the water shall be provided and worn by each person while working on docks, barges, watercraft or similar facilities.
- An observer shall be assigned whenever work is being done over water. The observer shall maintain communication with workers at all times.
- Adequate illumination of the work area shall be provided at all times.

Falling Object Protection

When the potential exists for employees to be exposed to falling objects, employees shall wear hardhats and one of the following measures shall be implemented:

- Toe boards, screens and guardrail systems will be installed to prevent objects from falling from higher levels, OR
- Erect canopies that are strong enough to prevent collapse and penetration by objects that may fall from a higher level, OR
- Barricade the area to which objects could fall and prohibit entry into this area.

Rescue Considerations

Prior to the start of each project, the assigned A.Z. Shmina, Inc. Project Manager shall determine how employees will be rescued in the event of a fall or injury. In the event of a fall or injury, prompt rescue of employee shall be performed. The availability of rescue personnel, ladders or other rescue equipment shall be evaluated. A.Z. Shmina, Inc. may utilize rescue plans established by the controlling contractor (CM or GC) after coordinating such use. The method to be used to rescue employees shall be noted on the Project Fall Protection Assessment Checklist.

Equipment Inspection

Body Harness - Body harnesses shall be inspected before each use. The body harness shall be removed from service if any defects listed below are present. After being removed from service, the body harness shall be discarded.

- Cracked, dry or rotten leather.
- Nylon or cords that have worn thin.

- Cuts or worn places deep enough to weaken the strap or belt.
- Broken stitches at buckles, D-rings or snaps.
- A snap with weak springs behind the tongue or defective tongues that have been bent or sprung.
- Loose tongues in buckles.
- Cracked, bent or heavily worn buckles, D-rings or snaps.
- Other wear, damage or defect that could affect the protection afforded by the assembly.

No repair of safety harnesses, lanyards or fall protection equipment is permitted unless performed and guaranteed by the manufacturer.

Self Retracting Lifeline - Self retracting lifelines shall be inspected prior to being installed and used for fall protection. The self-retracting lifeline shall be removed from service and returned to an authorized service center for repair if any of the defects below are present:

- Loose or missing bolts and bent or damaged parts.
- Distortion, cracks or other damage to housing.
- The lifeline will not pull out and retract fully. Approximately ¼ of the lifeline length should be pulled from the housing and then released.
- The locking mechanism does not lock when the lifeline is sharply jerked. There should be no slipping.
- Cuts, abrasions or breaks on the wire rope.
- Broken or cracked ferrules.
- Bent, damaged or broken snaphook or self-locking mechanism.
- The self-retracting lifeline has been subjected to impact loading from a fall or misuse.
- Additionally, each self-retracting lifeline shall be inspected and serviced according to the manufacturer's instructions.

Equipment Use

Anchorage - Anchorage used for attachment of personal fall arrest equipment shall be independent of any anchorage being used to support or suspend platforms and capable of supporting at least 5,000 pounds per employee attached. Guardrail systems to include wire rope guardrails shall not be used as an anchorage for fall protection systems.

Body Harness - Adjust the body harness to fit the chest and under the arms and legs snugly before each use.

Wear only harnesses that fit properly. Belts used to secure the harness to your legs must fit snugly and pass through both sides of the buckle. Position the D-ring in the center of your back, between the shoulder blades. The back D-ring is the attachment point for the lanyard.

Lanyard - Attach the lanyard as high above your head as possible as to reduce fall distance. Never tie a knot in a lanyard. This can reduce its strength by 50%. Use only approved lanyards. Do not use substitutes for lanyards (i.e. wire or rope). Lanyards shall be attached above the point of operation and moved during work as necessary to ensure that the attachment point will not allow the harness wearer to reach a lower level before stopping the fall. Protect lanyards from sharp edges to reduce possibility of ripping or tearing. Lanyards shall be no longer than six feet. Damaged lanyards should be removed from service immediately.

Rope Grabs - Rope grabs shall be used in accordance with the manufacturer's recommendations. Environmental conditions such as rain, snow or ice may affect the operation of rope grabs. Consult the manufacturer's instructions when these conditions exist. Employees shall test the rope grab by moving it along the lifeline to ensure that it is locking properly. This test shall be completed prior to attaching the body harness to the rope grab.

Self Retracting Lifelines - Self retracting lifelines, which automatically limit free fall distance to two feet or less, shall be capable of sustaining a minimum tensile load of 3,00 pounds, applied to the device with the lifeline or lanyards in the fully extended position. Self retracting lifelines shall be installed under the supervision of a qualified person, as part of a complete personal fall arrest system. Self retracting lifelines shall be installed so that the reel and housing are positioned perpendicular to the ground or lower level. Oil or any other lubricants shall never be applied to self retracting lifelines.

Snaphooks - Snaphooks must be equipped with a double-lock mechanism that requires two movements to open the snaphook. When released, the snaphook must return to the closed position. Never connect two snaphooks into one D-ring or connect snaphooks together. Snaphooks should be positioned vertically when attached to an anchorage point. The strength of a snaphook is greatly reduced when positioned horizontally or perpendicular to the lanyard. Never

connect snaphooks directly to the body harness webbing, rope or wire rope. Never connect snaphooks to a D-Ring to which another snaphook or other connector is attached.

Training

All employees required to work at elevations shall be trained in the recognition or unsafe practices or working conditions that could lead to a fall.

Workers shall be instructed as to the inspection, function, use and operation of body harness systems and other fall protection to be used including how to perform the work requiring body harnesses and how to adjust body harnesses to fit properly.

Employee training shall also include training in state or federal fall protection standards as they apply to the employee's work and exposure to fall hazards.

Retraining of an employee shall be conducted when:

- Lack or improper use of fall protection equipment is observed
- Insufficient skill of understanding of fall protection equipment is demonstrated
- An employee is found to be noncompliant with the fall protection policy
- A change in the workplace occurs and/or new, or unfamiliar, task is assigned

Records

A.Z. Shmina, Inc. shall prepare a certification record of training. The certification record shall contain the name of the employee trained, the dates of training and the signature of the person that administered the training.

This certification shall be retained for the duration of the employee's employment.

Accident/Near-Miss Reporting

A.Z. Shmina, Inc. safety department shall be informed of any accident or near-miss that occurs. A.Z. Shmina, Inc. safety department will use the information obtained to create a "Lessons Learned" presentation to prevent similar accidents/near-misses from happening.

**FIRE EXTINGUISHER USE & FIRE PREVENTION PLAN

General

This guideline is intended to prevent potentially serious incidents involving incipient fires by providing training in the proper use of portable fire extinguishers and fire prevention.

All employees shall be informed about the uses and limitations of portable fire extinguisher.

This guideline outlines terminology, responsibilities and reviews basic principles for the development of procedures to ensure safety and efficiency.

Definitions

Class A Fire - A fire involving ordinary combustible materials such as wood, plastic, cloth and paper.

Class B Fire - A fire involving combustible gases, liquids and grease.

Class C Fire - A fire involving energized electrical equipment requiring nonconductive extinguishing agents.

Combustible Gas, Liquid or Grease - Materials having a flashpoint at or above 100°F

Flammable Gas, Liquid or Grease - Materials having a flashpoint below 100°

Incipient Stage Fire - A fire that is in the initial stage and can be controlled or extinguished by portable fire extinguishers without the need for protective clothing or breath apparatus.

Inspection - A visual check of fire protection systems and equipment to ensure that they are in place, charged and ready for use in the event of a fire.

Maintenance - Checking internal fittings, devices and agent supplies of fire protection equipment and systems to assure that they will perform as expected in the event of a fire.

Maximum Travel Distance (MTD) - The longest distance allowed for a person to travel from a potential fire hazard to the fire extinguisher protecting the area.

Expectations/Requirements

*General rules - f*or using portable fire extinguishers are as follows:

- Approved portable fire extinguishers shall be mounted, located and identified so that they are readily accessible.
- Portable fire extinguishers using carbon tetrachloride or chlorobromomethane extinguishing agents shall be removed from service and replaced with an approved model extinguisher.

- Use acceptable dry chemicals. Do not mix chemicals (especially Foray) with any bicarbonate-based or B:C dry chemical.
- Portable fire extinguishers shall be maintains in a fully charged and operable condition and shall be kept in their designated places at all times. If removed for repair, testing or use, the extinguisher shall be replaced immediately with one of the reserve units of equal or greater capacity.
- Portable fire extinguishers shall be selected and distributed based on the classes of anticipated workplace fires and on the size and degree of expected hazard.

Inspections - The Safety Manager/Representative shall visually inspect all fire extinguishers monthly and document the inspection to determine that all portable fire extinguishers meet the following criteria:

- Extinguisher shall be in its designated place and shall not have been discharged.
- If the extinguisher is pressurized, the gauge shall reflect that the unit is charged in the correct range.
- If the extinguisher is the dry powder type, ensure that the shift of the powder can be detected when the unit is inverted.
- If the extinguisher is a funnel-nozzle equipped unit, ensure the nozzle is clear.
- The extinguisher should not have any apparent physical damage or corrosion.
- All fire extinguishers that do not pass the inspection will be removed and replaced immediately.

Maintenance and Testing - only trained, qualified persons, contractors of the manufacturer's representative shall maintain or test fire extinguishers.

Mounting Fire Extinguishers - Fire extinguishers shall be located along normal paths of travel. Access to portable fire extinguishers shall not be obstructed. The following shall be considered when mounting fire extinguishers:

- Fire extinguishers located outdoors shall be protected from the elements.
- Identify the location of fire extinguishers using the following methods:
  - Paint a 12 inch red stripe on the column on which the fire extinguisher is mounted.
  - Paint a 12 inch red square on the wall above a mounted fire extinguisher.
  - Install a metal "FIRE EXTINGUISHER" sign perpendicular to the wall or column if the painted marking is not visible from 25 feet.
  - Install a "FIRE EXTINGUISHER" sign on any housing that protects a wheeled fire extinguisher.
  - Utilize fabricated fire extinguisher stands.

Minimum Installation by Location - The location of fire extinguishers shall be based in part on the longest distance allowed for a person to walk from a potential fire hazard to the fire extinguisher protecting the area. Additional placements are discretionary. Placement shall ensure that the following Maximum Travel Distances (MTDs) for these types of fire hazards are not exceeded:

- Class A Fire - 75 feet MTD
- Class B Fire - 50 feet MTD
- Class C Fire - 50 feet MTD

Training - All employees shall receive prior to initial assignment, and annual classroom, training to familiarize them with the general principles of fire extinguisher use and the hazards involved with fire extinguishers every other year. Qualified instructors may include manufacturer's representatives or externally trained fire fighters.

Fire Prevention

Housekeeping Techniques/Procedures -

- Keep storage and working areas free of trash.
- Place oily rags in covered containers and dispose of daily.
- Do not use gasoline or other flammable solvents/finish to clean floors.
- Use noncombustible oil-absorptive materials for sweeping floors consisting of sawdust or some other combustible material treated with oil.
- Dispose of materials in noncombustible containers that are emptied daily.
- Remove accumulation of combustible dust.
- Do not refuel gasoline powered equipment in a confined space, especially in the presence of equipment such as furnaces or water heaters.
- Do not refuel gasoline-powered equipment while it is hot.

- Follow proper storage and handling procedures.
- Ensure combustible materials are present only in areas and in quantities required for the work operation.
- Clean up and spill of flammable materials immediately.
- Change clothing that has become contaminated with flammable liquids before continuing with work.
- Post “No Smoking” signage near storage areas.
- Report any hazardous condition, such as old/faulty wiring, worn insulation and broken electrical equipment to the supervisor.
- Keep motors clean and in good working order.
- Do not overload electrical outlets.
- Ensure all equipment is turned off at the completion of the work shift.
- Maintain the correct type of fire extinguisher available for use.
- Ensure that all passageways and fire doors are unobstructed.
- Stairwell doors shall never be propped open and materials shall not be stored in stairwells.
- Periodically remove overspray residue from walls, floors and ceilings of spray booths and ventilation ducts.
- Remove contaminated spray booth filters from the building as soon as replaced or keep immersed in water until disposed.
- Do not allow materials to block automatic sprinkler systems or to be piled around fire extinguisher locations.
- To obtain the proper distribution of water, a minimum of 18 inches of clear space must be maintained below sprinkler deflectors.
- If there are no sprinklers, a three-foot clearance between piled material and the ceiling must be maintained to permit use of hose streams.
- These distances must be doubled when stock is piled higher than 15 feet.
- Check daily for any discarded lumber, broken pallets or pieces of material stored on site and remove properly.
- Immediately reposition any pile of material that falls into an aisle or clear space.
- Use weed killers that are not toxic and do not pose a fire hazard.

Storage and Handling Procedures -

- The storage or material shall be arranged such that adequate clearance is maintained away from heating surfaces, air ducts, heaters, flue pipes and light fixtures.
- All storage containers or areas shall prominently display signs to identify the material stored within. Storage of chemicals shall be separated from other materials in storage, from handling operations and from incompatible materials.
- All individual containers shall be identified as to their contents.
- Only containers designed, constructed and tested in accordance with the US Department of Transportation specifications and regulations are used for storage of compressed or liquefied gases.
- Compressed gas storage rooms will be areas reserved exclusively for that purpose with good ventilations and at least a one-hour fire rating.
- Gas cylinders shall never be used without pressure regulators.
- Wooden pallets will not be stacked over six feet in height. If feasible, extra pallets will be stored outside or in separate buildings to reduce fire risk.
- Piles of combustible materials shall be stored away from buildings and located apart from each other sufficiently to allow firefighting efforts to control and existing fire.
- Bulk quantities of flammable liquids shall be stored outdoors and away from buildings.
- Flammable liquids shall be stored in and dispensed from approved safety containers equipped with vapor-tight, self-closing caps, screens or covers.
- Flammable liquids shall be stored away from possible ignition sources.
- Flammable liquids shall only be used in areas having adequate and, if feasible, positive ventilation. If the liquid is highly hazardous, the liquid shall only be used in areas with local exhaust ventilation.
- Flammable liquids shall never be transferred from one container to another by applying air pressure to the original container. Pressurizing such containers may cause them to rupture, creating a serious flammable liquid spill.

- When dangerous liquids are being handled, a warning sign will be posted near the operation notifying other employees and giving warning that open flames are hazardous and are to be kept away.
- The storage and usage areas will include fire-resistive separations and separation of incompatible materials and the separation of flammable materials from other materials.

Records

Equipment Inspections - Records of the monthly inspection shall be retained for the most recent year. The date of the monthly inspection and the initials of the inspector shall be recorded on a metal or fabric tag attached to the fire extinguisher. Records of the annual maintenance, specifying the date, shall be retained for one year plus the current year.

Fire Extinguisher Use Training Records - Shall be retained for one year plus the current year.

Instructor Training Records - Qualification records of fire extinguisher training instructors shall be retained for one year plus current year.

Maintenance Training Documentation - Records of personnel qualified to perform maintenance shall be retained 13 years.

FIRE PROTECTION

Contractor shall be responsible for fire protection in its work and operational areas, including offices, tool rooms, and storage areas twenty four (24) hours per day, seven days per week through the duration of this Contract.

Contractor, as required by OSHA and the local fire protection code, must provide appropriate fire suppression equipment. At least one 10lb fire extinguisher, fire extinguishers must have current annual inspection tag and be inspected monthly signed and dated.

Contractor for all Hot Work Operations will provide a fire watch and at least one10lb fire extinguisher of appropriate size & type.

Only safety containers approved by UL and the local Fire Marshall, and properly labeled as to their contents, are to be used for handling and/or storage of flammable liquids in quantities more than one gallon.

All tarpaulins and plastic used for temporary covers shall be of fire resistant manufacturer.

**FLOOR OPENING SAFETY

Floor Openings

A floor opening is an opening in any floor, roof platform, pavement, or yard that measures at least 12 inches in its smallest dimension and through which a person can fall.

- Stairways
- Hatchways
- Large manholes/vaults
- Skylight openings

Floor openings shall be protected at all times by one of the following methods:

- Guardrail system (top rail, mid rail, toe board). Requirements for guardrail system construction are found in the Fall Protection guideline of this manual.
- Opening covers - must be able to withstand shall be capable of supporting, without failure, at least twice the weight of employees, equipment, and materials that may be imposed on the cover at any one time. Opening cover must be clearly marked with the word “HOLE” or “COVER” and be securely fastened to the floor surface.
- When cover or guardrail must be removed to perform the task, the following actions must be taken:
  - For a guardrail system - guardrails must be relocated to allow access to floor opening.
  - For an opening cover system - prior to removal of the cover, guardrails or other barricades must be installed to protect opening while cover is removed.
  - In either case, employee occupying the space inside the guardrail system must have fall protection in the form of body harness and shock-absorbing lanyard, attached to a proper anchorage point.
  - In either case, floor area below opening shall be protected and marked indicating to other workers that work is taking place above. Hazards from falling objects must be considered at all times when an opening is exposed to this risk.

Floor Holes

A floor hole is any opening in a floor, roof, platform, pavement, or yard that measures at least 1 inch but less than 12 inches at its smallest dimension and through which materials and tools can fall.

- Cored holes for pipes or conduit
- Cable belt holes
- Slotted openings

Floor holes shall be protected by means of a floor hole cover. A job built cover or manufactured cover may be used.

- Covers must be fastened or otherwise installed to prevent displacement and expose the hole.
- Covers must be able to withstand twice the expected load from people, tools, equipment, etc.
- Covers must be clearly marked “HOLE” or “COVER”
- When covers are removed to perform the work, protection must be provided for lower floors for hazards associated with dropped/falling objects.

HAND PROTECTION

General Requirements

Employers shall select and require employees to use appropriate hand protection when employees' hands are exposed to hazards such as those from skin absorption of harmful substances; severe cuts or lacerations; severe abrasions; punctures; chemical burns; thermal burns; and harmful temperature extremes.

Selection

Employers shall base the selection of the appropriate hand protection on an evaluation of the performance characteristics of the hand protection relative to the task(s) to be performed, conditions present, duration of use, and the hazards and potential hazards identified.

Refer to Appendix B Hand Protection Reference for additional information

**HAND PROTECTION POLICY

Mandatory Hand Protection

- When metal materials with sharp edges are being handled such as:
  - Handling or working around sheet metal siding, roofing, etc.
  - Metal unistrut materials and all thread rods
  - Handling or working around tie-wire
  - Handling metal floor grating
  - Handling wire rope during rigging operations
  - Handling or working around metal studs
  - Handling of metal duct work
- Cutting operations involving hand-held, non power-operated cutters:
  - Using hand-held tubing cutters for cutting metal and hard plastic-type piping
  - Using hack saws for cutting metal
  - Using cross-cut saws for wood cutting
- Handling of wood materials:
  - Placing plywood sheeting on floors, scaffolds, etc.
  - Unloading and loading wood of any type
  - Moving and transfer of wood
- Concrete operations where hands are exposed:
  - Power and hand troweling operations
  - During the cleaning of chutes used for delivery of concrete
  - During concrete removal operations
- During the use of utility knives or exacto knives:
  - Cutting sheet rock
  - Trimming wire sheathing or other stripping operations
  - Cutting insulation
  - Trimming temporary plastic walls
  - Cutting/scoring paper, vinyl tiles, etc.

- Sharpening knives, saws and blades
- While pulling wire in or around electrical panels
- While performing Energized Electrical Work (EEW) operations
- During use of impact-type tools:
  - Using impact hammers to chip concrete
  - Using jackhammers on concrete and similar operations
  - Using fence post drivers for driving posts and/or stakes
  - Using power-actuated power tools
- During welding operations
- While operating a grinder:
  - The grinding helper shall also utilize gloves to prevent impalement by flying debris
- Working on or near materials affected by extreme temperatures:
  - Mechanics working on or around hot parts
  - Workers performing operations around refrigerant or argon lines
- Handling hazardous materials which require the use of hand protection to avoid skin contact, as indicated on the material Safety Data Sheet (MSDS) for the material, to include but not limited to:
  - Paints, solvents, adhesives, caustics or corrosives
  - Petroleum products such as gasoline, diesel, hydraulic fluids and used motor oil
- Working with glass materials where the edges are exposed and present a hazard
- Personnel involved in the removal and handling of trash
- Protective gloves may be worn for hand protection in the Clean Rooms when hands are exposed to hazards described by this procedure.

Proper Glove Selection

Different exposures require the use of different types of gloves. Evaluate each situation to ensure which is the appropriate type of hand protection. (See chart below)

OPERATION	GLOVE TYPE
Energized Electrical Work (EEW)	Electrically insulated-rated rubber gloves with leather protectors
Welding operations	Gauntlet-type leather welding gloves
Grinding Operations	Tight-fitting leather gloves
Exposure to sharp edges & metal burrs	Cut-resistant gloves (Kevlar® or tight-fitting leather)
Utility knives, hacksaws, & cross-cut saws	Cut-resistant gloves (Kevlar®)
Concrete work	Rubber or leather gloves
Exposure to petroleum products	Chemical-resistant gloves per the MSDS requirements & manufacturers requirements (Neoprene, PVC, Nitrile or Rubber) *
Exposure to hazardous materials such as solvents, paints, adhesives, etc.	Chemical-resistant gloves per the MSDS requirements & manufacturers requirements (Neoprene, PVC, Nitrile or Rubber) *
Working around machinery	Tight-fitting leather gloves should be utilized when hand protection is necessary around rotating equipment to prevent entanglement of gloves/hands in machinery
Proximity & exposure to excessive heat, or hot piping and equipment.	Kevlar® heat resistant gloves and sleeves.
Using saws – portaband, and reciprocating.	Tight-fitting leather gloves.
Handling wire rope/rigging.	Tight-fitting leather gloves.
Handling glass	Cut-resistant gloves - Kevlar®
Handling wood	Tight-fitting leather gloves

HAZARD COMMUNICATION PROGRAM

The Occupational Safety and Health Act (OSHA) requires each employee potentially exposed to hazardous chemicals be advised of the potential hazards and how to guard against those hazards. Each contractor whose employees are potentially exposed to hazardous chemicals must develop a list of all such chemicals used on the project, gather material

safety data sheets (MSDSs) for those materials, develop a labeling system for all materials, and train all potentially exposed personnel in the hazards and their controls for all listed compounds.
These steps are outlined in detail in the following material.
Employee training for this requirement will be documented and acknowledged by signatures following each session using the acknowledgment statement found at the end of this section.

Material Safety Data Sheets (MSDSs)

Every contractor will be responsible for development and maintenance of a list of hazardous chemicals utilized within the project operations and will be further responsible for obtaining and maintaining MSDS for all such hazardous chemicals.
Employees will be allowed access to this information and the specific MSDS for chemicals utilized in their work areas.
All questions relating to the program should be directed to the Contractor's Superintendent or safety representative.
A copy of each MSDS will be delivered to A.Z. Shmina, Inc. prior to work starting involving that substance. **ALL MSDS sheets will be kept in the on-site safety office**.

Employee Information and Training

All new and present employees will be given information regarding the requirements of the Chemical Hazard Communication Program, the hazardous chemicals present in their work place, and the physical and health risks of these chemicals.
This requirement may be met through orientation sessions for new employees and refreshers for all during toolbox talks.
The information and training will also include the following elements:

- The symptoms of overexposure to the chemicals.
- How to determine the hazardous presence or release of a chemical in the work place.
- Methods to reduce or prevent the exposure to hazardous chemicals, such as control procedures, work practices, or personal protective equipment.
- Procedures to follow in the event of an exposure to hazardous chemicals.
- The location of the log containing the MSDS, which apply to their work place and the location of the written Chemical Hazard Communication Program.
- How to review MSDSs to obtain the hazard information for the chemical, and how to read the labels, which are required on the chemical containers.
- When a new hazardous chemical is obtained for use, each employee who could be exposed will be given the information and training as described above, and a copy of the MSDS for the chemical will be obtained and distributed to those who actually use the chemical in the work place. The MSDS will be available to all employees during each work shift.
- Proper disposal procedures of waste materials shall be enforced.
- Labeling of waste containers and disposal of all hazardous materials by a licensed disposal facility is required.

Container Labeling

All chemical containers at the project must be clearly labeled as to the contents, the hazards involved, and the name and address of the manufacturer.
All secondary containers of hazardous chemicals are to be clearly labeled with the same information as the original container.
Each contractor's Superintendent or safety representative shall perform the above responsibilities for all their materials.

Hazardous Non-Routine Tasks and Nearby Work

In the event an employee is assigned to perform, or is assigned to work in an area where a hazardous task, non-routine to their work, the employee will be given the additional information and training related to the hazardous chemicals which may be encountered in the non-routine task.
The first-line foreman, Contractor Superintendent, or safety representative, will provide this information and training.
The information will include the specific chemical hazards of the task, the controls and protective measures required the types of personal protective equipment required, how to use the equipment, the nature of other work being performed in or near the non-routine task, and what emergency procedures are involved with the task.

Chemicals in Unlabeled Pipes, Vessels and Containers

To ensure that employees who work on unlabeled pipes, vessels or containers have been informed as to the hazardous materials contained within, the following policy has been established:

Prior to starting work on unlabeled pipes, vessels or containers, employees are to contact their foreman for the following information:

- Type of chemical in the pipe, vessel or container.
- Potential hazards.
- Safety precautions which should be taken.

Audit and Review

It will be the responsibility of each Contractor's Superintendent, and/or safety representative, to review the entire Hazard Communication Program.

Each Contractor's Superintendent, and/or safety representative, shall revise and update the material contained herein to reflect all changes in the purchase, use, storage, and handling of hazardous chemicals at the project.

Each Contractor's Superintendent, and/or safety representative, shall periodically audit procedures in the use of the hazardous chemicals meet the requirements as set forth in the MSDS.

HAZARD ANALYSIS

Prior to beginning work, each Contractor shall prepare a hazard analysis that defines the activities to be performed and identifies the sequence of the work, the specific hazards, and the methods to be used to eliminate or minimize each hazard.

The hazard analysis shall be submitted prior to, and will be reviewed during the pre-construction meeting by A.Z. Shmina, Inc. and the Contractor's supervisors and safety representative.

The hazard analysis shall be written in a form acceptable to A.Z. Shmina, Inc.

Hazard Analysis shall be done when the scope of the work or conditions change.

Each Contractor foreman will inform their work crew of the Hazard Analysis for their work activity each day prior to start of work or when conditions change.

Each contractor shall submit for review by A.Z. Shmina, Inc., a project specific safety program which addresses all the elements of this Safety Program as they will be implemented by the Contractor, its contractors, vendors and suppliers.

The hazard analysis will be included as an appendix to the Contractor's project-specific safety program.

See Appendix B Sample Hazard Analysis

**HOT WORK PRACTICES

* At any time, if equipment is found to have defects, equipment operator must report the defect and discontinue use until equipment has been repaired or replaced.

** If the potential of hazardous fumes, gases, or dust exist then proper measures shall be implemented. Respiratory systems, ventilation, PPE, etc.

Hot Work Operations

All hot work operations performed in areas where the potential for fire or explosion exist require the following:

- A hot work permit that authorizes hot work operations. The permit must be specific in the scope of work being authorized and precautions to be taken to prevent fire and/or explosion.
- A gas test must be performed on the equipment and area that will be exposed to the hot work to determine that explosive gases and/or vapors are not present.
- At a minimum, one class ABC, 20 pound dry chemical fire extinguisher, sealed, fully charged and inspected must be present at the site where hot work will occur.
- All drains, trenches, vents and sewer openings in the area of the hot work will be covered with fire retardant material to prevent sparks/slag from entering them and to prevent the escape of explosive gases or vapors from the opening.
- Fire extinguishers shall be made readily available.
- Flammable and/or combustible materials such as wood, cloth and paper must be removed from the work area or be protected.
- A fire watch must be provided to monitor slag, sparks and other fire hazards of the job.

- The equipment to be exposed to hot work must be properly isolated and cleared.
- Spark containment “firebox” must be installed as needed or required.
- A fire watch shall remain at the location of hot work activities for one hour after hot work activities are finished.
- Upon inspection of work area, if conditions are identified as unsafe, welding and cutting shall not be performed.

Arc Welding Safety

Arc welding safety rules consist of the following:

- Make sure welding equipment is installed properly and grounded and is in good working condition.
- Always wear proper eye protection when welding or cutting.
- Always wear protective clothing suitable for welding.
- Keep your work area clean and free of hazards. Make sure that no flammable, volatile or explosive materials are in or near the work area.
- Handle all compressed gas cylinders with extreme care. Replace protective caps when the cylinder is not in use.
- Make sure that compressed gas cylinders are secured to the equipment carriage, wall or other structural supports.
- When compressed gas cylinders are empty, close the valve, install the cap and return to the correct bottle storage area.
- Do not weld in confined spaces without special precautions and/or supervisor’s authorization.
- Do not weld on containers that have held combustibles without special precautions and/or supervisor’s authorization.
- Use mechanical exhaust at the point of welding when welding lead, cadmium, chromium, manganese, brass, bronze, zinc or galvanized metals.
- Make sure all electrical connections are tight and insulated. Do not use cables with frayed, cracked or bare sports in the insulation.
- When the electrode holder or welding torch is not in use, hang it on brackets provided. Never let it touch a compressed gas cylinder.
- Dispose of electrode holder and wire stubs in proper container since stubs and rods on the floor are a safety hazard.
- Use weld curtains to shield others from the light rays produced by your arc.
- When using water-cooled equipment, check for water leaks.
- Make sure all compressed gas connections are tight and check for leaks. Do not use hoses that are frayed or cracked.
- Keep you leads orderly and out of walkways. Suspend them whenever possible.
- Do not weld if your leads or machine is in or near water.
- Make sure a portable fire extinguisher is nearby.
- Once you remove your welding helmet, put on safety glasses.

Oxy-Fuel Cutting and Welding Safety

Oxy-fuel cutting and welding safety rules consist of the following:

- Make sure that all of your gas welding equipment is installed properly and is in good working condition. Make sure that all connections are tight before lighting the torch. Do not use the flame to inspect for tight joints. Use a soap solution to detect leaks.
- Always wear protective clothing suitable for welding, brazing, soldering or flame cutting.
- Always wear proper eye protection when welding, brazing, soldering or flame cutting.
- Keep your work area clean and free of hazards. Flame cutting sparks can travel up to 30-40 feet. Do not allow flame cut sparks to hit hoses, regulators or cylinders.
- Handle all compressed gas cylinders with extreme care. Keep caps on when not in use.
- Make sure that compressed gas cylinders are secured to the equipment carriage, wall or other structural supports.
- Store compressed gas cylinders in a safe place with good ventilation. Acetylene cylinders and oxygen cylinders should be kept at least 20 feet apart.
- When compressed gas cylinders or fuel gas cylinders are empty, close the valve, install the cap and return to correct bottle storage area.
- Use oxygen, acetylene or other fuel gases with only the appropriate torches and tips.
- Oxygen should not be used for “AIR” in any way.

- Never use acetylene at a pressure in excess of 15 psi. Higher pressure can cause an explosion.
- Never use oil, grease or any other material on any apparatus or thread fitting in the oxyacetylene or oxyfuel gas system. Oil and grease in contact with oxygen will cause spontaneous combustion.
- Do not turn valve tee handle using excessive force.
- When assembling apparatus, crack gas cylinder valve before attaching regulators. This blows out accumulated foreign material. Make sure all threaded fittings are clean and tight.
- Always use the correct sequence and technique for assembling and lighting the torch.
- Always use the correct sequence and technique for shutting off a torch.
- Use mechanical exhaust at the point of welding when welding lead, cadmium, chromium, manganese, brass, bronze, zinc or galvanized metals.
- Do not weld in confined spaces without special precautions and/or supervisor's authorization.
- Do not weld on containers that have held combustibles without special precautions and/or supervisor's authorization.
- Use weld curtains to shield others from the light rays produced by your gas welding.

Resistance Welding Safety

Resistance welding safety rules consist of the following:

- Make sure your resistance welding equipment is installed properly, grounded and in good working condition.
- Always wear protective clothing suitable for welding.
- Always wear proper eye and hand protection when operating the welding equipment.
- Keep your work area clean and free of hazards.
- Keep your fingers and hands clear of electrodes.
- Do not touch the weld spot until it has had time to cool.
- Position weld screens to protect others.

Training

All employees using welding equipment must be trained and authorized by A.Z. Shmina, Inc.

All A.Z. Shmina, Inc. supervisors and employees shall be trained in the following, when welding, cutting, or brazing:

- Fire suppression equipment (i.e. uses, placement, type, etc.)
- Hot work permit/site emergency procedures
- Personal Protective Equipment (i.e. uses, selection, type, etc.)
- Hazards of hazardous fumes, gases and dust.
- Proper storage and use of welding equipment.
- Proper inspection process of equipment, work areas and PPE.

HOUSEKEEPING

On a daily basis, all debris and scrap material shall be removed from the work area.

Debris and other loose materials shall not be allowed to accumulate in stairwells.

Containers shall be provided for the collection and separation of waste, trash, oily and used rags and other refuse. Metal (dumpster type) containers must be used and emptied promptly.

Garbage and other waste shall be disposed of at frequent or more regular intervals in a manner approved by A.Z. Shmina, Inc.

Contractor shall notify A.Z. Shmina, Inc. of any hazardous waste it will generate during performance of the work. Contractor has the direct responsibility of maintaining proper storage of these wastes while on the project and will verify to A.Z. Shmina, Inc., in writing, the wastes have been disposed of in a legal manner.

A copy of the haulers manifest must be provided to A.Z. Shmina, Inc.

Contractor shall not pour, bury, burn, nor in any way dispose of a chemical on the project.

Contractor shall clear all combustible debris to a solid waste disposal project properly licensed under the laws of the State having jurisdiction.

NO OPEN BURNING OF DEBRIS, OR RUBBISH WILL BE PERMITTED ANYWHERE ON THE PROJECT

Materials and supplies shall be stored in locations, which will not block access-ways, and arranged to permit easy cleaning of the area.

In areas where equipment might drip oil or cause other damage to the floor surface, a protective cover of heavy gauge, flame resistant, oil proof sheeting shall be provided between the equipment and the floor surface sheeting so that no oil or grease contacts the concrete.
This requirement is applicable to both finished and unfinished floors.
All hoses, cables, extension cords, and similar materials shall be located, arranged and grouped so that they will not block any access-way and will permit easy cleaning and maintenance.

**HOUSEKEEPING

*All employees will be made aware and trained, as necessary, on the following procedures:
On a daily basis, all debris and scrap material shall be removed from the work area.
Debris and other loose materials shall not be allowed to accumulate in stairwells.
Containers shall be provided for the collection and separation of waste, trash, oily and used rags and other refuse. Metal (dumpster type) containers must be used and emptied promptly.
Garbage and other waste shall be disposed of at frequent or more regular intervals in a manner approved by A.Z. Shmina, Inc.
A.Z. Shmina, Inc. shall notify controlling contractor of any hazardous waste it will generate during performance of the work. A.Z. Shmina, Inc. has the direct responsibility of maintaining proper storage of these wastes while on site and will verify to controlling contractor in writing that the wastes have been disposed of in a legal manner. A copy of the haulers manifest must be provided to controlling contractor.
Employees shall not pour, bury, burn, or in any way dispose of a chemical on the work project site.
Employees shall clear all combustible debris to a solid waste disposal project site properly licensed under the laws of the State having jurisdiction. No open burning of debris, or rubbish will be permitted anywhere on the project site.
Materials and supplies shall be stored in locations, which will not block access-ways, and arranged to permit easy cleaning of the area. In areas where equipment might drip oil or cause other damage to the floor surface, a protective cover of heavy gauge, flame resistant, oil proof sheeting shall be provided between the equipment and the floor surface sheeting so that no oil or grease contacts the concrete. This requirement is applicable to both finished and unfinished floors.
All hoses, cables, extension cords, and similar materials shall be located, arranged and grouped so that they will not block any access-way and will permit easy cleaning and maintenance.
Employees will receive awareness training per project, to review owners' requirements

INCENTIVES AND AWARDS

Safety awareness and recognition campaigns during construction will include the posting of banners, posters and signs emphasizing safety awareness, the proper use of safety equipment and safe work practices. The project is also incorporating the BRAVO Report Program along with Safety Lunch and Learn Program.

INFECTION CONTROL

INFECTION CONTROL MEASURES FOR USE DURING MAINTENANCE, CONSTRUCTION, AND RENOVATION

General

The level of risk in any given area is determined by the Owner in conjunction with Industrial Hygiene professionals, and may be modified with changes in patient population.
The Owner will complete an Infection Control Risk Assessment (ICRA) before work begins.
Contractors will be required to comply with infection control measures.
The infection control measures to be taken for any given project will be determined on the basis of the guidelines of the ICRA.
Prior to the start of work the Owner will confirm to A.Z. Shmina, Inc., areas under construction are free of any hazardous materials or medical wastes.

A.Z. Shmina, Inc. Responsibilities

A.Z. Shmina, Inc. and responsible contractors will review blueprints and be involved in pre-construction planning meetings.

This involvement is to provide input into project planning to identify infection control issues in the planned space and, to help implement and monitor measures to control infection risk generated by construction.

- A.Z. Shmina, Inc. will assist the Owner and Architect in pre-construction planning
- A.Z. Shmina, Inc. will monitor the implementation of infection control measures and document any nonconforming conditions.
- A.Z. Shmina, Inc. will implement a work permit system whereby A.Z. Shmina, Inc. will walk the project with Contractor personnel to determine that all appropriate controls are in place according to the ICRA.
- A.Z. Shmina, Inc. will coordinate with the Owner, to identify conditions that may change, which may alter the Infection Control Risk Assessment.
- A.Z. Shmina, Inc. will monitor the project's infection control measures, including the infection control measures of the Contractors.
- A.Z. Shmina, Inc. will contact the Owner's Infection Control Representative upon completion of each phase of the project for final assessment, before occupancy.
- A.Z. Shmina, Inc. will notify the Owner of any known breaches of the infection control requirements and implement corrective actions with the trade contractors.
- A.Z. Shmina, Inc. will report all sewage spills to the Owner, and coordinate the clean-up.

Contractor Responsibilities

All project employees will comply with the infection control measures, including blood borne pathogen training.

All project employees will be required to attend a project orientation, which includes infection control requirements, prior to start of work.

All workers exposed to sewage or bodily fluids must report the exposure immediately to their supervisor. Their employer should offer any workers, who may have been exposed to sewage, as a part of their job, vaccination. Employers must offer vaccine at no additional cost to the worker.

Construction workers with communicable infections or exposure to communicable infections, such as chickenpox or tuberculosis, must have the permission of their occupational health provider to work.

Each Contractor will identify a person responsible for monitoring their employees' compliance with the ICRA. The person must be present onsite during all working hours of their personnel.

Guidelines for Orientation to Infection Control

- Review of color coded floor plan of areas to be worked showing moderate and high risk areas as developed by the Owner's ICRA.
- Review project specific ICRA including classes of cork and associated precautions.
- Facility access restrictions and security measures.
- Worker circulation routes.
- Working around the building exterior
- General work practices on controlling dust, odor, vibration and noise.
- Required use of Personal Protective Equipment (provided by employer) – only in containment and patient areas.
- Cautions relating to existing MEP equipment.
- Access into enclosed spaces (above ceilings, into chases, behind walls and as otherwise determined by A.Z. Shmina, Inc.
- Barrier requirements and monitoring.
- Exiting a containment area, both in emergency and routine cases.
- Reporting an emergency.
- Removal of equipment, tools or trash/debris from a containment area.
- Cleaning requirements, techniques and frequency.

Attendance is to be documented with a dated, signed sheet showing the attendees employer and the full name of the attendee both printed and with signature. This is to be stored with the safety file.

INSPECTION AND AUDITING

Purpose and Scope

To establish a basic inspection/audit program for the elimination of unsafe practices by employees and to establish a hazard free work environment for all employees on the project.

Objectives

To reaffirm the trade contractor's basic responsibility for the actions of the employees as originally assigned under the General Provision of the Occupational Safety and Health Act of 1970 (revised). The exercise of these responsibilities, by all project trade contractors will be the effective deterrent to accidents arising from unsafe practices and physical conditions will materially enhance the construction efficiency of this project.

Procedures

Control will be achieved only when each trade contractor fulfills their contractual and statutory responsibilities and applies all practical steps to maintain safe and healthful work practices and conditions.

Project Controls

Continued monitoring/audit of the performance of the Contractor and their supervision under this section will be made by A.Z. Shmina, Inc. Contractors will be notified of any unsafe practices observed.

The Contractor's safety supervisor, the project safety representative and the construction manager's field staff shall utilize the "Construction Safety Survey".

SUPERVISORY CONTROL

Contractor

Each Contractor will be responsible for conducting continuous daily surveys of their operations to ensure they are aware of the probable sources of potential injury or loss due to unsafe acts of procedures.

Planning

Contractors must extensively plan the procedures to be followed for each operation using Hazard Analysis procedures and submit such plans to A.Z. Shmina, Inc.

Personnel chosen to perform any such planned operation shall be thoroughly briefed in all aspects of the procedure, including emergency actions to be taken in the event of a mishap.

Inspections

In addition to inspections conducted by A.Z. Shmina, Inc. Insurance Representatives, and each Contractor, construction activities are subject to periodic inspection by OSHA Compliance Officers.

Each Contractor is required to notify A.Z. Shmina, Inc., in writing, prior to starting work if, by their company policy, they will require a warrant for OSHA to inspect their work. A.Z. Shmina, Inc. does not require a warrant.

Contractors shall forward copies of any and all inspection reports and/or citations received by the Contractor from OSHA to A.Z. Shmina, Inc. All information will remain confidential.

In the event an OSHA Compliance Officer visits the project, he/she will be directed to the A.Z. Shmina, Inc. office. The appropriate Contractors will then be notified so that an Opening Conference may be conducted.

A.Z. Shmina, Inc. will organize an inspection party, consisting of both employer and employee representatives.

Each contractor shall perform monthly, a 3rd party safety audit. Each contractor shall perform a weekly project safety audit.

Notification of Hazards

Each Contractor shall notify A.Z. Shmina, Inc., verbally or in writing, of the existence of any hazardous conditions, property, or equipment at the project, which are not under the Contractor's control.

However, it is the Contractor's responsibility to take all necessary precautions against injury until corrected by the responsible party.

Equipment and Facilities

All operating equipment and facilities used by Contractors shall be, inspected, and maintained as directed by this manual; as dictated by the applicable Federal and State safety and health regulations. In the event of conflict, the more stringent requirement will take precedence.

OSHA/MIOSHA Inspections

Owner personnel will be notified as soon as any regulatory agency appears onsite.

Pre-Shift Inspections

The project safety officer or Superintendent shall do a pre-shift inspection prior to all shifts on the project. These documents are available upon Owner request.

Inspection Reports

Owner representatives will have access to safety and health inspection reports upon request.

INTERIM LIFE SAFETY MATTERS FOR OCCUPIED FACILITIES

Specific Measures

Whenever construction affects the facility's ability to accommodate occupants (either because of disruption of services, interruption of normal operations, or when hazards are present), it will become necessary to implement interim life safety measures, as follows:

- Ensure that all exits are clear. This includes areas directly affected as well as all other exits.
- Ensure that there is free access to emergency services, that vehicles, material, etc. are not blocking the access route.
- Disabling of fire protection systems. A small disaster could escalate if the fire protection system is not functional. Care should be given to provide an alternate system while the primary system is off-line.
  **This includes scheduled maintenance, upgrade, repairs, or adding of coverage resulting in disabling system, and disabling system to allow maintenance or repairs to be completed on other systems (e.g. hot work).
- Fire alarm, detection, and suppression systems must not be impaired. A temporary (but equivalent) system shall be used if the system is impaired. These temporary systems must be tested monthly.
- Temporary construction partitions shall be smoke tight and noncombustible. Adequate signage shall discourage casual observers from opening or entering the partitions.
- Additional (double) fire-fighting equipment must be provided, as well as personnel trained in its use.
- Smoking is prohibited on campus, in and adjacent to all construction areas. Strict enforcement must occur.
- Construction project shall be kept clean and orderly. This includes material piles, debris, platforms, and break areas.
- Hazard surveillance of projects shall be increased and documented. Attention is to be given to evacuation routes, construction areas, storage, office/lunch areas, and fuel storage.
- Whenever the safeties of adjacent areas are compromised because of construction, staff shall be informed. Alternate exit routes shall be identified.
- Facility-wide education programs are conducted explaining interim life safety matters and current life safety deficiencies.
- The construction project must be restricted from all but authorized staff. Adequate signage shall be provided.
- Alternate access must be provided for public and emergency traffic whenever disruption occurs.
- Policy and procedures must ensure that roads and pathways are clear of mud, debris, materials, etc.
- Proper notification must be made to local authorities (fire, police, other) whenever life safety is diminished.
- Governing body shall be kept apprised of status of life safety during project.
- Construction workers must be made aware of egress routes.
- Construction workers' egress routes must be inspected daily to ensure no obstacles.
- Effective storage, housekeeping, and debris-removal policies and procedures must be in place to reduce collection of combustibles in construction areas.
- Whenever fire zones are altered, the Owner's staff will be informed in regard to new or different life safety measures regarding their changed compartmentation and fire safety.

**LADDER SAFETY

Ladders are used for many purposes. This guideline outlines terminology, responsibilities and reviews basic principles to ensure safety and efficiency with using ladders.

General

Defective or damaged ladders shall not be used. Before each use, ladders shall be inspected for the following:

- Missing non-skid feet
- Worn or frayed ropes
- Cracks in sides, frame and/or rungs
- Missing rivets or other fasteners
- Bent or missing spreaders
- Loose rungs
- Any condition that could pose a safety issue or cause a safety problem

Ladders shall not be painted, as paint can obscure damage to the ladder and defects in the materials of construction.
The correct type of ladder shall be selected for the job or task. Only fiberglass ladders shall be used at electricity generating facilities. Only non-conductive ladders shall be used for work involving electricity or the use of electrically powered tools.
Ladders shall be secured by tying the top or bottom rung to a fixed structure that will support more than the anticipated total load of the ladder. Ensure that an adequate slope is maintained where the base is placed at least ¼ the length of the ladder away from the supporting structure.
The feet of the ladder shall be placed securely on the ground or work floor and not on other objects in an attempt to extend the reach of a ladder.
Ladders shall not be lengthened by splicing additional sections to it.
Always face a ladder when ascending or descending it.
Ladders shall be positioned so that work can be performed without leaning and shall be moved as work progresses.
Ladders shall not be placed near power lines or against movable objects or vehicles.
Ladders shall not be placed in front of door or doorways that open toward the ladder unless the door is locked in the open position, locked shut or guarded by another employee. If the door is locked shut because of ladder work, post the locked door with a “DO NOT OPEN - WORK IN PROGRESS,” or similar signage.
Unattended step or straight ladders shall not be left standing but should be closed, lowered to the ground and placed where they do not present tripping hazards.
The area around the base and top of the ladder shall be kept free of tripping hazards and barricaded if the base or top projects into a passageway.
Ensure that the shoes are free of mud, oil and/or grease before ascending or descending a ladder. Ladder rungs shall be cleaned immediately if they become soiled to reduce slipping hazards.
Workers shall use a tool pouch or raise and lower materials using a line or line and bucket rather than carrying them while ascending or descending a ladder.
Only one employee shall work from a ladder at a time so that the design load capacity of the ladder is not exceeded.
Every excavation, bell hole or trench that is more than four feet deep shall have a ladder(s) that extends at least three feet above the grade surface and be placed so that personnel shall not travel more than 25 feet to get to a ladder.
Ladder rungs must be uniformly spaced or meet OSHA/ANSI specifications.
Ladders shall only be used for their intended use.

Ladder Selection

SELECT TYPE - The first step in ladder selection is choosing the right style of ladder for the job. Different styles of ladders are designed to keep you safe and productive when climbing or standing. Using the wrong style of ladder or simply ignoring the limitations of climbing equipment can result in a fall or serious injury. The most common selections will be basic step and extension ladders, however, there are many options available.
SELECT PROPER LADDER MATERIAL - use only non-conductive ladders when working on or in proximity to any electrical system or device.
SELECT PROPER HEIGHT - Extension ladders should be 7 to 10 feet longer than the highest support or contact point, which may be the wall or roof line. This will allow enough length for proper setup, overlap of ladder sections, height restrictions of the highest standing level, and where appropriate, the extension of the ladder above the roof line. The highest standing level is four rungs down from the top. The highest permitted standing level on a stepladder is two steps down from the top. A person standing higher may lose their balance and fall. A person’s maximum safe reaching height is approximately 4' higher than the height of the ladder. For example, a typical person can safely reach an 8' ceiling on a 4' ladder.
SELECT PROPER DUTY - Ladders are designed and constructed to safely hold up to a specific amount of weight. Most ladders come in five different Duty Ratings identified by their grade and type. The Duty Rating is defined as the maximum safe load capacity of the ladder. A person's fully clothed weight plus the weight of any tools and materials that are carried onto the ladder must be less than the duty rating. Ladders are also built to handle the demands of various applications. For example, a ladder used frequently on a construction site by rugged workers should typically be stronger and have a corresponding higher Duty Rating than a ladder used by a lighter person for light chores around the home. Workers should be advised to consider both the weight which will be on the ladder and the work application and to

select the proper grade of ladder which is designed to handle anticipated usage. Duty Rating is the maximum safe load capacity of the ladder. Duty Ratings are described in terms of pounds. Refer to the chart below for a duty rating summary:

LADDER TYPE	DUTY RATING	DESCRIPTION
TYPE 1AA	375 LBS.	Extra Heavy-duty industrial ladder
TYPE 1A	300 LBS.	Heavy-duty industrial ladder
TYPE 1	250 LBS.	Heavy-duty industrial ladder
TYPE 2	225 LBS.	Medium-duty commercial ladder
TYPE 3	200 LBS.	Light-duty household ladder

Stepladders

Stepladders that wobble shall be removed from service, marked "DO NOT USE - DEFECTIVE" (or similar) and repaired or replaced.

Spreaders shall be fully opened and locked before using a ladder.

The top step of a stepladder shall never be used. Rather, use a larger stepladder, a longer straight ladder or another method of accessing work.

Tools or materials shall not be left on the top step of a stepladder but shall be removed before descending a ladder and/or relocating the ladder.

NEVER use a stepladder in the closed position. Use the proper ladder for the task.

Straight Ladders

Straight ladders shall be leaned against the structure being climbed so that the distance from the ladders feet to the base of the structure is ¼ the distance along the ladders length to its upper contact point with the structure in order to ensure a safe slope.

*Quick Tip - count the ladder rungs from the feet to the point of contact and divide by 4 - the feet of the ladder should be that many feet from the structure base.

At least three feet of ladder should extend above the upper point of contact with the structure being climbed.

Use ladder of the length needed. Never work from top two rungs of a straight ladder.

When either the length or the weight of a ladder makes it difficult to handle, two people shall raise and secure the ladder. One should secure the feet while the other walks under the ladder from the opposite end until it is raised enough to place or move. Raise the extension, if needed. Reverse the process for lowering the ladder.

When the ladder extends more than four feet above the top tie-off, a barrier or flag shall be placed on the ladder to prevent personnel from climbing beyond a safe point.

Extension Ladders

Extension ladders shall be equipped with necessary irons, locks and hooks and shall be assembled so the sliding (upper or fly) section is on top of the base (lower) section.

Extension ladder sections should overlap by at least three feet.

If the ladder extends more than four feet above the top tie-off, a barrier or flag shall be placed on the ladder to prevent personnel from climbing beyond a safe point.

When either the length or the weight of a ladder makes it difficult to handle, two people shall raise and secure the ladder. One should secure the feet while the other walks under the ladder from the opposite end until it is raised enough to place or move. Raise the extension, if needed. Reverse the process for lowering the ladder.

The fly section of an extension ladder shall never be used independently.

Storing Ladders

Support ladders stored or hung horizontally in a sufficient number of places to prevent sagging and permanent set.

Tie together or otherwise secure ladders that are stored vertically to keep them from falling into aisles or equipment.

Wood ladders shall not be stored near radiators, stoves or other heat sources that could dry the wood and cause deterioration.

Wood ladders shall not be stored near steam lines or otherwise placed where they are kept wet or damp enough to rot the wood.

Ladders shall be cleaned after every use before returning to storage. All mud, oil and/or grease shall be removed.

Fixed Ladders

Fixed ladders more than 20 feet high shall be caged unless other fall protection safety devices are installed and used.

Fixed ladders with cages exceeding 20 feet in height shall have landing platforms installed at every 30 feet.

Fixed ladders should be securely attached to an immovable structure and attachments shall be inspected annually for signs of deterioration or detachment. Repairs shall be made immediately.

Securing Ladders

Ladders that are stored vertically shall be tied together or otherwise secured to keep them from falling into aisles and equipment.

All ladders that are not self supporting shall have an adequate tie-off rope securely attached to the top section of the ladder and to the fixed structure at all times.

Have a co-worker hold and brace the ladder in place when the ladder cannot be tied off at the top, when the feet are on a slanting or slippery surface or when the ladder feet cannot be placed between ¼ of the length away from the structure.

Inspections

Ladders shall be kept in good condition at all times and shall be inspected before each use. Regular inspections help ensure that ladders are safe to use.

Ladders found to have defects or damage shall be removed from service, tagged/marked “DO NOT USE - DEFECTIVE”, sent in for repair or destroyed.

The quarterly safety inspection shall be recorded and documented by the Supervisor.

Proper ladder inspection should include the following points:

- Ensure that there are no broken or missing step/rungs, broken or split side rails or other defects.
- Ensure that connections between the rungs and side rails are not loose.
- Ladders that have fallen or have been misused shall be checked for excessive dents or damage.
- Ensure that tie-off rope is attached and in good condition.
- Ensure that the spreaders and locking mechanism on stepladder are in good, working condition.
- Ensure that hinges move easily and are in good condition.

Training

All employees using ladders shall be trained in safe ladder use.

Recordkeeping

Training records shall be retained for the duration of employment.

Inspection records and/or maintenance/repair records shall be retained for the life of the ladder.

****LEAD**

General

A.Z. Shmina, Inc. does not perform lead abatement. An outside service shall be hired to complete all lead abatement work. Employees shall not be exposed to a PEL of 50 (fifty) micrograms per cubic meter of air. A written program shall be developed and implemented to reduce the exposures to or below the permissible limits. When working on multi-contractor worksites, employees shall be protected from exposure.

Lead Painted Components

Lead based paint can possibly be identified on numerous surfaces throughout facilities. In keeping with the requirements of the Occupational Safety & Health Administration’s (OSHA’s) Lead Exposure in the Construction Industry Standard (29 CFR 1926.62), every painted surface shall be considered a potential lead hazard.

A potential source of lead emission is the disturbing of painted surfaces or structures and components within these facilities. Typical activities that would significantly disturb a painted surface include the following:

- Removal of all or part of the paint by hand or power tools
- Removal of all or part of the paint by blast cleaning
- Removal of all or part of the paint by other means such as the use of chemical strippers or a heat gun
- Structural work to the surface such as welding, burning, cutting, or drilling
- Manual demolition of buildings, portions of buildings, or the building components.

The primary consideration when specifying work methods shall be the requirement to protect workers from exposure to

lead above the Permissible Exposure Limit (PEL). Further considerations when specifying work methods shall be the effort to reduce the release of lead into the air, water and soil, and to reduce to a minimum the generation of debris. Employees shall abide by warning signs and assessment reports. Employees shall not disturb the lead containing materials.

Air Monitoring

Initial air monitoring shall be conducted prior the beginning of work. If initial air monitoring is above the action level, monitoring shall be conducted every six (6) months until two consecutive results are below the action level.

All air monitoring conducted by the Site competent person for lead or other qualified representative shall be performed in accordance with the OSHA Standard.

Detailed and accurate records of all monitoring and other relevant data used in conducting employee exposure assessments shall be kept and maintained in accordance with the OSHA Standard.

Employees shall be notified, in writing, of the air monitoring results and any corrective actions taken.

Signage, Notification and Worker Protection

Signs shall be posted in each work area where work on painted surfaces disturbs the paint in such a way so as to expose personnel to lead contaminated dust, debris, or lead fumes. At minimum they shall read:

- WARNING
- LEAD WORK AREA
- POISON
- NO SMOKING OR EATING

All worker protection requirements will, at minimum, meet the current OSHA Standard. These requirements include but are not limited to:

- Signage, Barriers & Access
- Exposure Monitoring
- Respiratory Protection
- Medical Surveillance & Records
- Education & Training
- Decontamination & Clearance

Handling and Disposal

All work involving lead removal or re-coating shall be conducted in a manner that minimizes the release of lead and lead containing materials into the air, water, and soil.

All lead containing hazardous wastes that are generated shall be contained, collected, segregated, labeled and held at a location designated or approved by the client or owner, pending the appropriate disposition.

Contractor shall provide for proper disposal of waste, including EPA identification number, notification, certification, manifest, etc.

All waste containers must be leak proof and capable of being securely covered.

All waste containers shall be clearly labeled with weather resistant labels using indelible ink to identify the type of waste they contain.

Personal Protective Equipment

All employees shall be provided necessary and appropriate PPE at no cost. Respirators, Class C suits, gloves, etc.

Respirators shall be used during the installation/implementation of engineering and work practice controls.

Training

All employees shall be trained in lead awareness prior to the commencement of work on any tasks in which the potential for the exposure of lead exists. All employees are required to receive annual refresher training. All training shall be properly documented and maintained by A.Z. Shmina, Inc.

Medical/Hygiene

Medical surveillance shall be implemented in the event employees have been or have the potential to be exposed above the action level for more than 30 days. Blood sampling and monitoring shall occur in the event employees have been or have the potential to be exposed to lead containing materials. Employees shall wash their hands and face if lead materials are contacted. Changing, shower and hygiene facilities shall be provided when exposure to lead is above the PEL. The key health effects of lead are listed below:

- Peripheral neuropathy
- Fatigue/Irritability
- Impaired concentration
- Hearing Loss
- Wrist/Foot drop
- Seizures
- Encephalopathy
- Nausea
- Dyspepsia
- Constipation
- Anemia
- Hypertension

LINE BREAK

Policy

Any entry into an operating Process System under installation, testing, or operating conditions is subject to the procedures for "line breaking".

All employees are to be informed of the inherent dangers of working on operating process systems.

Entries can be made only with approval of the Owner and A.Z. Shmina, Inc.

Added hazard potential exists when cooling occurs, vacuums, which may be holding liquids in pockets often break without warning and liquid is released to run to the lowest point.

Plugs (particularly solidified process materials) can move and release of materials after the first connection has been broken.

The Owner and A.Z. Shmina, Inc. must agree on the location of first breaks.

All systems must be considered as having the potential to discharge contained energy/material from open ends of lines or broken flanges at any time even after the line has been drained and vented.

Cautions

No Contractor may enter an operating piping system or equipment until the requirements of this procedure are met.

Systems activated for testing purposes fall under this procedure.

Under no circumstances will any line/system be violated other than via the lock and tag procedure.

**LOCKOUT/TAGOUT – ENERGY ISOLATION

This guideline is intended to prevent accidents and injuries due to unexpected release of energy. This guideline outlines terminology, responsibilities and reviews basic principles to ensure safety and efficiency.

Definitions

Affected Employee - an employee whose job requires them to operate or use a machine of equipment on which servicing or maintenance is being performed under lockout or tagout, or whose job requires them to work in an area in which such servicing or maintenance is being performed

Authorized Employee - a person who locks out or tags out machines or equipment in order to perform servicing or maintenance on that machine or equipment. An affect employee becomes an authorized employee when that employee's duties include performing servicing or maintenance.

Energy Source - a source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal, stored or other energy.

Energy Isolating Device - a mechanical device that physically prevents the transmission or release of energy, including, but not limited to the following:

- Manual electrical circuit breaker
- Disconnect switch
- Switch disconnecting the conductors of a circuit form all ungrounded supply conductors, and no pole can be operated independently.
- Slide gate
- Blind flange
- Line valve
- Block/blind or other device
- Any similar device used to block or isolate energy sources

Lockout - the placement of a lock or lock-out device on an energy isolating device according to an established procedure to ensure that the energy isolating device and the equipment being controlled cannot be operated intentionally or unintentionally.

Lockout Device - a device that utilizes a keyed lock to hold an energy isolating device in the safe position and prevent unsafe energizing of the equipment.

Responsibility

Responsible Manager/Supervisor - The Responsible Manager/Supervisor shall ensure that this guideline is fully implemented and lockout/tagout procedures are followed.

Employees - Employees shall have a full understanding of the energy isolating devices in use. Employees shall not work on equipment that they have not personally locked out with their own keyed lock. Employees shall never remove a lock placed by others.

Safety Representative - The Safety Representative shall train employees in the lockout/tagout safeguard procedures to ensure the safety of all employees. The Safety Representative shall ensure that lockout/tagout procedures are implemented and that necessary supplies and equipment are available.

Equipment Requirements

Equipment shall be locked with personally assigned locks, group locks that hold several personally assigned locks or a lock-box system (box holding the key to the single lock on the equipment and secured close by several personally assigned locks). A lock must be used if the energy isolating device can physically be held in the safe position by a lock. Each lock shall have only one key and shall be clearly identified as the property of the specific employee. If an energy isolating device cannot physically be locked out with a lock, a tag may be used only if used in conjunction with an additional control such as disconnect of in clear view of the personnel performing work.

Preparation for Shutdown

Equipment owner or their representative shall approve shutdown of the equipment. Person shutting down the equipment must have a complete understanding of the equipment or system and the energy sources involved. All energy isolating devices shall be identified and the equipment needed to lockout these devices shall be determined and collected. All remote, emergency, timed and automatic override controls shall be identified and included in the lockout.

Shutdown Removing Equipment from Service

All affected employees shall be made aware of the shutdown. Before lockout begins, equipment of system shall be shutdown in an orderly manner.

Isolation

Locate, isolate or relieve all stored energy such as air pressure, springs, hydraulic systems and similar residual energy sources. Ensure isolation from all process and utility lines. Place all valves in a safe position, open drains and vents and perform other tasks necessary to de-energize the equipment or system.

Lockout/Tagout

Before beginning work on the equipment or system, the following actions to verify lockout/tagout shall be taken:

- All energy isolating devices shall be set in the safe position and locked in position.
- Tags reading “DANGER - DO NOT OPERATE” shall be filled out and attached to each locked isolating device.
- Each person who will work on the equipment must apply his or her personal lock to each locked out isolating device or the lockout device in use.
- All equipment being locked out and tagged out shall include the name of individual placing device.

Verification of Isolation

Before beginning work on the equipment or system, the following actions to verify isolation shall be taken:

- Ensure that personnel are at a safe distance from the equipment or system.
- Attempt to start the equipment or system. If the equipment or system does not start, return all controls to the OFF position. If the equipment starts, begin the process again from PREPARATION FOR SHUTDOWN, locate the energy source that is not isolated and isolate it. Continue through the steps until the equipment does not start.
- The equipment is not “locked out.”
- Notify affected employees that the lockout is complete.
- Review all energy isolation device locations and the work to be performed with all members of the team before beginning work.

Removing Locks and Tags to Return Equipment to Service

After the planned work has been completed, the following actions to safely return the equipment or system to service shall be taken:

- Inspect the area to ensure that non-essential items and all waste/debris have been removed and the equipment or system components are intact.
- Ensure that all machine safety guards have been replaced correctly.

- Ensure that all members of the team have been notified that the work has been completed and the locks have been removed.
- Stored energy (i.e. springs, elevated machine members, rotating flywheels, hydraulic system, and air, gas, steam, or water pressure) must be dissipated or restrained by methods such as repositioning, blocking, bleeding down, disconnecting, etc. If there is a possibility of reaccumulation of stored energy to a hazardous level, verification of isolation shall be continued until the servicing or maintenance is completed, or until the possibility of such accumulation no longer exists.

When the person who applied the lock or tag is unavailable, another employee designated by the person responsible for administering the lockout/tagout program may remove it if the following conditions are met:

- A reasonable attempt has been made to contact the person who applied the device.
- A thorough inspection of the process has taken place.
- The person who applied the device(s) is notified of the lockout/tagout release before he/she resumes work.
- A thorough search of the work area for the exposed personnel is completed.

Testing Equipment or System for Return to Service

Before returning equipment to service, testing shall be completed as follows:

- All work on the equipment or system shall have ceased before the lock owner removes each lock from all energy isolating devices. Lockout devices and tags shall be removed.
- The equipment or system is no longer locked out.
- The equipment or system may now be tested. Ensure that all employees are at a safe distance from the equipment or system and start the equipment or system to test proper operation. If no further work is required on the equipment or system, the lockout is complete. If further work is required, a complete lockout shall be reinitiated for the system or equipment to be worked on again.
- When the equipment or system passes the testing or when testing is not required, members of the team shall be notified that the work has been completed. The equipment owner shall be notified that the work has been completed and that the equipment or system is operational.
- The equipment or system has now been returned to service.

Shift or Personnel Change

Specific procedures shall be utilized during shift or personnel changes to ensure the continuity of energy isolation, including provisions for orderly transfer of lockout devices between off-going and on-coming shifts or personnel.

- Off-going personnel shall brief on-coming personnel on progress relating to the locked out/tagged out equipment or system.
- Off-going personnel will remove their lockout device, to be replaced immediately by on-coming personnel's lockout device.
- These steps will continue with subsequent personnel/shift changes until adjustment or repair to the equipment or system is complete.

Use of Multiple Lockout/Tagout Procedures During Project Activities

When multiple lockout/tagout procedures are used during project activities, the following shall be done:

- Each employee (e.g. A.Z. Shmina, Inc., subcontractor and customer) shall inform each other of their respective lockout/tagout procedures.
- Each employee (e.g. A.Z. Shmina, Inc., subcontractor and customer) shall ensure that his or her employees understand and comply with the restrictions and prohibitions of each employee's lockout/tagout procedure.
- An authorized employee shall have the responsibility of a set number of employees.

Use of Customer or Equipment Owner Lockout/Tagout Procedure During Project Activities

When it is determined the customer's or equipment owner's lockout/tagout procedure will be used by all employees during project activities, the following shall be done:

- Each employee (e.g. A.Z. Shmina, Inc. and subcontractor) shall obtain a copy of the customer's or equipment owner's lockout/tagout procedure.
- Each employee (e.g. A.Z. Shmina, Inc. and subcontractor) shall ensure that his or her employees, engaged in activities covered by the scope and application of the OSHA lockout/tagout standard, understand and comply with the customer's or equipment owner's lockout/tagout procedure.

Annual Program Review

The written lockout/tagout procedure shall be reviewed annually and all appropriate improvements to the program shall be made.

Training

All training and re-training must be documented, signed and certified. Authorized and affected employees shall be trained in lockout/tagout procedures. Employees shall be re-trained whenever the following conditions exist:

- There is a change in equipment, machinery or systems.
- The control procedures are changed or revised.
- The lockout/tagout procedures are changed or revised.
- The annual review reveals deficiencies in employees' knowledge or use of the procedure.

Records

Records of employee training or retraining shall be retained for the duration of employment. The lockout/tagout procedure shall be reviewed annually and retained at the facility/project until superseded, plus one year.

LOCKOUT/TAGOUT PROCEDURES

The Contractor must adhere and strictly follow either the project lockout/tagout requirements, the Owner's requirements or the Contractors own requirements, whichever is the most stringent.

No employee is permitted to work on any energized circuit.

All circuit disconnects must be locked in the open position or otherwise appropriately identified with affixed tags stating "DANGER - DO NOT ENERGIZE" or other equivalent wording prior to working on the system or equipment.

Lockout Devices

Only individually keyed padlocks shall be used.

Padlocks are to be painted per the craft color code for easier detection and craft identification.

A lockout device of the standard scissor type that will allow the placing of more than one padlock is required, when more than one individual is working on a circuit or mechanical process.

A piece of chain or cable may be necessary to complete a lockout on some valves or controls and shall be used wherever needed.

Danger Tags

'Danger Tags' ***are not*** 'Danger Signs', and shall not be used where a sign is needed.

Two standardized Danger Tags shall be used on this project. They are described as follows:

- **"DANGER - DO NOT USE":** This tag must be attached to each padlock on a lockout.
- **"UNSAFE - DO NOT USE":** This tag does not require an attachment to a padlock, but may be used if needed.

This tag shall be used to identify tools, equipment, vehicles, etc.

Procedure

If device, valve, switch, or piece of equipment is locked out, a "Danger Tag" shall be attached.

No device, valve, switch or piece of equipment shall be operated with a "Danger Tag" and/or lockout attached regardless of circumstances.

Systems consisting of electrical components will be checked, locked and tagged first by electrical craft employee working on the circuit.

The electrical craft will be the first lock on, and the last lock off.

Where placing of lock is not feasible, the circuit conductor will be disconnected from the breaker and tagged out.

The panel cover must be of the type that will cover all breakers when closed and must be equipped with a hasp in order to secure a lock to prevent the panel door from being opened.

If panel cover is of a type that cannot be locked closed, a cover must be secured over the panel cover and be locked closed and tagged while any work is being performed on any of those circuits.

If the above cannot be accomplished, each circuit will be tagged out as prescribed and an electrician will stand by the panel board to prevent breakers from being tampered with.

This physical presence will continue daily until the work is complete.

All "Danger Tags" must be dated and signed. Also on tag, must be the intended work and equipment for which tag has been placed.

If employees of more than one craft or crew are to work on a system, circuit, machinery, or component, the supervisor from that craft shall place his individual lock and tag; and verify that the system, circuit, machinery or component being tagged, is indeed the system that is to be worked on.
Only the person that placed the lock and tag shall remove it without special authorization from the Project Manager, construction manager or craft Superintendent.
Padlocks, lockout devices and "Danger Tags" shall be made available as specified above.
Padlocks shall be color coded for craft identification and shall only be used by that craft for lockout purposes, i.e. valves, switches, electrical components, etc.
Padlocks shall be issued from the contractor responsible where a sign in/out log will be maintained. Locks and tags shall be issued to the foremen or supervisor responsible for the craft performing the work.
The Contractor of each craft discipline will be responsible for assuring all padlocks are personally identified, that will be used for lock and tag purposes.
The Contractor Superintendent(s) will be responsible for ordering their own craft's padlock. A master key will also be provided.
Any employee(s) or person(s) found to have removed another's lock and/or tag will be subject to disciplinary action up to and including dismissal from the project.

Special Situations

When due to the nature of work, a supervisor who has employees assigned to work on systems that are between construction and client turnover that is to be locked and tagged out in order to perform work, the below shall be applied:

- Prior to the electrical foreman de-energizing the system, the foreman will ascertain whether system or device has been turned over and accepted by the client; If system is signed off, the client shall assume responsibility for de-energizing system and becoming the tagging authority.
- Contractor electrical foreman/craft journeyman places lock and tag and tries to engage the equipment.
- The electrical journeyman or lead man will meter the tagged equipment to verify that it is de-energized.

Operating Facilities and Equipment

All systems covered under this section whether electrical, mechanical or others are considered those systems where no future construction activity is warranted.

Electrically Operated Systems

Client representative or designee de-energizes system demonstrating accuracy to construction electrical supervisor, then locks and tags.
Construction electrical foreman/journeyman ascertains that fuses, breakers or throws have been removed, when applicable; tags, locks and tries system.
Electrical foreman/journeyman, meters the side of the system to be worked on to verify it is de-energized and safe.
Upon completion of work, the journeyman removes their lock/tag and advises the construction electrical supervisor.
Client representative or designee clears system, removes lock and tag and re-energizes if necessary.

Other Systems

Plant engineer or designee de-energizes system and makes system safe.
Client mechanics or designee(s) makes first break in flanges, places blanks, blinds or valves, and demonstrates that the system is empty and decontaminated.
Construction (Client) Coordinator or designee verifies that the system is de-energized and tagged.
Construction Craft supervisor locks, tags and tries system, surrenders the key to the journeyman who will then perform the assigned task.
Upon completion of work, the journeyman will return the key to the assigned supervisor and tag and lock are removed.
Construction (Client) Coordinator or designee assures that system is clear, and then removes lock and tag. Client mechanics or designee(s) re-energize system.

Construction

All systems under this section whether electrical, mechanical or others, are considered those systems that are still in the construction phase.

Equipment or circuits that are de-energized shall be maintained inoperative at their main power source and shall have locks and tags attached to prevent accidental turn on.
A staff member shall be designated from the electrical department (Superintendent or General Foreman), to assume the responsibility, for the removal of locks and tags, and activation of power from the main switchgear through end line component.

MEETING – PRE-CONSTRUCTION

The Contractor, before starting work at the project, shall attend a pre-construction “award” meeting with A.Z. Shmina, Inc. to understand the project conditions and safety requirements.
A project tour shall be made to confirm the Contractor's awareness of potential safety hazards.
The Contractor to ensure a safe work place shall provide appropriate methods, equipment, devices and material.
The Contractor shall provide or develop his own project specific safety program and submit it to A.Z. Shmina, Inc. for review prior to starting work at the project.
Such review shall not relieve the Contractor of responsibility for safety, nor shall such reviews be construed as limiting in any manner.
It is the Contractor's obligation to undertake any action, which may be required to establish and maintain safe working conditions at the project.

MEETINGS

A Project Start Safety Conference will be held with the Superintendent(s), safety representative and foremen of each new Contractor prior to coming on the project.
A.Z. Shmina, Inc. will issue the project start package information and will issue special instructions to the Contractors in support of the Safety Program when needed.
A.Z. Shmina, Inc. will conduct regularly scheduled meetings with the supervisors of new Contractors coming on the project and explain safety goals, contents of this manual and otherwise provide project orientation, safety activities and information.
All Supervisors will be required to attend this orientation after coming on the project.
Contractor meetings will be held as necessary and as directed by A.Z. Shmina, Inc.
All Contractors actually working on the project will have a representative at the safety meeting to maintain all safety requirements for their trade.
A.Z. Shmina, Inc. will conduct safety meetings on a regularly scheduled basis. Minutes of the meeting will be a topic of all scheduling and progress meetings.
All Contractors are required to hold weekly 10-15 minutes **"Tool Box" safety meetings** for all employees. Topics related to work assigned, and current safety problems will be discussed.
Monthly meetings for supervisory and clerical employees will be held.
A.Z. Shmina, Inc. will monitor these "Tool Box" meetings through personal attendance or by reviewing a copy of the meeting report.
Prior to starting any major operation, which would involve locking and tagging procedures, a meeting must be set up involving A.Z. Shmina, Inc. and every Contractor Superintendent and every Contractor safety representative affected by the work.
Specific procedures must be adopted and reviewed by all concerned with the operation prior to commencement of the work.

**MEETINGS

Pre-Construction

A.Z. Shmina, Inc., before starting work at the project site, shall attend a pre- construction meeting with the controlling contractor to understand the project conditions and safety requirements. Supervisor(s), Project Manager, Safety Representative, Foreman (as applicable), and subcontractor shall attend, at a minimum.
A project site tour shall be made to confirm the Contractor's awareness of potential safety hazards. Any specialty or non-routine items shall be noted and a proper procedure shall be developed.
The contractor is to assure a safe work place shall provide appropriate methods, equipment, devices and material.

The Contractor shall provide the Safety and Health Manual and submit it to controlling contractor for review prior to starting work at the project site. Such review shall not relieve the Contractor of responsibility for safety, nor shall such reviews be construed as limiting in any manner. It is the Contractor's obligation to undertake any action, which may be required to establish and maintain safe working conditions at the project site.

Orientations

Orientation meetings shall be held daily, prior to the commencement of work. Subcontractors will be required to attend all orientations.

Toolbox Talks

Toolbox talks apply to all employees, contractors and subcontractors. Toolbox talks shall be held weekly, at the minimum, and after a learning event (i.e. accident, near miss, training, etc.). Refer to Toolbox Talk policy of this manual for specific requirements. Toolbox talks are designed to assist supervisors at all levels to deliver safety related information. It is the responsibility of the Safety Representative to ensure that these talks are carried out and to appoint a competent person who shall be responsible for ensuring that tool box talks take place. Toolbox talk topics should be selected based on project conditions or known hazardous work activity taking place. The Safety Representative will make suggestions as to relevant tool box talks. After accidents and near-misses, a toolbox talk shall be conducted that correlates to the nature of the accident/near-miss as soon as possible. All attendees shall sign and date the tool box talk form after it is completed. The signed copy of the tool box talk form shall be submitted to the Safety Representative for record keeping. Be sure to note any special, job-specific items or questions that may have been covered during the tool box talk. Toolbox Talk forms shall be obtained from the safety representative. Contact main office for forms.

MOTOR VEHICLES AND EQUIPMENT (ALL EQUIPMENT MUST BE APPROVED BY CCC BEFORE BEING BROUGHT ON SITE.)

All equipment must be inspected daily before use by Contractor's operator. Contractor must also make documented and complete inspections at 30-day intervals with proper documentation maintained at the project by Contractor and copies shall be made available to A.Z. Shmina, Inc. upon request.

Defective equipment shall be repaired or removed from service immediately.

All Contractors' operators of construction equipment should be properly licensed and certified by a competent person.

Copies of the certifications shall be maintained on site by Contractor and made available to A.Z. Shmina, Inc. upon request.

Vehicles used to transport employees shall have seats firmly secured and adequate for the number of employees to be carried and all passengers shall be properly seated with seat belt used. Standing/kneeling on the back of moving vehicles is prohibited.

Locations for storage of all fuels, lubricants, starting fluids, etc., shall be reviewed by A.Z. Shmina, Inc. prior to use by Contractor for storage and shall conform to the requirements of the NFPA as well as the local Fire Marshal. **No fuel storage tanks allowed on this project**.

Where required, contractors shall provide equipment diapers to protect from environmental spills.

Drivers of motor vehicles shall have a valid state drivers license (CDL when applicable) and be instructed to exercise judgment as well as observe posted speed limits.

All Contractors' means of ingress and egress shall be adequately marked and kept clear of stored material, debris and equipment.

Pedestrians always have right-of-way over motorized traffic.

Horns shall be sounded at blind corners, when passing, and/or for warning.

Established hand signals or turn signals are to be used.

Reckless driving or other non-observance of these instructions will be cause for withdrawal of driving privileges on the project.

Any ATV's used on the project shall be "four"- wheeled, not three-wheeled.

All vehicles permitted access to the project must display an appropriate vehicle identification badge from the rear view mirror or other conspicuous location at all times while on the project.

Seat belts shall be worn by all employees operating motor vehicles and any equipment with rollover protection structures during performance of work.

Properly trained and equipped flag persons shall be used whenever construction traffic accesses or exits from public highways as well as when construction traffic and deliveries interfere with the planned flow of traffic on public highways.

OCCUPATIONAL NOISE EXPOSURE

Protection against the effects of noise exposure shall be provided when the sound levels exceed those shown in the table below, when measured on the A-scale of a standard sound level meter at slow response.

When employees are subjected to sound levels exceeding those listed in the table below, feasible administrative or engineering controls shall be utilized. If such controls fail to reduce sound levels within the levels of the table, personal protective equipment shall be provided and used to reduce sound levels.

If the variations in noise level involve maxima at intervals of 1 second or less, it is to be considered continuous.

In all cases where the sound levels exceed the values shown herein, a continuing, effective hearing conservation program shall be administered.

Permissible Noise Exposure

Duration per day, hours	Sound level dBA slow response
8	90
6	92
4	95
3	97
2	100
1 ½	102
1	105
½	110
¼ or less	115

When the daily noise exposure is composed of two or more periods of noise exposure of different levels, their combined effect should be considered, rather than the individual effect of each.

Exposure to different levels of various periods of time shall be computed according to the formula set forth below:

$F(e) = (T_1/L_1) + (T_2/L_2) + \ldots + (T_n/L_n)$ where:

F (e) = The equivalent noise exposure factor
T = The period of noise exposure at any essentially constant level
L = The duration of the permissible noise exposure at the constant level (from the table above)

If the value of F (e) exceeds unity (1) the exposure exceeds permissible levels.

Exposure to impulsive or impact noise should not exceed 140 dB peak sound pressure level.

OSHA REQUIRED TRAINING

Instruction and training of employees is a requirement of OSHA and will be enforced on this project.

Training of Contractor personnel is the responsibility of the Contractor.

All Contractor personnel must attend the A.Z. Shmina, Inc. New Employee Orientation prior to their starting work on their first day on the project. **Proper documentation will be submitted to AZ. Shmina, Inc. and kept on site.**

OSHA – INSPECTION

It is A.Z. Shmina, Inc. policy to allow OSHA to conduct an inspection of the project (subject to review by A.Z. Shmina, Inc. Legal Team if necessary).

If a Contractor wishes to assert their rights under the U.S. Constitution regarding inspection by OSHA, then the Contractor must so notify OSHA prior to the start of an inspection.
A.Z. Shmina, Inc. will accompany the OSHA inspection party at all times and will make arrangements for the necessary meetings between OSHA, contractors and organized labor representatives (if any).
A.Z. Shmina, Inc. does not assume liability or responsibility for the presence of any alleged hazards or their correction.
Contractors will inform A.Z. Shmina, Inc. of the issuance of any OSHA citations and provide a copy when requested.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)

Precautions shall be taken to prevent personal injury due to hazards associated with the performance of tasks under hazardous conditions. This guideline outlines terminology, responsibilities and reviews basic principles to ensure safety and efficiency through proper use of personal protective equipment (PPE).

Responsibility

Responsible Manager/Supervisor - The Responsible Manager/Supervisor shall ensure that adequate supplies of PPE are on hand and enforce the use of required PPE. The Responsible Manager/Supervisor shall complete and sign the PPE hazard assessment form.

Employees - Employees shall be trained to know when to use PPE and shall use the appropriate PPE at all times. Employees shall remove damaged PPE from use and report the need for replacement.

Safety Representative - The Safety Representative shall perform job/task safety analyses and document the findings in order to identify PPE needs. The Safety Representative shall ensure that the annual inspection of personally assigned PPE is performed and documented. The Safety Representative shall ensure that adequate supplies of appropriate PPE are available for use. The Safety Representative shall perform an analysis of the possible need for flame retardant clothing (FRC). The Safety Representative shall train employees, or arrange training, on the proper use of PPE.

General

PPE shall meet ANSI standards, or equivalent, be NIOSH or MSHA approved, or equivalent. Affected employees shall be trained in the selection, use, care and limitations of the PPE they use and shall wear PPE that is appropriate to the job of that is required for the area in which they are working. PPE shall be inspected by the user before each use and defective or damaged PPE shall be removed from service and replaced immediately. PPE shall be fitted to each affected employee. Areas with specific PPE requirements shall be marked appropriately. A.Z. Shmina, Inc. shall supply employees with all required PPE. EMPLOYEE PPE IS NOT PERMITTED. Necessary PPE shall be provided to visitors during their visit to A.Z. Shmina, Inc. projects or facilities. A hazard assessment shall be performed and signed on all PPE.

Clothing

Clothing shall be reasonably clean. Clothing contaminated with oil, dirt or other materials can cause skin irritations by holding those materials in contact with the wearer's skin. Flammable substances on clothing constitute a fire hazard.
The use of Flame Retardant Clothing (FRC) shall be evaluated by the Safety Representative for the specific jobsite or facility. Identified FRC requirements shall be met with the appropriate grade of Nomex, or equivalent. Areas requiring FRC shall be posted.
Clothing shall be kept close to the body so that it does not snag or get caught in machinery. Long-sleeved shirts shall be buttoned at the wrist and shirt tails shall be tucked into trousers.
Sleeveless shirts and blouses, tank-tops, muscle shirts, mesh fabric shirts, uncontrolled long sleeves and similar inappropriate non-work clothing shall not be worn in project areas.
Clothing shall not be used to clean welding torch tips as acetylene impregnated fabric is highly flammable.
Welding apparel should adhere to the following requirements:
Clothing shall protect skin from hot sparks, electric arc and welding rays.
Leather chaps, aprons and sleeve guards shall be worn when necessary.
Clothing with synthetic fabrics, open shirt pockets or pant cuffs that can catch sparks or slag shall not be worn.
Electrical workers shall wear long sleeved, non-synthetic shirts with the sleeves rolled down in the following circumstances:

- When rubber gloves are required.
- When climbing poles is required.
- When working in manholes or vaults, on overhead lines, in underground installations, with hot compounds, oils,

metals or open flame or near hot boiler piping.
- When working with chemically treated poles.
- When working with chemicals.

Fire Retardant Clothing (FRC) shall be worn when switching, grounding or performing other work where high voltage arcing or flash-over could occur and when working around energized high voltage conductors in confined spaces.
Chaps or other thigh to shoe top protection shall be worn when operating a chain saw.

Jewelry and Hair

Employees shall review the tasks to be performed and consider whether there is a danger of catching jewelry on equipment. This can result not only in the loss of the jewelry, but in personal injury. When performing fieldwork, employees shall remove any item that could present a hazard when performing such work (i.e. finger rings, watches, bracelets, necklaces and other jewelry). Long, uncontrolled hair can be caught in machinery and result in severe injury. Hair shall be maintained short or controlled in a manner that does not pose a hazard where appropriate.

Eye and Face Protection

Eye and face protection is not required in offices, meeting rooms, parking lots and enclosed cab vehicles. Fixed-tint or shaded lenses shall not be worn inside buildings, enclosures or at night. Photogray glasses are acceptable. Areas where additional eye and face protection is required shall be clearly marked and the appropriate PPE shall be made readily available. Tasks requiring additional eye and face protection, regardless of where take is performed, shall be identified and eye and face protection made available. Eye and face protection shall be cleaned and returned to the storage area after use.

When wearing safety glasses, the following precautions are to be adhered to:
- Rigid side shields shall be required on all safety glasses. The side shields shall be manufactured for the specific frames by need not be permanently attached.
- Glasses damaged in the course of work shall be replaced by A.Z. Shmina, Inc.
- Visitors shall be furnished with safety glasses during visits. Non-safety prescription glasses wearers shall be required to wear goggles or fit-over safety glasses over the prescription glasses.

Goggles generally provided more complete protection that safety glasses for both impact and chemical exposure and shall be required in the following circumstances:
- On windy days when working with dry materials out of doors.
- When working with lawn equipment, such as trimmers and edgers.
- When working in lab areas or anywhere in a facility with chemicals.

Welding goggles or safety glasses shall be worn by welders and welder's helpers with American Optical Caliber Super Armor Plate lenses with Breeze Catcher side shields and Comfort Cable temples or equivalent. The protection level of these goggles is required and comfort of this model of welder's goggle is highly recommended. Lens shades shall be selected based on the type of welding to be done.

Face shields shall adhere to the following requirements:
- Face shields shall be equipped with a means of firmly attaching them to the appropriate head protection.
- Shields shall be used with safety glasses or goggles when working at grinders or drill presses and when handling caustics, acids, epoxies other chemicals and wet cell batteries.
- Face shields shall never be used as primary eye protection. Safety glasses or goggles shall be worn with them at all times.

Head Protection

Head protection must meet ANSI Z89.1m Class A or Class B standards, or equivalent. Head protection shall be inspected by the wearer regularly to ensure that the suspension system is secure and undamaged. In addition, the shell shall be free of gouges, dents and other damage and not brittle from age or exposure to chemicals. Damaged head protection shall be removed from service and replaced immediately. Aluminum or other metal head protection (Class C) shall not be worn. Head protection shall not be decorated with stickers, paint, decals or any other items that may hide damage or defects that may affect the protection level afforded. The only items permitted shall be:
- Company logo.
- Orientation stickers.
- Employee's name on plastic tape.

- Only approved winter liners may be worn with head protection.
- When there is danger of the head protection fall off or being blown off, a chin strap shall be provided and worn.

Foot Protection

Approved safety shoes must meet ANSI Z41.1 standard or equivalent standards and be suitable for field work. Toe and/or metatarsal guards that meet ANSI A41.1 standard or equivalent are approved for use as foot protection. These guards shall be provided by A.Z. Shmina, Inc. for the use of employees who are unable to wear safety shoes or who, due to the nature of their job tasks, required additional foot protection.

Hand Protection

Gloves shall be worn at all times when the hands are exposed to potential injury. Gloves shall not be worn when working on or around rotating equipment such as lathes, mills, drill presses and similar equipment. Employees shall request gloves based on the work to be done and/or the chemicals they shall handle. The MSDS for the chemicals to be handled shall be consulted to determine to type of glove needed to handle safely. Several types of gloves shall be stocked at all times. Unusual (not typically stocked) gloves shall be requisitioned for a given task.

Requirements for care of electrical protection rubber gloves are as follows:

- Gloves shall be stored in glove bags with the cuffs down.
- Gloves shall not be stored or worn inside out.
- Employees shall inspect the gloves before each use using the air test method for detection of holes. Look for scratches, cracked rubber, snags, blisters, embedded foreign matter or other defects. Defective gloves and their protectors shall be returned to the supply point or other location, as appropriate.
- Gloves shall be electrically tested every 6 months. Records of the issue and test dates shall be kept with the gloves.
- Leather protectors shall be worn over the rubber gloves when there is a possibility of making contact with a wire or when on a pole or structure carrying a wire.

Electrical Protection

Electrical protection rubber gloves classifications and requirements are as follows:

- Class 0 - for voltages from 50 to 1,000 volts
- Class 2 - for voltages from 50 to 5,000 volts
- Class 4 - for voltages greater than 5,000 volts

Hearing Protection

Hearing protection shall be worn by employees and visitors in areas marked as high noise areas and when exposed to noise levels equal to or greater than 85 dBA. Hearing protection is recommended whenever the employee judges the noise levels may exceed 85 dBA, whether the area is marked or not. Unmarked high noise areas shall be reported to the Safety Representative for sound level evaluation. Specific hearing protection is required when exposed to hot sparks or molten metal.

Certain noise sources are necessarily extremely loud. These sources include compressors and turbines. When working with or near these noise sources, compliance with the following is required:

- Work as far away as possible from the noise source
- Increase hearing protection by wearing both earplugs and earmuffs. Remember, hearing protection devices are additive.

Respiratory Protection

Respiratory protection shall be NIOSH approved, or equivalent. Respiratory protection shall be selected based on the work to be performed and the information contained in the MSDS when using chemicals or welding materials. The Respiratory Protection Program shall be consulted and followed.

Fall Protection

Fall protection (body harness and lanyard) is required whenever there is a possibility of falling more than 6 feet to the ground or another surface. Requirements for fall protection are contained in the Safety Guideline “Fall Protection.”

Floatation Devices

Floatation devices shall be fire retardant and capable of keeping an unconscious person’s head out of the water. A floatation device shall retain 95% of its buoyancy for at least 24 hours in fresh water. Personal floatation devices shall be worn whenever working near or over water or from the deck of a watercraft. Additional information on the use of floatation devices is contained in the Safety Guideline “Fall Protection.”

Seat Belts

Seat belts shall be available in powered equipment and over-the-road vehicles having a standard operator's seat and shall be used at all times while the equipment or vehicle is in operation.

Training

Affected employees shall be trained in the selection, use and limitations of PPE required while performing their duties. Affected employees shall be trained in the maintenance and care of PPE, including proper sanitary conditions. Affected employees shall wear fitted PPE and be trained on how to properly fit PPE to their person.

Retraining of an employee shall be conducted when:

- Lack or improper use of fall protection equipment is observed
- Insufficient skill of understanding of fall protection equipment is demonstrated
- An employee is found to be noncompliant with the fall protection policy
- A change in the workplace occurs and/or new, or unfamiliar, task is assigned

Records

The most recent record of employee training in the selection, use, care and limitations of PPE shall be retained. The current PPE Reimbursement Policy shall be retained. The current job/task safety analysis reports shall be retained.

**POSTINGS AND RECORDKEEPING

Posting Requirements – Jobsite Safety/EEO Packet

As soon as practical, after the arrival on a new jobsite, the Project Manager should place a bulletin board in or near the Company project office area. If the Project Manager is stationed offsite, the on-site Supervisor shall install. Should the board be located outdoors, it shall be adequately protected from the elements.

The bulletin board will carry information regarding project specific doctor and ambulance services, safety bulletins and all applicable federal, state, local and OSHA regulatory posters/information.

Injury and Illness Recordkeeping Requirements

The following forms are to be completed after every reportable injury or illness. A reportable injury is one that requires medical attention and/or follow up treatment and as defined by OSHA or state regulations:

- Medical Treatment Authorization Forms
- Foreman's and Supervisor's Accident Investigation Report
- Injury and Illness Report, OSHA 301
- Log and Summary of Occupational Injuries and Illness, OSHA Form 300

PROJECT – CODE OF SAFE PRACTICES

Each individual working on this project will be required to attend a safety orientation meeting at the start of their assignment.

At the conclusion of the meeting, each individual will be required to sign a Code of Safe Practices as follows, indicating their agreement to follow that code while on the project.

This does not relieve the trade contractor of any responsibility to properly orient and train their employees for the specifics of their work.

Sample Page: Code of Safe Practices

Project Name

Employee Name

I agree to abide by the following Code of Safe Practices while on this project.

1. I will work in a safe manner, protecting others, and myself and will report observed hazards to my supervisor. If not addressed, I will further report these hazards to the A.Z. Shmina, Inc. Project Superintendent.
2. I will dress appropriately for the project, wearing a long or short-sleeved shirt, long pants, and work boots with ankle protection, reinforced toes, and substantial soles.
3. I will use personal protective equipment as required by my trade, and will wear hard hat and safety glasses at all times.
4. I will abide by the six-foot fall protection rules, including use of harnesses where required.
5. I will park only in designated areas and observe a ten-mile per hour speed limit on site.
6. I will not smoke or use tobacco products of any type on site.

7. I will eat only in designated areas and dispose of trash in proper containers.
8. I will not use any intoxicants or other controlled substances on the project.
9. I will report all injuries and accidents involving persons or property.
10. I will not bring any weapons, including knives with blades over 4 inches, onto the project.
11. I will conduct myself in a professional manner and not engage in any violence, horseplay, practical jokes, or other behavior obnoxious to the general public. I will not harass anyone else on site or any member of the public, sexually or otherwise. I will not bring onsite, write or draw any sexually explicit materials.
12. I will not use any headset-type radios or other music players or personal televisions on site.
13. I will comply with the security procedures established throughout the project, for entrance to the project.

Signed _____

PROJECT – SAFETY RULES

All personnel on this project, including the employees of Contractor, will be required to comply with these rules.
Contractor shall ensure and indicate that all its employees have read these rules and understood its contents.
The employee must sign a declaration, which shall then be retained by Contractor with the employee's personnel file.
In addition, Contractor shall comply with the following:

- Long or short sleeve shirts shall be worn at all times. All shirts shall be tucked in trousers at all times. All shirts shall be hemmed at neck, sleeve and tail. “Muscle Shirts” are prohibited.
- Long pants are required. “Shorts” are prohibited.
- A well-constructed boot/shoe that provides ankle protection with a substantial, flexible sole shall be worn. Exposure to hazard dictates whether or not a protective toe guard will be required. Sandals, tennis shoes, or any other street type shoes (even if equipped with ANSI toe protection), will not be permitted.
- Loose fitting clothes or dangling jewelry shall not be worn around moving machinery, grinding operations, welding, or other hazardous operations.
- Hair, which could come in contact with, or be caught in machinery, shall be protected by a hardhat or hair net, as appropriate.
- Approved hard hats meeting specifications contained in the most current addition of the American National Standards Institute (ANSI), Z89.1 and/or Z89.2 are required. “Cowboy-type” hard hats are not allowed. Baseball caps and other soft headwear are not allowed under the Hard Hat suspension.
- All contractors’ means of ingress and egress shall be adequately marked and kept clear of stored material, debris and equipment.
- No firearms are allowed on the project.
- Practical jokes, horseplay, scuffling, wrestling and/or fighting are prohibited and may be grounds for immediate dismissal.
- Reflective vests or clothing shall be worn by all personnel exposed to equipment during the project work and excavation phases of the project or when deemed necessary by A.Z. Shmina, Inc.
- Stilts may only be used where allowed by local regulation and then only where the floor is clean and free of debris and obstructions, there are no uncovered floor holes, where there are no pipe- stub-ups and all guardrails are raised to provide adequate fall protection.

Drinking and/or possession of intoxicants on The Owner's property are forbidden. The use of narcotics, unless authorized by a physician, and the Project Manager/Superintendent notified, is forbidden. Violation(s) of the above will result in immediate dismissal.

PROTECTION OF THE PUBLIC

Access to the Project

No work shall be performed in any area occupied by the public unless specifically reviewed and permitted by A.Z. Shmina, Inc.
In the event the project interfaces with the public, precautions to be taken include, but are not limited to:

- Each Contractor shall take such necessary action as is needed to protect and maintain public use of sidewalks, entrances to buildings, lobbies, corridors, aisles, doors, exits and vehicular roadways.

- The Contractor shall protect the public with appropriate sidewalk sheds, canopies, catch platforms, fences, guardrails, barricades, shields, and adequate visibility as required by laws and regulations of governing authorities.
- Such protection shall guard against flying materials, falling or moving materials and equipment, hot or poisonous materials, flammable or toxic liquids and gases, open flames, energized electric circuits or other harmful exposures.
- Guardrails shall be made of rigid materials complying with the requirements for standard guardrails as defined by OSHA and the Safety Program.
- Temporary sidewalks, ramps or stairs shall be provided with guardrails on both sides whenever permanent sidewalks, ramps or stairs are obstructed by the work.
- A.Z. Shmina, Inc. may authorize barricades, secured against accidental displacement, meeting the requirements of local authorities, where fences, sheds, walkways and/or guardrails are impractical.
- During the period when any barricade, fence, shed, walkway, or guardrail is removed for the purpose of work, a watchman shall be placed at all openings.
- Appropriate warnings, signs and instructional safety signs shall be conspicuously posted where necessary. In addition, a signalman shall control the moving of motorized equipment in areas where the public might be endangered.
- Warning lights, including lantern, torches, flares and electric lights, meeting the requirements of governing authorities shall be provided and maintained from dusk to sunrise along guardrails, barricades, temporary sidewalks and at every obstruction to the public.
- These warning signs and lights shall be placed at both ends of such protection or obstruction and not over 20 feet apart alongside of such protection or obstructions.
- With respect to operations being performed on public roadways, all DOT and/or municipality requirements towards public safety will be strictly observed.
- Access to the project is limited to the entrance designated for construction traffic as indicated on the project plans issued with the construction documents.
- At no time is Contractor personnel or vehicles to obstruct traffic on public streets or Owner entry driveways.
- All material deliveries shall be scheduled in advance with the Project Superintendent and shall be completed within the time segment allocated for the specific delivery.
- A temporary six-foot high fence, in compliance with laws and regulations of governing authorities, shall be provided and maintained around the perimeter of operations on the project site to control access to the work by employees, to protect the public, and to restrict access by unauthorized individuals.

The above shall be implemented only where allowed by the governing authority. Where the owner of the property specifically prohibits such protective devices, rules and regulations of the governing authority shall apply.

Authorized Visitors

All visitors to the project are required to register with A.Z. Shmina, Inc. upon arrival.

Each Contractor will be expected to regulate their visitors accordingly.

All visitor passes expire upon departure from the project.

Parking

No parking on-site.

All vehicles delivering materials to the project shall be authorized to do so by A.Z. Shmina, Inc.

Unauthorized vehicles may be removed at the direction of A.Z. Shmina, Inc. and all towing charges will be the responsibility of the vehicle owner.

Fire hydrants and all designated fire lanes shall remain clear at all times for the use of emergency vehicles.

Employee Identification

All persons without a hardhat identification sticker shall report to A.Z. Shmina, Inc.'s office for verification of employment status, attendance at an orientation session, or issuance of a single day visitor pass.

Tours

It is of the utmost importance that a high degree of protection be afforded all persons touring the project.

All personnel who are responsible for the organization, direction and safe conduct of the tours shall be in compliance with the following guidelines:

- All group tours will be cleared through the Owner's representative and A.Z. Shmina, Inc. allowing for maximum notice.
- All tours will be coordinated by A.Z. Shmina, Inc. to accommodate the Project schedule, to make necessary preparations, and to assure safety precautions are observed.
- A.Z. Shmina, Inc. will review the following items with the person requesting the tour:
- Number of visitors.
- Individual tour groups in non-hazardous areas should be limited to no more than 10 persons per tour guide (i.e. a tour group of 20 will require at least two tour guides).

Clothing

Tour groups will be required to wear appropriate clothing (i.e. slack and low-heeled shoes).

Children

Children under the age of 12 will not be permitted to accompany tours.

An adult must accompany each child age 12 to 15.

Only those 18 years of age and older are permitted to work on the project.

Protective equipment

Hard hats, boots, raincoats, eye protection, etc., will be supplied as required.

Release and Hold Harmless Agreement

Each visitor will be required to sign this form prior to the start of the tour.

In the case of children, an adult must sign for them, preferably a parent.

Immediately prior to entering the project, all visitors shall be briefed about the need for careful and orderly conduct, including mention of any special hazards, which may be encountered.

Technical and official visitor tours will be conducted in accordance with the above safety precautions. Since technical tours are often conducted through areas of more hazardous work, it is recommended that the number of people on such tours be proportionate to the degree of hazard involved.

RESPIRATOR PROTECTION

General Requirements

The employer shall select and provide an appropriate, NIOSH-certified respirator based on the respiratory hazard(s) to which the worker is exposed and workplace and user factors that affect respirator performance and reliability.

The respirator shall be used in compliance with the conditions of its certification.

The employer shall identify and evaluate the respiratory hazard(s) in the workplace; this evaluation shall include a reasonable estimate of employee exposures to respiratory hazard(s) and an identification of the contaminant's chemical state and physical form.

The employer shall select respirators from a sufficient number of respirator models and sizes so that the respirator is acceptable to, and correctly fits, the user.

Use of Respirators

Appropriate surveillance shall be maintained of work area conditions and degree of employee exposure or stress. When there is a change in work area conditions or degree of employee exposure or stress that may affect respirator effectiveness, the employer shall reevaluate the continued effectiveness of the respirator.

The employer shall ensure employees leave the respirator use area:

- To wash their faces and respirator face pieces, as necessary to prevent eye or skin irritation associated with the respirator use
- If they detect vapor or gas breakthrough, changes in breathing resistance, or leakage of the facepiece
- To replace the respirator or the filter, cartridge, or canister elements.
  **If the employee detects vapor or gas breakthrough, changes in breathing resistance, or leakage of the facepiece, the employer must replace or repair the respirator before allowing the employee to return to the work area.

Storage

All respirators shall be stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals, and they shall be packed or stored to prevent deformation of the facepiece and exhalation valve.

Emergency respirators shall be kept accessible to the work area. Emergency respirators shall be stored in compartments or in covers that are clearly marked as containing emergency respirators, and in accordance with any applicable manufacturer instructions.

Inspection

The employer shall ensure that respirators are inspected as follows:

- All respirators used in routine situations shall be inspected before each use and during cleaning.
- All respirators maintained for use in emergency situations shall be inspected at least monthly and in accordance with the manufacturer's recommendations, and shall be checked for proper function before and after each use
- Emergency-only respirators shall be inspected before being carried into the workplace for use.

The employer shall ensure that respirator inspections include a check of respirator function, tightness of connections, and the condition of the various parts including, but not limited to, the facepiece, head straps, valves, connecting tube, and cartridges, canisters or filters.

A check of elastomeric parts for pliability and signs of deterioration shall be also be conducted.

**RIGGING SAFETY – GENERAL

Rigging Practices

- Do not damage machines and soft surfaces with the lifting apparatus.
- Avoid sharp bends in slings and protect slings from sharp edges and abrasions.
- Set loads on proper blocking/cribbing - never directly on a sling.
- Do not side load.
- Maintain an angle between the sling and the load horizontal greater than 45 degrees to reduce stress on the sling.
- Attach cable clips properly. The saddle should be on the load cable, the U-bolt on the dead end. Remember - NEVER SADDLE A DEAD HORSE.
- Do not stand or walk under suspended loads.
- Do not leave loads unattended at any time. Use tag lines of sufficient length to control the lift.
- Tag lines shall be used to receive all loads.

Rigging Equipment

- Know the safe carrying capacity of sling chains, wire rope and other lifting apparatus and do not overload them.
- Inspect all rigging equipment before each use.
- Immediately discard defective lifting/rigging equipment.
- Do not tie knots in sling chains, rope slings or wire cables to shorten or splice it.
- Do not exceed the lifting device's load capacity.
- Do not use rope for rigging or lifting loads except where it is impractical to use other methods.
- Modify lifting equipment only after engineering approval.
- Rigging equipment shall be properly stored in a manner which is not hazardous for an employee.
- Latches shall be in place on all hooks to eliminate the hook throat opening.

**SAFETY INSPECTIONS – PROJECT

Responsibility

Each supervisor will be responsible for making a daily informal tour of the work area(s) under their supervision.

The supervisor will make a weekly formal documented safety and health inspection of the work area(s) under their supervision.

Subcontractors will in attendance for safety inspections and hazard assessments.

Inspection Procedures

The supervisor will observe work methods as well as working conditions. Prior to the inspection, the supervisor should review past accidents and near-misses to determine specific causes and high hazard areas and/or operations. Such areas will be given special attention during each inspection

In addition to the contents of the inspection check sheet, the supervisor will note unsafe acts such as:

- Using equipment without authority.
- Insecure or disorderly piling or arranging of materials.
- Operating equipment at dangerous or unsafe speeds.

- Using defective tools or equipment.
- Unsafe loading or unloading of trucks, skids, racks, etc.
- Lifting improperly, or handling loads that are too heavy.
- Using tools, equipment or vehicles improperly.
- Making guards or safety devices inoperative.
- Failure to use personal protective equipment.
- Repairing or adjusting machinery in motion or equipment that is under pressure or energized.
- Horseplay.

Documentation

Safety inspection checklists will be submitted to the Safety Manager/Coordinator in the following manner:

- Once the supervisor completes the checklist, a copy should be forwarded to the Project Manager. An additional copy will be forwarded to the Safety Manager/Coordinator to initiate follow-up assistance.
- The completed checklists will be discussed as part of the Safety Committee agenda.

Corrective Action and Follow-Up

Whenever possible, the supervisor will correct/abate unsafe methods and conditions immediately upon recognition.

Each safety inspection checklist will be updated during the next scheduled tour. Items not corrected/abated will be repeated on the new checklist with asterisks indicated a repeat item and a notation of the date originally identified.

Hazardous conditions or procedures detected during inspections for which no corrective action can be determined by the supervisor will be brought to the attention of the Safety Manager/Coordinator. The Safety Representative will consult with the supervisor, maintenance/engineering, immediate manager, Safety Committee and outside consultants, as appropriate, to determine suitable corrective action.

Recommendations submitted by insurance company representatives and/or outside consultants will be handled in the same manner as the Safety Inspection Checklists.

Safety Manager/Coordinator shall review inspection checklists and make recommendations for further training/education as necessary.

SANITATION

Housekeeping

The project, work areas, and all premises occupied by A.Z. Shmina, Inc. and Contractor's personnel will be maintained in a clean, healthy and sanitary condition.

Work areas, passageways and stairs, in and around buildings and structures, shall be kept clear of debris.

Construction materials shall be stored in an orderly manner.

Storage areas and walkways on the project shall be maintained free of dangerous depressions, obstructions, and debris.

Construction equipment shall be stored or placed in an orderly manner.

Good housekeeping on the project is mandatory and every employee must do his part daily to minimize dust and to clean up his work area to keep the project clean for safety and efficiency.

Controls shall be observed which keep dirt from being tracked into areas outside the workspace. Immediate cleanup is required when dust, dirt or debris may affect the Owner’s operations.

- Eating within the construction project shall be confined to areas designated by A.Z. Shmina, Inc. for such purposes. Employees shall properly dispose of all lunch refuse and drink containers in trash receptacles
- Failure to maintain adequate housekeeping and to perform daily clean-up will result in the following actions:
- Written Notice: Upon receipt, the contractor shall take immediate action to perform housekeeping and clean up.
- If having been given sufficient notice, the contractor fails to clean up; the work will be performed by others, and the errant contractor back charged for all related costs.
- Daily and final clean up must be performed in accordance with contract documents.

Facilities

The locations of lunch areas and employee toilet facilities will be designated by A.Z. Shmina, Inc. and approved by the Owner.

Refuse and Garbage

Each contractor will provide an adequate number of covered garbage containers.
The project will be cleaned and garbage and refuse will be collected at least daily and removed from the building.

Potable Water

Each contractor shall provide potable water at the work site and test it at least weekly if delivery is from other than municipal supplies.
Sanitary facilities shall be provided for personal hygiene.

SIGNS, SIGNALS, BARRICADES AND LIGHTS (MOTOR VEHICLE EXPOSURE)

Signs, signals and barricades shall be visible at all times where a hazard exists and will be in compliance with ANSI D6.1 (most recent version), Uniform Manual of Traffic Control or regulations promulgated by the local authority.

SCAFFOLD

The Contractor's designated competent person shall inspect all scaffolds prior to each work shift with written documentation provided to A.Z. Shmina, Inc. on a daily basis. **Green tag/Red tag**.
All scaffolds shall bear a tag, signed and dated by the Contractor's competent person, denoting that the scaffold has been inspected and is safe to use prior to any employee utilizing that scaffold that day.
Any Contractor using scaffolding shall provide to A.Z. Shmina, Inc. the name of their competent person along with the content of the competent person's training program and proof of Scaffold User Training for all employees who may work on scaffolding.
Ladder Jack scaffold are not permitted on A.Z. Shmina, Inc. projects.
Scaffolds with a width less than 60 inches must have guardrails (top, mid and toe) installed when the work platform is in excess of 48 inches above the floor or lower work area.
Scaffolds with a height greater than 60 inches must have exterior outriggers installed to increase the base width of the scaffold below a ratio of 4 to 1.
Scaffold cross bracing is not permitted to be used as a substitute for guardrails.
Swing gates will be provided at all ladder or stair access points.
Where material is being landed on a scaffold, the outrigger extension will not be used to support the material unless it is deemed adequate by the manufacturer and a factor of safety of 4 is provided.
All non-mobile scaffold frames shall have base plates installed.
All mobile scaffolds will have wheels locked when in use and stationary.
Nominal grade lumber is not allowed as scaffold planking.
All individuals who are in scissor lifts shall wear a full body harness and be tied off by a lanyard to a manufacturer's approved anchorage point within the scissor lift.
Standing on guardrails is not allowed.
Only approved anchorages shall be used for fall arrest anchorage points.
A mast climbing elevating work platform that may be adjustable by manual or powered means must meet the requirements of ANSI Standard ANSI/SIA A92.9-1993, American National Standard for Mast- Climbing Work Platforms.

**SCAFFOLDS

General

Scaffolds are used in various ways to facilitate work. Affected employees shall be knowledgeable in assembling, dismantling and working on scaffolds safely. The guideline outlines terminology, responsibilities and reviews basic principles to ensure safety and efficiency.

Responsibility

Competent Person - Responsible for verifying the following tasks are completed:

- Daily inspection of all scaffolds prior to allowing employees to begin work and periodically throughout the shift.
- Authorization of the Scaffold Permit, with signature.
- Maintenance of routine surveillance of work activities to assure that the scaffold is being used safely.
- Work with the Safety Representative to develop asset-specific modifications to the scaffold permit system for cable splicer's platforms.

Employees - Shall never use a scaffold that has not been inspected or on that has not been issued a Scaffold Permit by the Competent Person for scaffolds on that shift. Employees shall understand and use precautions for working safely from scaffolds. Never exceed the working load of a scaffold.

General Requirements

Ladders shall be used for access to scaffold platforms. Scaffold rails or braces may only be used if specifically designed by the manufacturer as an access ladder.

Scaffold boards shall not be used for skids, ramps, runways, workbenches or any purpose other than scaffold decking.

The safe working load on a scaffold shall not be exceeded.

Brick, tile, block or similar material may not be stacked higher than 24 inches on a scaffold deck.

Employees should never rig from scaffold handrails or braces.

Workers shall not stand on any object to increase reach when on a scaffold including ladders, buckets, step stools etc.

Before starting work, the jobsite shall be surveyed and cleared of debris that would endanger secure footing for the scaffold or cause a rolling scaffold to tip over.

Where persons are required to work or pass under a scaffold, a screen of ½ inch wire mesh shall be installed between the Toe board and the guardrail to prevent objects from falling on those below.

Scaffold Permits

Scaffold permits shall be completed and signed by the Competent Person for scaffolds before the scaffold may be used. The signed permit is valid for one day only and shall be prominently displayed where workers can review it before using the scaffold:

- Any scaffold found to be defective, or in unsafe conditions, shall be removed from service and tagged until returned to safe working conditions.
- Scaffold permits shall be removed by the supervisor of the ground using the scaffold and shall be returned to the Competent Person for scaffolds at the end of the shift or job, whichever comes first.

Equipment Requirements

All manufactured scaffold systems must be used in compliance with the manufacturer's specifications. No alteration is permitted to any scaffold member by welding, burning, cutting, drilling or bending. Unless specifically allowed by the manufacturer, parts and sections of patented metal scaffolding of different manufacturers are not to be interchanged.

When space permits, scaffold platforms must be equipped with standard 42 inch high, rigidly secured handrails, midrails and 4 inch toe boards. Furthermore, scaffold platforms shall be completely decked with cleated or secured safety plank or manufactured scaffold decking. Workers shall not work from a deck that is less than two planks wide.

Scaffolds shall be braced with diagonal as well as cross bracing.

Scaffold boards shall have cleats to prevent slippage on the scaffold framework and shall extend at least 6 inches but not more than 18 inches over the end supports. Boards shall be secured to the framework to prevent movement.

Wheeled scaffolds shall not have adjusting or leveling screws. Adjusting screws, where permitted, shall not have more than 12 inches of thread extended.

Securing Scaffolds

Scaffolds shall be erected level and plumb on a firm base.

Scaffolds that are three times (3x) higher that the smallest base dimension shall be secured to the building or other solid structure at the second lift and every other lift thereafter.

Running scaffolds shall be secured every 30 feet of horizontal run at the same height as the other attachments to the building or other solid structure.

Rolling Scaffolds

Rolling scaffolds shall be used only on smooth, level surfaces unless the wheels are contained in wooden or channel iron runners that are level and stabilized.

Overhead clearances shall be checked and properly dealt with before moving scaffolds.

Tools and materials shall be removed or secured on the deck before moving a rolling scaffold.

Workers shall not ride a rolling scaffold while it is being moved.

The force needed to move a rolling scaffold should be applied as close to the base as practical.

The height of a rolling scaffold shall not exceed two times (2x) the smallest base dimension, including attached outriggers.

Scissor Lifts

A fire extinguisher (Ansul A-5 or equivalent) shall be mounted and maintained in the inside of the work platform.
Barricade tape shall be used around the lift base to keep workers at least three feet away from the scissors pinch points.
If the scissors must be raised for maintenance work on the mechanism, blocks shall be placed in the scissors mechanism to prevent the platform from falling.
Scissors lifts shall be completely lowered at the end of the work operation.

Boatswain Chairs and Other Suspended Systems

Boatswain chairs and other suspended systems shall have a fall arrest system in place at all times as well as an anchor tackle attached to a securely installed object.
These systems require seat boards that are at least 12”x24”x1”. First grade, 5/8 inch diameter fiber rope shall be used for the seat sling.
Swing stages, toothpicks, boatswain chairs, floats and needle beams must be accepted by the Project Manager and inspected by the Competent Person for scaffolds.
Tackle used for any suspended system shall employ only correctly sided ball bearings or bushed blocks and properly spliced, 5/8 inch diameter first-grade rope.

Employee Fall Protection

Wear properly tied-off safety harnesses on scaffold platforms that are not equipped with standard handrails and completed decking - except on suspended systems, 100% safety harness fall protection required.
Tie off harness to a building or other fixed structure or to a scaffold that is firmly attached to a fixed structure. Each person tying off when working from a scaffold shall have a personal lifeline.

Training

Employees who erect, dismantle and/or use scaffolds shall be trained in the following:

- Scaffold Permit System.
- Design of the various types of scaffolds used, with attention to safety limitations, proper assembling and securing of each type of scaffold.
- Nature of fall hazards.
- Use of body harnesses, lanyards, lifelines and other fall protection available.
- Safe use of ladders.
- Where to find working load limit markings on ladders and scaffolds.

Employees shall be retrained is there is a change in equipment or deficiencies are observed in the employee’s scaffold related work habits.

Records

The most recent of employee training records shall be maintained for the duration of employment.

STEEL ERECTION

Erection Plan

An erection plan will be prepared by the steel erector’s qualified person and reviewed with the A.Z. Shmina, Inc. Project Manager and/or A.Z. Shmina, Inc. Project Superintendent prior to start of work. Refer to OSHA 1926, Subpart R, Appendix A.
The erection contractor’s qualified person shall approve all changes in the safety erection plan.
A copy of the erection plan shall be maintained at the project showing all approved changes with a copy provided to A.Z. Shmina, Inc.
The implementation of the erection plan shall be under the supervision of a competent person.
A safe means of access to the level being worked shall be maintained.
Climbing and sliding on columns or diagonals, is not allowed.
Containers, such as buckets or bags, shall be provided for storing or carrying bolts or rivets.
When bolts, driftpins, or rivet heads are being removed, a means shall be provided to prevent accidental displacement.
Tools shall be secured in such a manner to prevent their falling.

Fall protection provisions, such as lifeline attachments, dynamic fall restraints and other such devices shall be considered during shop drawing preparation, shall be incorporated in fabricated pieces, and shall have safety lines or devices attached prior to erection wherever possible.
A tag line shall be used to control all loads.
For the protection of other crafts on the project, signs shall be posted in the erection area by the erection contractor reading, "*Danger Men Working Overhead*" and only ironworkers allowed in this area. This will include shakeout areas, erection areas and the load travel path from the storage area to the erection area.
When loads are being hoisted, all personnel are to be prevented from walking under the load.
No one shall be permitted to ride a load under any circumstances.
Crane personnel platforms will not be used for any purpose without the written approval of A.Z. Shmina, Inc.
Material shall not be hoisted to a structure unless it is ready to be put into place and secured.
Bundles of metal decking or small material shall be so secured as to prevent their falling out from the rigging.
Christmas treeing (multiple lifts) is not allowed unless exception approved by A.Z. Shmina, Inc. Safety Representative and/or Project Manager.

Fall Protection (See Elevated Work - Fall Protection)

All workers engaged in steel erection activities including connecting, bolting-up, decking, welding or any other activity that exposes them to a fall of 6 feet or greater shall be provided with and use fall protection.
This fall protection shall be either a personal fall arrest system consisting of a full-body harness, double, shock-absorbing lanyard, and anchorage or a safety net or a guardrail. Neither “Controlled Decking Zones” nor “Safety-monitor systems” are permitted. Metal deck is not considered a form of fall protection.
Fall protection requirements shall be rigorously enforced during steel erection with any observed violation cause for removal from the project.
Body belts are not permitted as part of a fall restraint system. Only full body harnesses will be used as part of a personal fall protection system.

Perimeter Protection

A guardrail system of a minimum of two (2) 3/8-inch diameter new wire rope cables shall be erected at approximately 42-inches from the floor deck and at the intermediate point immediately following the erection of beams and columns that are connected to provided adequate strength.
All sequence breaks will require a two (2)-cable assembly.
All connections will be with a minimum of two wire rope clamps.
Guardrails will not be used as a horizontal lifeline as part of a personal fall arrest system unless designed by a registered professional engineer and installed under the supervision of the steel erector’s competent person.
A minimum of three (3) wire rope clips shall be used at all connections. All connections will be loop-to-loop style.
Turnbuckles will be installed at suitable intervals to maintain the tightness of the wire rope but in no instance less than one per perimeter side.

THIRD PARTY INSPECTIONS

In addition to visits and safety inspections by its own corporate or insurance representatives, Contractor is advised that authorized third parties may inspect the project once a month.
Among others so authorized are representatives of the Owner and/or its agent, insurance companies and OSHA.
Upon their proper identification and clearance through security, they are entitled to access and courteous consideration.
A.Z. Shmina, Inc. must be made aware of their presence upon arrival, and in any case as soon as possible, of the purpose and results of such visits which relate to safety.

TEMPORARY HEAT

No salamanders or open flame heaters are allowed.

**TOOL AND EQUIPMENT SAFETY

Tools and equipment used to perform a job or task should be inspected daily to determine that they are safe and in good working condition, and, if required, have proper guarding before starting the job/task. Certain tools and equipment are inspected on a periodic basis, however, this does not guarantee the tools/equipment will be safe to use all of the time.

Tools which are not in compliance with any applicable requirements shall not be used and identified as unsafe. The controls of any unsafe tools shall be tagged or locked to prevent operation.
It is the responsibility of the employee to visually inspect tools and equipment daily for defect or conditions that could cause injury before attempting to use them.
Use the proper tool for the job/task and use tools to perform only intended work. Should a question arise as to what tools or equipment to use, the employee will contact supervisor for guidance.
Notify supervisor immediately if any tool is found to be defective or not in safe condition.

Hand Tools

Use the correct tool for the job/task. Tools with defects that make them unsafe are not to be used. The tools should be repaired by qualified personnel or replaced. Common examples of this are mushroomed heads on chisels and hammers, split handles, worn screwdriver blades, etc. Cheater bars or hammers should not be used on adjustable wrenches.
Pipe wrench jaws should be kept sharp and in good condition. Extreme caution should be used when working with knife-edges or sharp objects. Never carry knives/sharp objects in your pocket. Modifications are not to be made to any tools.
Tools should be carried in tool pouches or toolboxes. Never use wrenches, screwdrivers, chisels, etc as levers or pry bars.
Cutting tools should be kept sharp. Tools should be cleaned and properly stored at the end of use or the end of the shift.

Electric Power Tools

All electric tools will be safely grounded when in use. Do not remove any guards from electric power tools. Disconnect the tools from the power supply before attempting to repair or adjust it. Extension cords should be strung overhead to avoid tripping hazards. Use only those power tools that you are qualified to use. If any questions/issues arises concerning the safety of power tools, contact your supervisor.

Grinders and Buffers

Grinders and buffers must be equipped with the proper guards. Tool rests on pedestal grind wheels should be adjusted to within 1/8” of the wheel. Never use a grinding wheel that is rated at fewer RPM than the driver. Never use a grinding wheel that has a hole larger that the arbor of the driver. Gloves and hanging sleeves should never be worn when operating grinders, buffers, drill presses or other rotating tools. Long hair and beards must be protected when working around rotating machinery. Work must be securely held/clamped in place. Faceshields or goggles must be worn when using any chip producing tools. Grinding wheels must be kept properly dressed at all times. Cracked, defective or dropped grinding wheels should be discarded and replaced immediately. Grinders and buffers must be electrically disconnected before changing wheels or any adjustment.

Machine Tools

Machine tools are to be operated by qualified employees only. Never remove any safety guards. All drill press and radial drill work pieces must be securely bolted or clamped to the table. A brush or stick should be used to remove metal cuttings. Chuck keys and wrenches are not to be left in drill or lathe chucks, in spindles or pipe machines. Long hair and beards must be properly protected when working with machine tools. Gloves and long/baggy sleeves should not be worn when operating machine tools. All machine tools should be electrically disconnected before performing maintenance on them or adjusting them. Never leave machine tools running when not in use.

Hoisting Equipment

Inspect all hoisting equipment prior to use. Never exceed the rated capacity of blocks, slings, cables, ropes or other hoisting equipment. Never lift a load with the tip of the load chain hook. The load chain on chain falls should never be run “full out”. This makes the load totally dependent on the bolt holding the dead end of the chain. Suspended loads should not be left on chain hoists any longer than necessary. Use clevises in the end of slings whenever practical. The pull of a clevis must always be from pin to eye and not from side to side. Do not shorten chain slings by twisting or tying knots in them. Never add two or more slings together by threading the eyes. Use clevises to connect slings or use a longer sling.

Power Actuated Tools

Never place your hand or fingers over the front muzzle end of the tool. Never carry fasteners or other hard objects in the same pocket or container with powder loads. The loads could be set off, causing serious injury or death. Never fire into very hard or brittle materials such as cast iron, tile, glass or rock. These materials can shatter, causing sharp fragments and/or the fastener to fly freely. Never fasten into soft materials such as drywall. Always hold the tool perpendicular to the work surface to avoid serious injury or death from ricocheting fasteners. Use the spall guard whenever possible.

Always post warning signs when powder actuated tools are in use. Signs should state "Powder Actuated Tool in Use" and should be located within 50 feet of the area where tool is being used. Operators and bystanders must wear PPE at all times. Serious eye injury and hearing loss can result if proper PPE is not worn. Make sure you use the correct powder load for your particular application. Never fire a powder actuated tool in an explosive or flammable environment.

TOOLBOX TRAINING

Instruction and training of employees is an OSHA requirement and, as such, will be required on this project.
Examples of such required training to be provided by Contractor are:

- Newly employed, promoted and/or transferred personnel shall be verbally instructed in the safety practices required by their work assignments.
- All work assignments must include specific attention to safety.
- "Follow-up" monitoring is required in order to prevent accidents.

OSHA requires that employees performing specific non-routine tasks or operating specific equipment be trained in its usage.
Training of Contractor personnel is the responsibility of the Contractor.
Conduct Toolbox safety meetings for all employees at least once a week.
Maintain an attendance record by having employees sign the reverse side of the Toolbox Safety Meeting Report, or equivalent form.
Complete the report and submit it to the A.Z. Shmina, Inc. office within twenty-four (24) hours after each meeting.
File all Toolbox meeting reports and summaries so that they are available for review at any time during project operations or for a period of five years following termination of the project.
It is the responsibility of trade contractor supervision to explain the hazards involved in an assignment to all employees, either individually or in a group before they actually begin an assigned task.
This task may only require a few words, but in many cases it will require the actual demonstration of how the project can be done safely and the pointing out of the hazards that may be or will be encountered in any task.

WELDING, CUTTING AND BURNING – HOT-WORK

Electric Arc Welding

A suitable, approved fire extinguisher shall be ready for instant use in any location where welding is done.
Screens, shields, or other safeguards should be provided for the protection of men or materials, below or otherwise exposed to sparks, slab, falling objects, or the direct rays of the arc.
A dedicated fire watch shall be present at all welding operations and remain for at least 1 hour after the hot work has halted.
The welder shall wear approved eye and head protection.
Men assisting the welder shall also wear protective glasses, head protection and protective clothing. Adequate exhaust ventilation shall be maintained at all welding and cutting work areas.
Electric welding equipment, including cables, shall meet the requirements of the National Electric Code. All arc welding and cutting cables shall be of the completely insulated flexible type capable of handling the maximum current requirements of the work.
Cables in need of repair shall not be used. The frames of all arc welding and cutting machines shall be grounded either through a third wire in the cable connecting the circuit connector or through a separate wire which is grounded at the source of the current.
All ground connections shall be inspected to insure that they are mechanically strong and electrically adequate for the required current.
Welding practices shall comply with all applicable regulations.

Gas Welding or Cutting

When gas cylinders are stored, moved, or transported, the valve protection cap shall be in place. When cylinders are hoisted, they shall be secured in an approved cage or basket.
The valve cap shall never be used for hoisting.
All cylinders shall be stored, transported, and used in an upright position. If the cylinder is not equipped with a valve wheel, a key shall be kept on the valve stem while in use.

At the end of each work day or if work is suspended for a substantial period of time, compressed gas cylinder valves must be closed, regulators removed and properly stored.
Cylinders containing oxygen or acetylene or other fuel gas shall not be taken into confined spaces.
Cylinders containing oxygen or acetylene or other fuel gas shall be stored in designated areas outside the structure as approved by A.Z. Shmina, Inc.
No one shall use a cylinder's contents for purposes other than those intended by the supplier.
All hose used for carrying acetylene, oxygen or other fuel gas shall be inspected at the beginning of each working shift.
Defective hose shall be removed from service.
Oxygen cylinders and fittings shall be kept away from oil and grease.
Oxygen shall not be directed at oily surfaces, greasy clothes or hands.
Regulators, gauges, backflow check valves, and torches shall be kept in proper working order.
An approved fire extinguisher shall be readily available.
Appropriate personal protective equipment, such as burning glasses, shields, and/or gloves shall be used.
Adequate exhaust ventilation shall be maintained at all welding and cutting work areas.
Work permits shall be obtained daily, prior to any burning or cutting operations on the project.

WORK PERMIT PROCEDURES

General Procedures

A copy of this section of the Safety Program will be issued to all Contractors, and will serve as notice by A.Z. Shmina, Inc. that a work permit is necessary before starting any hot work or entering any confined spaces.
The work permit shall be obtained from A.Z. Shmina, Inc. before starting each day's work.
The procedures for initiating a work permit are listed on the permit application appropriate to the type of work.

Hot Work

Hot work is defined as a process or procedure, which could result in a fire if not properly controlled. Common types of hot work are welding, burning, cutting, brazing, soldering.
Hot work will usually be permitted only during normal working hours.
Permits will be issued the day before work is to be accomplished, and the work area will be inspected to verify that adequate control has been established.
A copy of the permit will be available at the point of work.
An adequate number of fire extinguishers will be available within 50-feet of the point of work for which a permit is issued.
The Contractor will take the necessary precautions when welding or burning above walls to assure that protection is maintained on both sides of the wall and areas below are protected on multilevel buildings.

Confined Space

When work in confined spaces is scheduled, such as a caisson, boiler, deep excavations, etc., consideration must be given to two major known and recognized hazards:
The possibility of fire or explosion, flammable gases, fumes, vehicle fumes, vapors, or dusts.
The possibility of injury to the worker (or loss of consciousness) as a result of inhalation or absorption through the skin of toxic materials or from oxygen deficiency.
For work in a confined space, the responsibility for recognition and advance notification is the Contractor's.
The Project Superintendent and the Project Safety Representative will be notified and will evaluate the situation, issuing a work permit in those cases for which he considers it necessary.
The Contractor will be responsible for providing equipment and special instructions for the worker, such as ventilating units, respirators, safety belts and life lines, etc., and for conformance to all applicable OSHA standards.
It is required that the "buddy system be used and that an observer will tend all workers in a confined space.
Rescue procedures should be agreed upon beforehand.

Guardrail Opening

The A.Z. Shmina, Inc. Safety Representative, Project Manager or Project Superintendent may approve work, which requires the opening of guardrails or the removal of holes covers to be performed, in advance.

Particular attention shall be given to the alternate means of fall protection, which will be required to safely perform the work and protect other workers in the vicinity of the fall exposure.
Specific plans for providing alternate fall protection shall be described in the request for the work permit.

Off-Hours Work

The Project Manager and/or Project Superintendent shall approve work, which is required to be performed outside normal working hours established at the project, in advance.
Any work occurring within the existing Owner facility shall be at the convenience of the Owner, and shall comply with all conditions imposed by the contract specifications and the work permit issued by the Project Manager or other persons identified by the Owner.

AREAS NOT COVERED

The areas not covered by this plan must be at least compliant with all federal, state and local regulations. All rules in this plan will be enforced by A.Z. Shmina, Inc. personnel

APPENDIX A – TABLE OF FINES

Violation	First Offense	Second Offense
Assured Grounding Program violation	$200	$400
Clothing not adequate	$50	$100
Confined Space violation	$200 / removal	N/A
Electrical Cord defective	$100	$200
Electrical cords not protected on floor or not raised	$50	$100
Equipment violation	$50	$100
Eye Protection Missing	$50	$100
Failure to protect public	$50	$100
Fall Protection not present	$100	$200
Fire Extinguisher missing	$100	$200
Fire Watch missing	$100	$200
Food Consumption	$100	$200
Footwear not adequate	$50	$100
Gas Cylinders stored incorrectly/not identified	$50	$100
General Duty Violation	$100	$200
Guard Rail removal	$100	$200
Hard Hat Missing	$50	$100
Hearing Protection missing	$50	$100
Hot Work Permit missing	$100	$200
Housekeeping poor	$50	$100
Ladder defective	$100	$200
Ladder not secured	$50	$100
Lockout violation	$200	$400
Material storage improper	$50	$100
MSDS missing	$100	$200
Open Hole	$200	$400
Orientation not attended	$100	$200
Power Tool defective	$100	$200
Scaffold Violation	$100	$200
Smoking in non-designated area	$50	$100

Violation	First Offense	Second Offense
Standing on top of Ladder	$100	$200
Tool Box Meeting not held	$100	$200
Traffic citation	$50	$100
Trench/Excavation Permit missing	$200	$400
Trenching violations	$200	$400
Uncertified Lifting Device	$100	$200
Urinating/Defecating in building	$200 /removal	N/A
Written HazCom Program missing	$100	$200

STANDARD SAFETY PLAN CHANGE LOG

11/07/11

Management Statement; Responsibilities Contractors; Accident Investigation: Accident Reporting procedures; Confined Space Entry; Crane and Rigging; Drug Enforcement Policy; Electric Temporary; Scaffolding; Emergency Procedures; Incentives and Awards; Meetings; Motor Vehicles and Equipment; Project Safety Rules; Welding, Cutting and Burning.

05/07/13

Safety Policy Statement, Aerial Work Platforms, Asbestos Awareness, Assured Grounding/Electrical Ground Fault Protection, Back/Lifting Safety, Code of Safe Work Practices, Crane Safety – General, Disciplinary Policy, Drug Detection Policy, Electrical Safety – General, Emergency Action Plans, Emergency Action Plans – Incident Investigation, Emergency and First Aid Medical Services, Excavations and Trenches, Exposure Control Plan, Eye and Face Protection, Fall Protection Policy, Fire Extinguisher Use & Fire Prevention Plan, Floor Opening Safety, Hand Protection, Hazard Communication Plan, Hot Work Practices, Housekeeping, Ladder Safety, Lead, Lockout/Tagout – Energy Isolation, Meetings, Personal Protective Equipment (PPE), Postings and Recordkeeping, Rigging Safety – General, Safety Inspections – Project, Scaffolds, Tool and Equipment Safety

VTC
INSURANCE
GROUP

December 14, 2021

A Z Shmina Inc
11711 Grand River Road
Brighton, MI 48116-9000

RE: Workers' Compensation Experience Modification

To Whom It May Concern:

Per your request, listed below is your experience modifications for the State of Michigan.

01/01/2022 to 01/01/2023 – 0.72

If you should need any additional information, please do not hesitate to call.

Sincerely,

Megan Kennedy
Mkennedy@vtcins.com

Year 2021 ______

LOG OF WORK RELATED INJURIES AND ILLNESSES

Michigan Department of Energy, Labor & Economic Growth

Michigan Occupational Safety and Health Administration (MIOSHA)

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.

Form Approved OMB No. 1218-0176

You must record information 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 Public Law of 1970 (P.L. 91-596) and Michigan Occupational Safety and Health Act 154, P.A. 1974, Part 11, Michigan Administrative Rule for Recording and Reporting of Injuries and Illnesses. Feel free to use two lines for a single case if you need to. You must complete an injury and illness incident report (MIOSHA 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 MIOSHA office for help. You may be fined for failure to comply.

ESTABLISHMENT NAME	
A.Z. Shmina, Inc.	
Brighton	Michigan

IDENTIFY THE PERSON		DESCRIBE THE CASE				CLASSIFY THE CASE											
						Using these four categories, check **ONLY** the one most serious result for each case:				Enter the number of days the injured or ill worker was:		Check the "injury" column or choose one type of illness: (M)					
(A) Case No.	(B) Employee's Name	(C) Job Title (e.g., Welder)	(D) Date of injury or onset of illness (month/day)	(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	Remained at work: Job transfer or restriction	Remained at work: Other recordable cases	Away From Work (days)	On job transfer or restriction (days)	Injury	Skin Disorder	Respiratory Condition	Poisoning	Hearing Loss	All other illnesses
						(G)	(H)	(I)	(J)	(K)	(L)	(1)	(2)	(3)	(4)	(5)	(6)
						☐	☐	☐	☐			☐	☐	☐	☐	☐	☐
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					Page totals	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
												Injury (1)	Skin Disorder (2)	Respiratory Condition (3)	Poisoning (4)	Hearing Loss (5)	All other illnesses (6)

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

Hearing Standard Threshold Shifts must be recorded under Column 5

Public reporting burden for this collection of information is estimated to average 14 minutes per response, including time to review the instruction, 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 aspects of this data collection, contact:

Michigan Department of Energy, Labor & Economic Growth, MIOSHA, MTSD,
7150 Harris Dr. P.O. Box 30643, Lansing MI 48909-8143. (517) 322-1848.
Do not send the completed forms to this office.

SUMMARY OF WORK-RELATED INJURIES AND ILLNESSES

Year 2021

Michigan Department of Energy, Labor & Economic Growth
Michigan Occupational Safety and Health Administration (MIOSHA)

Form Approved OMB No. 1218-0176

All establishments covered by Public Law of 1970 (P.O. 91-596) and Michigan Occupational Safety and Health Act 154, P.A. 1974, Part 11, Michigan Administrative Rule for Recording and Reporting of Injuries and Illnesses, must complete this Summary page, even if no injuries or illnesses occurred during the year. Remember to review the Log to verify that the entries are complete and accurate before completing this summary. You may be fined for failure to comply.

Using the Log, count the individual entries you made for each category. Then write the totals below, making sure you've added the entries from every page of the log. If you had no cases write "0."

Employees former employees, and their representatives have the right to review the MIOSHA Form 300 in its entirety. They also have limited access to the MIOSHA Form 301 or its equivalent. See Part 11, R408.22135 Rule 1135, in MIOSHA's Recordkeeping rule, for further details on the access provisions for these forms.

Number of Cases

Total number of deaths	Total number of cases with days away from work	Total number of cases with job transfer or restriction	Total number of other recordable cases
0	0	0	0
(G)	(H)	(I)	(J)

Number of Days

Total number of days away from work	Total number of days of job transfer or restriction
0	0
(K)	(L)

Injury and Illness Types

Total number of…

	(M)		
(1) Injury	0	(4) Poisonings	0
(2) Skin Disorder	0	(5) Hearing Loss	0
(3) Respiratory Conditions	0	(6) All Other Illnesses	0

Establishment information

Your establishment name A.Z. Shmina, Inc.

Street 11711 Grand River Avenue

City Brighton State Michigan Zip 48116

Industry description (e.g., Manufacture of motor truck trailers)
Construction

Standard Industrial Classification (SIC), if known (e.g., SIC 3715)
1 5 4 2

OR North American Industrial Classification (NAICS), if known (e.g., 336212)

Employment information

Annual average number of employees 21

Total hours worked by all employees last year 41,787

Sign here

Knowingly falsifying this document may result in a fine.

I certify that I have examined this document and that to the best of my knowledge the entries are true, accurate, and complete.

Andrew Shmina — Company Executive

President — Title

(810) 227-5100 — Phone

1/13/2021 — Date

Post this Summary page from February 1 to April 30 of the year following the year covered by the form