

TABLE OF CONTENTS

SECTION A	3
ADMINISTRATIVE ISSUES	3
SAFETY POLICY STATEMENT	4
PROJECT SAFETY GOALS	5
CONTRACTOR SAFETY QUALIFICATION	6
SITE SAFETY RESPONSIBILITIES	7
COMPETENT PERSON	Error! Bookmark not defined.
SAFETY TRAINING AND EDUCATION	13
EMERGENCY PROCEDURES	15
INCIDENT REPORTING	17
EMERGENCY NUMBERS	Error! Bookmark not defined.
ADDRESS OF CLINIC	Error! Bookmark not defined.
FIRE DEPARTMENT	Error! Bookmark not defined.
POLICE DEPARTMENT	Error! Bookmark not defined.
VGC SITE OFFICE	Error! Bookmark not defined.
INCIDENT REVIEW PROCESS	19
NON-COMPLIANCE TO SAFETY POLICIES	20
VISITORS	21
SECTION B	22
PROTECTION AND GENERAL SITE ISSUES	22
CORD MANAGEMENT	23
CRANES AND DERRICKS	25
DEMOLITION	27
ELECTRICAL	30
ELECTRICAL WELDING	33
EXCAVATION AND TRENCHING	34
EFFECTS OF EXCAVATING AND TRENCHING ON ADJOINING PROPERTY	36
FALL PROTECTION	38
FALL PROTECTION WORK PLAN	39
FIRE HAZARDS AND PREVENTION	40
WELDING / CUTTING	44
GASOLINE POWER	46
HAND AND POWER TOOLS	47
HEARING CONSERVATION POLICY	49
HOUSEKEEPING	50
LADDERS	53
MATERIAL AND PERSONNEL HOISTS	54
MATERIAL HANDLING AND STORAGE	55
SCISSOR LIFTS/MEWP'S	56
OXY-ACETYLENE BURNING AND WELDING	59
POWDER ACTUATED FASTENING TOOLS	61

PROTECTIVE EQUIPMENT FOR PERSONNEL	62
TEMPORARY PROTECTION.....	75
PROTECTION OF OPENINGS AND OPEN SIDED FLOORS AND DECKS.....	667
REBAR PROTECTION.....	79
SAFETY SIGNS AND BANNERS	80
SCAFFOLDING.....	81
SPRAY ON FIREPROOFING.....	723
STEEL ERECTION HIGH LIGHTS	734
TRAFFIC CONTROL.....	745
UTILITIES.....	756
SECTION C	87
ENVIRONMENTAL ISSUES	767
ASBESTOS.....	77
BLOODBORNE PATHOGENS	789
CARBON MONOXIDE.....	91
CARBON TETRACHLORIDE.....	92
CONFINED SPACES	823
CONFINED SPACE ENTRY PLAN	856
CONTAMINATED SPILLS	98
FLUORESCENT LAMPS	889
FLUORESCENT LIGHTING CIRCUITS	100
HAZARD COMMUNICATION.....	101
LEAD.....	924
PROJECT RESPIRATORY PROTECTION PROGRAM.....	957
CONSTRUCTION MANAGEMENT LEAD COMPLIANCE PROGRAM.....	979
RESPIRATOR USER TRAINING & EDUCATION	110
RESPIRATOR TRAINING RECORD.....	110
RESPIRATOR SELECTION SUMMARY.....	9911
SILICA DUST	1002
SECTION D	114
MEDICAL ISSUES	1024
FIRST AID/CPR.....	1035
ON SITE MEDICAL ASSISTANCE	1046
RETURN TO WORK.....	1058
SUBSTANCE ABUSE PROGRAM.....	1068
SECTION E.....	APPENDICES
APPENDIX A: SAFE OPERATING PROCEDURES	
APPENDIX B: MOLD & MOISTURE CONTROL PLAN	

SECTION A
ADMINISTRATIVE ISSUES

SAFETY POLICY STATEMENT

Scope and Application

As a leader in the construction industry, Venture General Contracting, LLC is committed to workplace safety and the safety of all workers on our sites. It is our intention to provide and maintain the safest possible work conditions for all workers and to ensure that all workers return home safe each day. This will be achieved through the continued implementation of the safety management system. By promoting safe and efficient operations, incidents that increase cost to the project and suffering to the employees will be kept to a minimum. It is our belief that with complete cooperation from all workers, the safety program will continue to achieve commendable results.

Project Managers, Superintendents, Assistant/Area superintendents, Safety Representatives, and foreman are the key individuals for implementing and maintaining an effective safety program. It is the responsibility of each of these individuals to ensure the men and women working under their control are maintaining safe work areas, and are performing their task in a safe manner. It is also the primary responsibility of each worker to follow every precaution and safety rule to protect themselves and their fellow workers.

Each Contractor/Subcontractor is jointly responsible for the safety of their employees and/or visitors as required by the rules and regulations of this program and the OSHA 1926 Safety Standards/WA STATE DEPT. OF OCC. SAFETY & HEALTH 296-155 standards for the Construction Industry and all other local, state, and federally recognized current standards and codes. All Contractors and Subcontractor on our projects are required to know and follow the contents of this Safety Program. All Contractors and Subcontractors are responsible to train and educate their employees, and/or visitors as to the contents of this program and applicable safety regulations. Documentation of this training, and all training, is the responsibility of the Contractor/Subcontractor and proof of the training shall be submitted upon request.

The program encompasses many of the major standards promulgated by the Federal Occupational Safety and Health Administration, Washington State Department of Occupational Safety and Health, and the American National Standards Institute, but in no way is it all-encompassing. In the event a situation arises whereby a site practice is not covered in this program or subcontractors program, the most applicable and stringent safety standard shall apply using the Occupational Safety and Health Administration standards/Washington Administrative Codes as a minimum requirement.

We have accepted and approved this policy. It is up to all of us to make sure it is effective. We sincerely believe in, and strive for production, which is both safe and efficient.

MATT PARENT

Partner

JACK BEAUDOIN

Partner

SAFETY GOALS**Scope and Application**

In order to prevent incidents and injuries that may result from the activities of independent contractors, Venture General Contracting (hereby referred to as "VGC") has set forth safety goals for which the company will maintain. The result will be minimal disruption to the project construction activities and will assist in monitoring the success of the program by maintaining statistics involving contractor incidents. The goals apply to the company as a whole but each Project, individual Contractor and Subcontractor shall establish their own company safety goals. Specific goals will be determined and documented by VGC staff prior to the start of work in the field.

Definitions

Lost Time Incident: An incident that involves a contractor employee receiving a work related injury that does not allow the employee to return to work (based on the restriction of work by the attending physician) on their next regularly scheduled work shift.

OSHA Recordable Incident: An incident that involves a contractor employee receiving a work related injury that results in loss of consciousness, restriction of work or motion, transfer to another job, or requiring medical treatment considered beyond first aid.

Lost Workday: A Regularly scheduled workday that an employee of a contractor misses due to the work restrictions placed on the employee by the attending physician.

Near Miss: Any situation that could have reasonably caused serious injury, illness, fire, property damage or any other serious hazard as defined by the owner.

Fatality: A work related incident resulting in the death of a contractor employee.

Light Duty: The light duty program encourages the return to work of workers who are not seriously injured. Each injury should be evaluated to determine what light duty jobs are available.

Procedures

Contractor employees must immediately report all incidents to their supervision at the time of occurrence. It is then the contractor's responsibility to immediately report all incidents to VGC. Complete incident investigation reports shall be submitted within 24hours of the incident occurrence to VGC project management and within 48 hours to VGC senior management.

Monthly reports tracking Lost Time Injuries, Lost Workdays, OSHA Recordable Injuries, and Fatalities will be developed.

CONTRACTOR SAFETY QUALIFICATION

Scope and Application

The goal of this process is to evaluate a contractor's historical statistical safety data and current written safety programs in order to indicate to VGC the level of safety that can be expected from a contractor if hired. Safety qualification applies to all contractors and subcontractors being considered to perform construction activities on VGC projects. The VGC management team shall evaluate the information submitted by the contractors. All prime or first tier subcontractors are responsible for collecting and evaluating the safety information of lower tier subcontractors, and to ensure adherence to this program.

The following terms are utilized in the qualification process:

- Experience Modification Rate (EMR) - This rating is issued by the contractor's worker compensation carrier. It is determined/influenced by the number, costs, and severity of Incidents.
- Lost Time Incident Rate - The number of Incidents that involve a contractor employee receiving a work related injury that does not allow the employee to return to work (based on the restriction of work by the attending physician) on their next regularly scheduled work shift per 200,000 work hours.
- OSHA Recordable Incident Rate - The number of Incidents that involve a contractor employee receiving a work related injury that results in loss of consciousness, restriction of work or motion, transfer to another job, or requiring medical treatment considered beyond that of first aid per 200,000 work hours.

Procedures

Before considering a contractor for work VGC shall request the contractor to complete the *VGC Pre-qualification* Form and submit it along with any other requested paperwork, and a copy of the contractor's written safety program. *The **Site Specific Safety Plan** shall be submitted when the bid is awarded.*

VGC will evaluate the submitted information based upon criteria developed for this project. If the contractor's data is deemed acceptable, the contractor can be considered for work or the contractor may be rejected or approved with conditions.

If the contractor's data is not acceptable, VGC may:

1. Use an alternative contractor,
2. Justify to Senior Management (i.e. new technology, emergency situation, past onsite experience, positive trends in Incident rates, etc.) that despite contractor's safety record, they must be utilized. In such an event, a specific plan shall be developed (Corrective Action Plan) to allow the contractor to achieve an acceptable rating while onsite, or
3. Only Senior Management of VGC may allow one of these Contractors to complete work with the approval of the Safety Director.

SITE SAFETY RESPONSIBILITIES**Scope and Application**

The assignment of construction management or insurance safety personnel to monitor responsibilities for safety is not intended to relieve the contractor of their responsibilities for providing a safe and healthy environment for their employees. It is the sole responsibility of all contractors on the project to comply with all federal, state, and local safety and health guidelines and requirements. This program is to supplement and assist in their efforts for such compliance.

Responsibilities

- **Construction Manager** - In charge with ensuring the overall activities of all onsite contractors and is responsible for the following:
 1. Assists in the design of the contractor safety process
 2. Assists in promoting continuity of the process
 3. Supports implementation of the Site Specific Safety Plan.
 4. Supports training and development of personnel regarding the contractor safety process
 5. Continually evaluates the contractor safety process
 6. Responds to questions regarding the contractor safety process
 7. Communicates the requirements of the contractor safety process
 8. Selectively attend pre-job meetings with the contractor to discuss their Site Specific Safety Plan; in addition, also to discuss the safety goals and requirements of the project.
 9. Conducts safety audits of the project weekly.
 10. The Project Safety Coordinator will chair the monthly safety committee meetings.
 11. Coordinating Insurance guidelines / input
 - **Project Managers/Superintendents/Assistant Superintendents** - The individuals charged with monitoring activities of specific area projects, are responsible for the following:
 1. Assists in the design of the contractor safety process.
 2. Implements the contractor safety process.
 3. Communicates potential contractor created hazards to the Project Safety Coordinator.
 4. Communicates hazards to contractors.
 5. Conveys the contractor safety process requirements to contractors.
 6. Promotes contractor adherence to Washington State Dept. of Occupational Safety & Health safety policies and addresses deficiencies.
 7. Attends Incident review meetings and assists in tracking Incident statistics.
-

8. Conducts weekly safety compliance audits.
 9. Enforces all safety policies and procedures.
 10. Plan and execute all work so as to comply with the stated objectives of the Safety Program.
 11. Comply with all the provisions of the Contract dealing with Safety and Incident prevention requirements.
 12. Cooperate with the Safety Director, Safety Manager and the Owner's Representatives.
 13. Authorize necessary immediate action to correct Safety deficiencies reported or observed.
- Contractor/Subcontractor Safety Coordinator – The competent Contractor Management individual designated by their companies to carry forth the safety objectives of this program and their company's program are responsible for the following:
1. Assists in the design of their company's safety process and this program.
 2. Assists in promoting continuity of the process and program.
 3. Supports implementation of the process and program.
 4. Supports training of their company's personnel regarding the contractor safety process and the requirements in this program.
 5. Continually evaluates their company's safety process.
 6. Ensure that the requirements of applicable safety training are met.
 7. Communicates the requirements of this program to their company's employees.
 8. Assists VGC in all safety activities with regards to their company.
 9. Disciplines and takes corrective actions when directed by VGC staff, or when conditions warrant such actions.
 10. The inclusion of a light duty/return to work program is required.
 11. Ensures their company's employees follow all aspects of this program.
 12. Make daily safety inspections of the job site and make necessary immediate corrective action to eliminate unsafe acts and conditions. Documentation of inspections is to be submitted weekly.
 13. Assure the OSHA 300 Injury and Illness Log Form Report is properly completed.
 14. Review incident reports and initiate immediate corrective action.
 15. Provide job foreman with appropriate material for use in conducting weekly "tool box" safety meetings
 - a. Subjects discussed shall be documented
 - b. Attendance shall be documented

- c. A review of the weekly walk-around safety inspections since last meeting shall be discussed and documented
 - d. An evaluation of any accident investigations that have taken place since the last meeting
16. Attend foreman “tool box” Safety meetings and evaluate their effectiveness
 17. Attend WEEKLY Jobsite safety committee meetings unless another representative for the subcontractor has been assigned or voted to attend.
 18. Assist in the preparation of the Incident investigation and reporting procedures.
 19. Encourage programs for recognition of individual employee’s safety efforts and their contribution toward improved work procedures.
 20. Be responsible for the control and availability of the necessary safety equipment, including employee’s personal protective equipment.
 21. Coordinate activities with those of the other contractors, the Project Safety Coordinator, and the Owners Representatives.
 22. Attend loss control meetings monthly or more frequently, as required. The Safety Representative should share their experience, questions and problems with the other Safety Representatives at those meetings.

Training Requirements

Contractors awarded projects shall attend preconstruction meetings, pre-job training/orientation regarding the content of the VGC site specific safety program.

- Prime and Subcontractors
 1. Contractual requirements of this project require each prime contractor and subcontractor to provide VGC with a copy of a written Project Specific Safety Plan. This plan must contain, at a minimum, the following requirements:
 - (a) The name of the management person who is responsible for the implementation of the plan and what roles will this person play during the project.
 - (b) How each will conduct their weekly toolbox talks.
 - (c) Provisions for safety inspections of the job site by supervision.
 - (d) Process for completing job hazard analysis (JHA) for all critical tasks and processes for developing detailed work plans/procedures for the successful accomplishment of these identified critical tasks.
 - (e) How the job trailer or gang boxes will be equipped to meet WA STATE DEPT. OF OCC. SAFETY & HEALTH standards.
 - (f) The method that will be used to ensure that all WA STATE DEPT. OF OCC. SAFETY & HEALTH required training and the VGC Safety Program requirements have been communicated to craft persons.
 - (g) Company policy on safety and substance abuse.

- (h) Incident reporting, first aid, and emergency procedures. Details for the management of work related injuries.
 - (i) Describe the company safety recognition/incentive policy (if any) that will be in effect for this project.
 - (j) How their program will mesh with the VGC Site Specific Safety Program.
 - (k) The procedure for ensuring that the previously stated information will be implemented and enforced for workers, supervision, and subcontractors.
 - (l) A list of all competent person(s) overseeing those tasks in which WA STATE DEPT. OF OCC. SAFETY & HEALTH requires such person(s) or that have been requested by VGC.
2. Subcontractors may utilize and abide by their prime contractors written Site Specific Safety Plan. However, VGC requires confirmation in writing stating from the subcontractors that they will abide by their prime's programs. In so doing this, it is critical that the primes acknowledge this understanding and ensuring VGC that their subs will abide and follow by their programs, as long as they meet or exceed VGC's Safety Program. This in no way alleviates the Subcontractors from having a "company" safety program of their own. It just applies to the "site-specific" program.

Refer to Appendix A for a checklist of Pre-Construction Requirements.

COMPETENT PERSON DESIGNATIONS

An evaluation has determined that the person named below has knowledge of the systems, equipment, conditions, and procedures, proper use, inspection, manufacturer’s recommendations and instructions, and maintenance for the activities designated below. This designation is based on the 29 CFR 1926.32(f) definition of a “Competent Person” and/or 29 CFR 1926.32(m) definition of “Qualified Person”.

Employee Information

Company Name:

Employee Name:

Competent Person Designation(s): *Check all that apply.*

Sub Part C – General Provisions

1926.20 General Safety

Sub Part D – Health and Environmental Controls

1926.53 Ionizing Radiation

1926.54 Non-Ionizing Radiation

1926.55 Gases, Vapors, Fumes, Dusts, Mists

1926.57 Ventilation

1926.59 Hazard Communication

1926.62 Lead

Sub Part E – Personal Protective Equipment

1926.101 Hearing Protection

1926.103 Respiratory Protection

Sub Part H – Materials Handling, Storage

1926.251 Rigging Equipment for Material Handling

Sub Part J – Welding and Cutting

1926.354 Welding, Cutting and Heating

Sub Part K – Electrical

1926.404 Wiring Design and Protection

Sub Part L – Scaffolding

1926.451 Scaffolding

1926.453 Aerial Lifts

Sub Part M – Fall Protection

1926.502 Fall Protection Criteria/Practices

1926.503 Training Requirements

Sub Part N – Cranes

1926.550 Cranes & Derricks

1926.552 Hoists and Elevators

Sub Part O – Motor Vehicles and Equipment

1926.601 Motor Vehicles

Heavy Equipment Operator (List Type Below):

1926.600 Powered Industrial Trucks (forklifts)

Sub Part P – Excavations

1926.651 Specific Excavation Requirements

1926.652 Requirements for Protective Systems

Sub Part Q – Concrete and Masonry Construction

1926.701 General Requirements

1926.703 Cast-in-place

1926.704 Pre-Cast

1926.706 Masonry

Sub Part R – Steel Erection

1926.752 Site Layout/Erection Plan

Sub Part S – Tunnels, Shafts, Caissons

1926.800 Underground Construction

1926.803 Compressed Air

Sub Part T – Demolition

- 1926.850 Preparatory Operations
- 1926.852 Chutes
- 1926.859 Mechanical Demolition
-

Confined Space

- 1910.146 PRCS
- EM 385-1-1 Confined Spaces
- ANSI Z117 Confined Space
-

Sub Part V – Power Transmission and Distribution

- 1926.955 Overhead Lines
- 1926.957 Construction Energized Substations

Sub Part X – Stairways and Ladders

- 1926.1053 Ladders
- 1926.1060 Training Requirements

Sub Part Z – Toxic and Hazardous Substances

- 1926.1101 Asbestos
- 1926.1101 through 1148 T/H Substances

Sub Part CC – Crane and Derricks In Construction

- 1926.1427/ HAR 12-48 Operator License
- 1926.1419(a) Qualified Signal Person
- 1926.1425(c) Qualified Rigger

Credentials Reviewed and Verified for Designation

- Union Apprenticeship
- Formal Training (describe, with year completed)
- Years of Experience (give number of years)
- Informal Training (describe)
- On-the-Job Performance (OJT/OJE)
- Other

Standards and Practices Training

By signing below, I certify that the employee listed has reviewed the following applicable regulatory standard(s) and safety and health practice(s), and understands the roles, responsibilities, and authority he/she will be expected to execute in accordance with the standard(s) and practices(s).

List standards and/or practices employee read during the designation process:

Signature/Date: Competent Person:

Signature/Date: Company President:

Competent Person – A person who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them. (29 CFR 1926.32(f)).

A Competent Person must demonstrate he/she is (a) highly knowledgeable on the subject, and (b) capable of using consistently good judgment in carrying out the appointed responsibilities in the subject area; one may be competent and not be a Competent Person. The number of Competent Persons should be sufficient for the job at hand, but not more than is necessary to cause confusion of authority and leadership.

Safety Training and Education

Scope and Application

With VGC and designated Contractor Safety personnel monitoring contractor safety, exposures and/ or hazards, involving contractors, will be minimized. The creation of a safe and healthy environment for contractors will result in fewer Incidents and injuries benefiting both contractor and VGC. This environment will further be enhanced through safety training and education. The training shall include items contained in, but not limited to, the VGC Safety Program, OSHA CFR 1926.00 Standards, and WA STATE DEPT. OF OCC. SAFETY & HEALTH 296-155 WAC.

Procedures

Each contractor is solely responsible for all federal and/or state required safety training of his or her personnel on this project. Each Contractor individual is required to be trained in the recognition of hazards on this project, this safety program, and the contractor's safety program.

All Contractors are required to conduct and document weekly safety toolbox talks. These talks shall be conducted at the site and contain safety information that will increase safety awareness on this project. *The weekly tool box talks must relate to the work that is underway or immediately upcoming.* Each individual that attends these safety talks shall sign their signature documenting attendance. A copy of the toolbox talks with signatures will be forwarded to VGC within 24 hours of conducting the meeting. Subcontractors may attend a prime contractor's toolbox talk if a separate list of signatures identifying the subcontractor personnel is maintained.

Site Orientation

Contractors are responsible to ensure their employees attend the site orientation provided by VGC. No employee will be permitted to work until such orientation has been successfully completed.

Prior to commencing work, subcontractors will be required to participate in a scheduled orientation process.

The orientation program will contain the following:

1. Incident reporting procedures
2. Medical provider information
3. PPE policy's
4. Safety aspects of the particular job/operation being done
5. Fall protection policy
6. Drug & alcohol policy and testing procedures

VGC shall relay any changes in the policies and procedures of this program to the Contractors, and their superintendent/foreman are to relay it to all of their employees.

Each contractor must ensure that they have on site at all times, a crew member who has attended CPR and First Aid training.

All delivery and maintenance personnel needing access to the site must attend the site orientation if all of the following apply:

1. IF they have to access the site to perform work.
2. IF they are entering the building, not just delivering to the dock or material hoist.
3. IF they are onsite frequently (once or more times a month).

Emergency Procedures

Scope and Application

An emergency is any situation that poses an immediate threat to life or property. This would include but not be limited to collapse of a building or a portion thereof, fire, explosion, equipment failure such as collapse of a crane, release of exposure to toxic fumes or smoke, presence of gas or other explosive fumes, flood, etc. The Director of Safety and Loss Control shall be notified of any emergency situation.

Procedures

In the event of an incident (fire, injury, etc.) requiring the assistance of outside personnel, craft persons shall contact a VGC management person immediately. If the situation requires immediate outside attention and there is no time to contact a management team member, individuals shall dial # 911. Upon calling, the person shall state their name, their contractor's name, the location of the emergency, and the type of emergency. Immediately after this emergency call is made, the person shall contact the VGC management team and their direct superiors. VGC management will ensure that VGC safety department is immediately notified.

The VGC management team will work with the Contractors in developing appropriate evacuation procedures as the job progresses. For emergencies involving building evacuation all craft persons shall follow the developed, posted evacuation routes to their designated rally point. Craft persons shall remain at the rally point until they are accounted for by their supervision and an "all clear" is given to return to the project. Contractors are required to provide a designated rally point for their employees to VGC that is to include the name(s) of their employees which will account for their personnel and inform VGC of any person(s) missing.

In the occurrence of an emergency, the contractor shall ensure that all proper Incident reports are completed and distributed in the required time.

For Incident involving personal injury, the contractor, in addition to completing the project Incident reports, shall also complete an Employer's First Report of Injury/Illness and forward it to the designated insurance carrier of VGC.

A list of "key" onsite and home office personnel (with phone numbers) shall be developed by each Contractor and submitted to VGC management team prior to any work commencing, in order to assist communication in case of a project emergency.

The Project Manager or designated VGC management team member in off-hours will take charge in the event of a major catastrophe. One or all steps are to be followed:

Take whatever actions are needed to make people on the project safe.

1. Call for assistance from outside, **911**.
2. Stop work.
3. If necessary, call for site evacuation with role call and clear site access roads.
4. Issue instructions to all supervisors and employees.
5. Set up security control at the emergency area.
6. Refer all media requests to the VGC.

7. In the event of a major catastrophe outside working hours on Saturday or Sunday, etc., the designated management on site or security personnel will be provided with an emergency call list to summon contractor personnel to the site to take action.

Refer to emergency response flowcharts that specified on site specific safety plans for subcontractor direction to emergency response.

INCIDENT REPORTING

Scope and Application

The following reporting procedures are to be followed in order to ensure proper safety reporting procedures by all affected persons on this project. All incidents involving physical harm, property damage, employee misconduct, or near misses are to be reported to VGC project supervision.

Responsibilities

All Incidents resulting in injuries other than first aid are to be reported at the time of occurrence to the project superintendent or his designee. The contractor in charge of the person(s) involved will complete an Incident investigation form and request those craft person involved to complete a written statement (please see attached forms) whenever any such events take place. The contractor shall then immediately give a copy to project management for review and signature. A more detailed investigation may be required by VGC management and the Contractor shall comply with their directions. Please refer to site specific safety plans and “grab and go” packet instructions (located on project sites) for additional and more detailed instructions.

Procedures

VGC

Incident reporting procedures

1. Near Miss/ Injury free Event

It is the responsibility of the subcontractor to complete the investigation using the VGC Incident investigation report. This report WILL include recommendations / implementation of corrective actions. The report will be submitted to the VGC project management team within 24 hours.

2. First Aid Event

It is the responsibility of each contractor safety representative to collect and log the contractors' Incident reports and recommend corrective action. The Incident logs and work hour statistics will be sent to the VGC Project Superintendent by the 2nd of EACH month.

3. Medical Treatment Event

If the injury is considered an emergency, **911** should be called first. It is the responsibility of each subcontractor safety representative to **immediately** notify the VGC Superintendent of an event requiring medical treatment.

4. Serious Injury Event

It is the responsibility of the subcontractor to immediately notify the VGC Project Superintendent of a serious event requiring medical treatment. The Project Superintendent will oversee and help facilitate first aid, ambulance access, etc.. Refer ALL media inquiries to the VGC Management. The Director of Safety shall be notified.

5. Fatality

It is the responsibility of the subcontractor to notify the VGC Superintendent who will restrict access to the area and preserve the scene. The VGC Superintendent will immediately notify the VGC Safety Director who in turn will notify the appropriate insurance carriers of an event resulting in a fatality. VGC employees may refer to the "Crisis Management Program" for additional information.

6. Property Damage

It is the responsibility of the subcontractor to notify the VGC Project Superintendent of the incident and assist in the assessment of damages. The VGC Safety Director will also be notified.

7. General Liability Accident

It is the responsibility of the subcontractor, to immediately notify the VGC Project Superintendent of an event occurring with the general public. The prime contractor involved will complete an incident report and send to the VGC Project Superintendent. The VGC Safety Director shall be notified.

8. Unsafe Condition

Employees who observe any unsafe condition on site shall immediately report the unsafe condition to their supervisor or a VGC supervisor. Any supervisor VGC or subcontractor who receives a report of an unsafe condition or action shall take immediate prompt action to correct the condition or action.

Incident Investigation Procedures

All incidents, regardless of severity will be investigated and appropriate corrective actions will be put in place. The information collected on these forms will be presented to VGC. For all OSHA recordable incidents there will be an Incident Review Meeting, which will focus on the facts surrounding the Incident, and the corrective actions developed by the contractor that will be put in place to prevent similar occurrences. The Project Management Team will be the Incident Investigation Team with the aid of VGC Corporate Safety.

INCIDENT REVIEW PROCESS

Scope and Application

The Incident review process and Incident review meeting serve two basic purposes: first acting as an organized and documented process for the Contractor to present to the owner the facts surrounding an Incident. Second, as a process for the corrective actions developed by the Contractor to prevent a similar type of Incident. This review applies for all Lost Time Incidents and OSHA Recordable Incidents involving a Contractor or other project employee.

The VGC management member directly responsible for the area where the Incident took place is responsible for scheduling and facilitating Incident review meetings with assistance from the VGC safety department.

The Contractor is responsible for promptly investigating Incidents, identifying causal factors, and developing corrective action.

Procedures

1. VGC requires the Contractors to immediately report the above-defined Incidents.
2. Upon the occurrence of a defined Incident, the contractor will then be responsible for completing the above-defined Incident forms.
3. The contractor shall complete these forms and return them to VGC within 24 hours of the Incident.
4. The VGC management member directly responsible for the area where the Incident took place will then schedule an Incident review meeting within 2 days of the Incident. Attendees for the meeting may include: *Director of Safety, the Safety Manager, The Contractor supervision, the Insurance safety representative / the Contractor Safety coordinator, Project Manager, Project Superintendent, Foreman, Affected Employees, Witnesses, and designated VGC management team members including the one directly responsible for the area.*
5. The VGC management member directly responsible for the area where the Incident took place is then responsible for documenting a summary of the meeting and distributing it to all Contractors and VGC team members in order to prevent further occurrences. The names of the individuals involved shall be kept out in order to protect their privacy.

NON-COMPLIANCE TO SAFETY POLICIES

Scope and Application

In an effort to ensure compliance to this program and all other established WA STATE DEPT. OF OCC. SAFETY & HEALTH standards, VGC hereby implements this procedure of non-compliance to all Contractors working on VGC projects. This is established to promote safety and eliminate offenders and repeat offenders, and may lead up to contract termination with a Contractor. This program may be used or may be superseded with more severe discipline based on the degree of the infraction(s). In any case VGC has sole authority in what type of discipline is issued up to and including removal from the project.

1. **1st offence** give a verbal warning (written record kept)
2. **2nd offence** written warning issued and a copy of the written warning is sent to the offending Workers Company's office. With a statement to the effect that if this happens again the worker will be removed from the project and could lead to a termination of the contract.
3. **3rd offence** the worker may be suspended or terminated from the project.
4. **If repeat occurrences with other crewmembers are found** the supervisor of said offenders shall be subject to removal from the project.

Immediate termination may result when the nature of the violation or when repeated violations make retention of the violator unacceptable.

Willful disregard for serious safety hazards which pose immediate danger to life and health will result in immediate termination of individuals directly responsible. Examples: fall protection, lockout/tag out, confined space, trenching. Violations involving these types of work could result in serious injury or death to one or more employees.

If at any time you are unsure of safety conditions or procedures, stop immediately and contact your direct supervisor.

Visitors

Scope and Application

All visitors shall be required to report to the project field office upon entering the project site.

Requests for tours of the project site must be made 24 hours in advance unless special circumstances apply. Tours shall be carefully screened and limited in frequency and numbers of people. Tours of the site shall be approved by the VGC Project Manager and Superintendent and shall be conducted during non-working hours as much as possible.

Procedures

VGC shall establish the time and travel route for any tour. Areas, which may present hazards to the tour group, shall be prohibited. The tour's travel route shall be cleared of any tripping hazards, cleaned, and properly protected to avoid potential personal injury. A designated member of the VGC management team shall guide the approved tours.

All members of a tour group shall sign a release prior to touring the site. If minors are present, the parents or legal guardian must sign the release. Additionally minors must have approval from the project safety coordinator to attend a tour.

Any project site visitors who are permitted access to the site but are not on official on-site business shall sign the release before being authorized to proceed beyond the project office.

All visitors must wear long pants, shirts with sleeves over the shoulder, hard hats, safety glasses, and hard-soled work boots when on site. No penny loafers, dress shoes, skirts, dresses, etc. shall be permitted.

SECTION B

PROTECTION AND GENERAL SITE ISSUES

CORD MANAGEMENT

Scope and Application

Use of electricity on the jobsite poses serious hazards, with employees potentially being exposed to such dangers as electric shock, electrocution, fires and explosions. Recognizing the importance and widespread use of the National Electrical Code (NEC) in promoting electrical safety, OSHA has incorporated those parts of the NEC that relate to employee safety on construction sites directly into its regulations covering this area.

In addition to the hazards associated with electricity, electrical cords can pose a unique and potentially dangerous condition when not properly stored or laid out while in use. Keeping the work area tidy and free of slip or trip hazards is a requirement of all cords on this project.

General Requirements

To keep the area free of trip and slip hazards, the following guidelines must be followed:

- At no time shall cords be strung across exit ways, hallways, or high traffic areas creating a tripping hazard, or in front of emergency equipment.
- **All extension cords will be run overhead!**
- Keep extension cords out of wet conditions at all times.
- Use cones for short duration use of extension cords (5 minutes or less).
- Support all cords that run through floors or ceilings with the appropriate means.
- All cords must be stored and put away after use. (i.e. not coiled up on the floor or ground).
- Whenever an extension cord is plugged into an existing building outlet for construction work, a GFCI is required between the extension cord and the tool, (see below).
- All cords must be inspected before each use.
- No “Daisy-Chaining” of cords is allowed. (Plugging an extension cord into another extension cord for additional length.)
- Cords must be inspected monthly and the following color scheme is used to identify monthly inspections:

○ January & July	Red
○ February & August	White
○ March & September	Blue
○ April & October	Green
○ May & November	Orange
○ June & December	Yellow

If the above listed safety items cannot be met, temp wiring must be installed to facilitate proper cord management.

Ground Fault Circuit Interrupters

All 120 volts single-phase 15 and 20 ampere receptacle outlets which are not a part of the permanent wiring of the structure and which are in use by employees shall have approved GFCI's.

A program of testing and documentation of testing for the GFCI system shall be implemented. Upon initial completion or extension of the temporary power system, the installing Contractor shall test each power receptacle for proper polarity and GFCI operation using a simple,

commercially available tester. The results of this commissioning shall be documented and copies given to VGC. Afterward, the same Contractor shall conduct routine weekly tests.

All projects are to be 100% GFCI compliant. An assured grounding program may be used only in addition to the GFCI Program.

Extension Cords

Only round, heavy duty (type S, ST, SO, ST) are acceptable on VGC projects. Cords shall be maintained in their original designed configuration. Any cord which is damaged or has a grounding pin removed shall be positively removed from service by cutting off the male plug by the Contractor. The Contractor shall remove cords that have been spliced or repaired from project site.

There will be no taping of cords in any manner. All extension cord shall be plugged into job-site power that has proper over current and ground fault protection.

Temporary Wiring

The Electrical Subcontractor is required to furnish, install and maintain a temporary power system. The temporary work will be installed in such a manner as not to interfere with the permanent construction. Local power centers will be maintained to prevent the accumulation of cluttered branch circuitry.

Temporary spider boxes shall be provided on each level and fed via an existing slab conduit and junction box system.

All temporary wiring supplying the spider boxes will be suspended and maintained at least 7 feet above finished floors or as required to clear and pass through permanent ceiling levels. All power cords feeding all boxes are to be supported above ceilings and under no circumstances are cables to be lying on the floors. Cord routing and drop locations shall be adjusted as required to accommodate the ongoing installation of overhead M&E, wall framing, doorframes, drywall, etc...

The Electrical Subcontractor will provide a cord management system for tool cords plugged into spider boxes. Provided will be "Caddy CAT32" hooks (or similar) supported from the deck by hanger wires approximately 6-7 feet off the floors. Hooks shall start at each spider box and lead into and through all corridors at a spacing of 10 feet. The system will be maintained on a daily basis as required.

CRANES AND DERRICKS

Scope and Application

Equipment shall comply with the American National Standard B30 Safety Codes for Cranes, Hoists and Derricks and to all applicable WAC codes.

Rated Load capacities, including wind load ratings, and recommended operating speeds, special hazard warnings or instructions shall be conspicuously posted on all equipment. Instructions or warnings shall be visible to the operator. Any crane on site shall not exceed 90% of its rated lifting capacity. Man baskets should be used only as a last resort.

ALL critical lifts must be planned with copies sent to the VGC Project Superintendent and a Pre-Plan meeting held within 24 hours of the lift.

The Contractors shall provide a current annual inspection certificate of the crane to VGC, as well the operator must provide a valid NCCCO crane operator certification. This includes proof of annual inspection before crane is put into service. Copies are to be sent to the VGC Project Superintendent to be maintained in the contractor file.

Wire rope, its attachments, fittings, sheaves, and safety devices shall be inspected weekly with a copy of the record of the inspection, including a maintenance lubrication check, submitted to the VGC Superintendent. A Contractor designated Competent Person other than the person who installed, reeved, and attached the wire rope shall make the inspection.

Wedge sockets and fittings shall be the proper size to match the wire rope and shall move to wedge and hold the wire rope under load construction. The dead end shall be terminated according to ANSI B30.5 and shall not be attached in any manner to the live side of the load line.

All replacement parts shall be as specified by the manufacturer. An antitwo-block device or warning device is required on all cranes except pile driving equipment.

It is required that all Contractor Superintendents have a current copy of:

1. Mobile Crane Operator's Manual
2. Rigging Manual

Both are available from: The Construction Safety Association
74 Victoria Street
Toronto, Canada M5C2A5
416-674-2726

ALL CRANES used on the project must meet the following minimum criteria:

- No crane shall be put into use until an annual crane inspection and supplemental repair reports are submitted to the VGC indicating the crane meets minimum safety criteria and is acceptable for use.
- A daily and monthly inspection shall be performed while the cranes are in use on the Project. These daily and monthly forms are to be maintained on file by the Contractor, and made available to the VGC upon request for review and verification.
- No lift shall be made that exceeds 90 percent of the manufacturer's rated capacity of the crane, as indicated on the crane's load chart, will be made.

- If the crane manufacturer's rated lifting chart for the specific crane configuration is not available on the crane; the crane must be immediately taken out of service.
- All crane operators must complete a minimum of four (4) hours Crane Safety Training class before operating a crane on the Project, and possess a valid NCCCO crane operator certification. This training class must be retaken every other year, with certification provided on request by VGC Management.
- Any lift exceeding 75 percent of the cranes rated capacity or multiple lifts shall be considered as critical lift, and a pre-lift meeting shall be held in the field with the crew involved in making the lift. The following minimum items should be reviewed:
 - Calculation of gross weight of load performed
 - Correct crane lifting capacity chart reviewed
 - Full radius of crane movement calculated and confirmed in field with tape measure
 - Footing for crane confirmed to be sound and level
 - Minimum clearances from electric lines
 - Wind speed checked and reviewed
 - Confirmation lift is in conformance of approved erection plan (if applicable)
- When two cranes are working in the same area, a procedure shall be submitted explaining method of coordination to be used between cranes to ensure the possibility of a collision is prevented.
- Mobile cranes are only to be used with outriggers fully extended and tire off the ground unless manufacturer's recommendations allow otherwise.
- If supporting ground for crane is soft, the lift shall not be made until firm bearing is provided including crane mats if necessary. No lift shall be made if the crane is not on level ground.
- If the full range of motion of the lift is not visible to the operator, signalmen or a radio communicator must be provided.
- For multiple crane lifts, reduce the cranes rated capacity by 25 percent.
- All cranes shall be equipped with anti-two blocking devices except those directly involved in pile driving operations

DEMOLITION**Scope and Application**

It is the intent of VGC to monitor and review the safety procedures during demolition processes to ensure the safety of all Contractors. The Contractor Superintendent will be responsible for providing direction and guidance to all of its employees during the demolition operation. It is the sole responsibility of the Contractor or Sub Contractor who conducts these processes to utilize and enforce the following procedures and meet all current federal, state, and/or local relevant to the operation(s). The Contractor shall be responsible for submitting a Job hazard analysis/Job Hazard Analysis and work procedures plan at a minimum of seven days prior to the start of demolition for each phase.

Procedures

1. VGC contractors will be required to wear durable gloves, eye protection, and long sleeved shirts in addition to their standard Personal Protective Equipment when performing selective demolition operations. The contractors are solely responsible for this and any other required personal protective equipment
2. Prior to beginning demolition operations, an engineering survey will be made by a qualified person designated by the Contractor. This survey shall determine the condition of the framing, floors, and walls, and will also determine the possibility of an unplanned collapse of any part of this structure. Adjacent structures will be checked for structural integrity. Written evidence of the results of this survey is to be given to VGC. In addition, the contractor shall supply the job hazard analysis of the demolition operation. .
3. Prior to beginning demolition operations, VGC will obtain from the owner a site survey identifying the locations of asbestos- and lead-containing materials. If the owner is unable to provide this information, the Contractor shall employ a testing agency that can identify and/or verify areas suspected of containing these materials prior to their disturbance during the demolition operation at their own cost.
4. All electric, gas, water, steam, sewer, and other service lines shall be shut off, capped, or otherwise controlled outside the building line before demolition work is started. Any utility company whose services are effected will be notified in advance by the contractor.
5. If electric, gas, water, steam, sewer, or other utilities are necessary during demolition, their lines shall be temporarily relocated and protected.
6. Before demolition begins, the building will be checked to determine whether any hazardous chemicals, gases, explosives, flammable materials, or similarly dangerous substances have been used in pipes, tanks, or other equipment on the property. If found shall be eliminated before demolition is started. Any hazardous glass fragments shall be removed.
7. Guardrails and covers shall protect all floor and wall openings, which pose a fall exposure.
8. If debris is dropped through holes in the floor without the use of chutes, the area onto which the material is dropped will be completely enclosed with barricades not less than 42 inches high and not less than 6 feet back from the project openings. Signs shall be posted at each level, warning of the hazard of falling materials. Removal of the debris from the lower area shall not be permitted until debris handling from above has ended.

9. Floor openings not used, as material drops will be covered with material that can withstand the weight of any potential load. The floor opening cover will be secured to prevent it from being incidentally moved.
10. Demolition of exterior wall construction and floor construction will begin at the top of the structure and proceed downward, except for the cutting of holes in floors or walls for chutes and material drops, preparation of storage space, and similar preparatory work. Each story of exterior wall and floor construction will be removed and dropped into the storage space prior to removing exterior walls and floor construction in the story below.
11. Entrances to multi-story structures being demolished shall be completely protected by sidewalk sheds, canopies, or both. Protection shall be provided from the face of the building for a minimum of 8 feet. Canopies shall be at least 2 feet wider (1 foot each side) than the opening or entrance being protected, and will be capable of sustaining a load of 150 pounds per square foot.

Chutes

Materials, chutes, or sections at an angle of more than 45 degrees from the horizontal will be entirely enclosed, except for openings equipped with closures at or about floor level where materials are inserted. The openings will not exceed 48 inches in height as measured along the wall of the chute. At all stories below the top floor, openings not being used will be kept closed or covered.

Each chute shall have a substantial gate at or near the discharge end. A Contractor designated Competent Person shall control the operation of the gate and the backing and loading of trucks.

When operations are not in progress, the area surrounding the discharge end of a chute shall be securely closed off.

A guardrail will protect any chute opening into which debris is dumped. Any space between the chute and the openings in the floor through which the chute passes will be covered.

Where material is dumped from mechanical equipment or wheelbarrows, a securely attached toe-board or bumper not less than 4 inches thick and 6 inches in height will be provided at each chute opening.

Removal of Materials through Floor Openings

There is to be no removal of materials through floor openings unless approved by the VGC Superintendent.

Manual Removal of Floors

Openings cut in floors will extend the full span of the arch between supports. Before demolishing a floor arch, debris and other material will be removed from the arch and other adjacent floor area. Planks not less than 2 inches by 10 inches in cross section, full size undressed, will be used to stand on while breaking down floor arches between beams. The planks will be placed so that a safe support is provided for the workers if the arch between the beams collapses. The open space between planks shall not exceed 16 inches.

Safe walkways meeting WA STATE DEPT. OF OCC. SAFETY & HEALTH standards, not less than 18 inches wide, formed of planks, not less than 2 inches thick, if wood, and of equivalent strength, if metal, will be provided so that workers can reach any point without walking on exposed beams.

Stringers of ample strength will be installed to support the flooring planks and the ends of such stringers will be supported by floor beams or girders, and not by floor arches alone.

Planks will be laid together over solid bearings with the ends overlapping at least 1 foot.

Demolition of floor arches will not be started until the arches and surrounding floor area for a distance of 20 feet have been cleared of debris and any other unnecessary materials.

Removal of Material with Equipment

Mechanical equipment will not be used on floors or working surfaces unless the floor or surface is strong enough to support the imposed load.

Storage of Materials

No demolition materials are to be stored inside the building without the permission of VGC Superintendent and meeting WA STATE DEPT. OF OCC. SAFETY & HEALTH standards.

Removal of Steel Construction

Steel construction shall be dismantled column length by column length and tier by tier. If cutting and burning is to be done on steel then the steel must be checked for lead based paint. If lead is found in the paint that the proper precautions must be taken to prevent worker exposure. Also a fire watch must be maintained for a minimum of 30 minutes after all cutting and burning had been completed.

Structural members being dismembered are not to be overstressed.

Demolition using Mechanical Equipment

When demolition balls and clam buckets are used for demolition, no craft personnel will be allowed to enter an area where they can be adversely affected by this operation. Only those contractors necessary for the performance of the operations will be permitted in this area at any other time.

The weight of the demolition ball shall not exceed 50 percent of the crane's rated load. This is based on the length of the boom and the maximum angle of operation at which the ball will be used; or it will not exceed 25 percent of the nominal breaking strength of the line by which it is suspended, whichever is less.

The ball will be attached to the load line with a swivel-type connection to prevent twisting of the loadline, and attached so that the weight cannot become incidentally disconnected.

During demolition, continuing inspections by a Contractor assigned Competent Person shall be made as the work progresses so that hazards that could result from weakened or deteriorated floors, or walls, or loosened material are detected. No contractor employee will be allowed to work where such hazards exist until these hazards are corrected by shoring, bracing, or other effective means.

Training

Contractors are responsible for training their employees in all applicable demolition operations and all applicable Federal, State, and Local laws, codes, and standards.

ELECTRICAL**Scope and Application**

Use of electricity on the jobsite poses serious hazards, with employees potentially being exposed to such dangers as electric shock, electrocution, fires and explosions. Recognizing the importance and widespread use of the National Electrical Code (NEC) in promoting electrical safety, OSHA has incorporated those parts of the NEC that relate to employee safety on construction sites directly into its regulations covering this area.

The WA STATE DEPT. OF OCC. SAFETY & HEALTH regulations are divided into four parts:

- Installation safety requirements, (rules concerning electric equipment and installations used to provide electric power and light on job sites)
- Safety-related work practices (hazards arising from use of electricity at job sites and hazards arising from Incidental contact, direct or indirect, by employees with all energized lines, above or below ground, passing through or near the job-site)
- Safety-related maintenance and environmental considerations
- Safety requirements for special equipment

Contractors are required to follow all of the parts of the most current standards.

Ground Fault Circuit Interrupters

All 120 volts single-phase 15 and 20 ampere receptacle outlets which are not a part of the permanent wiring of the structure and which are in use by employees shall have approved GFCI's.

A program of testing and documentation of testing for the GFCI system shall be implemented. Upon initial completion or extension of the temporary power system, the installing Contractor shall test each power receptacle for proper polarity and GFCI operation using a simple, commercially available tester. The results of this commissioning shall be documented and copies given to VGC. Afterward, the same Contractor shall conduct routine weekly tests.

All projects are to be 100% GFCI compliant. An assured grounding program may be used only in addition to the GFCI Program.

Electric Tools

All portable electric tools such as saws, hammers, drills, vibrators and float machines, shall bear the label of a nationally Certified Testing Agency, such as Underwriters Laboratories (UL), CSA, ETL, or the like.

Single-phase motors shall have three-wire cable; two for current to motor and one (insulation GREEN) connected from motor casing in a suitable ground. Three-pronged plugs shall be used on extension cords, which carry a third or ground wire.

Three-phase current requires fourth wire for grounding. This ground is connected to outlet of temporary wiring system which itself shall be grounded to a water pipe or copper rod driven into the earth.

Certain small electric tools may only provide a two-pronged connector as supplied from the factory. These are categorized as "double insulated." However, double insulated tools shall be identified by the manufacturer's rating label attached to the tool, not simply because only two prongs are present.

All tools shall be maintained in their original condition. This includes damage to the case or housings of a tool, condition of the power cord, etc. One vital item is that the third (grounding) pin on a power plug shall remain in place. If a tool is damaged severely or has the grounding pin removed from its plug, physical removal of the power plug shall be taken by the Contractor.

Electric Equipment

Heavy stationary electric equipment with dead metal parts like housings, boxes and hoist frames shall be grounded.

Extension Cords

Only round, heavy duty (type S, ST, SO, STD) are acceptable on VGC projects. Cords shall be maintained in their original designed configuration. Any cord which is damaged or has a grounding pin removed shall be positively removed from service by cutting off the male plug by the Contractor. The Contractor shall remove cords that have been spliced or repaired from project site.

There will be no taping of cords in any manner. The gauge of wire of the cord shall be sized for the designated use, but in no case less than 16 gauge. For an overall length over 100 feet, one size larger shall be used. All extension cord shall be plugged into job-site power that has proper over current and ground fault protection.

Whenever an extension cord is plugged into an existing building outlet for construction work, a GFCI is required between the extension cord and the tool.

All extension cords shall be kept out of walkways and out of wet conditions on the floor. Temporary wiring shall be maintained at least 6'6" above the ground or floor.

Temporary Wiring & Lighting

Temporary lighting shall not be put on the same circuit as temporary receptacles. A separate lighting circuit for stairways and exit areas is required.

The minimum illumination level shall be 10 in foot-candles for all work areas and 5 in foot-candles for travel areas.

The Contractor(s) installing all wiring and lighting shall be responsible for the maintenance of such materials.

Temporary power/ lighting, will have a "planned" location through-out the project and throughout each floor plate, and placed off of connections located in the ceiling space, which will avoid trip hazards. The following is a summary of this plan for each floor plate:

1. Ten-Power Boxes- A minimum of 6 ten power boxes will be located at selected locations on each floor. These boxes will hang from the ceiling space, power cords will be connected, and distribution will allow for close proximity of use.
2. Temp. Lighting: will consist of Metal Halide Lights spacing based upon 5 foot per candlelight. See Attached floor plan showing layout.

Lockout/Tag out

All sources of potential hazardous energy including but not limited to; valves, switches, breakers, and all other mechanical or electrical equipment must be properly locked and tagged out of service to prevent the system from operating while installation, maintenance or repair work is in progress.

The Contractor Safety Coordinator, Project Manager, and Superintendent shall survey field operations to determine if workers are required to perform tasks that may expose them to hazards associated with energized equipment.

The Contractor Safety Coordinator will establish an energy control and training program that includes written procedures for the control of potentially hazardous energy when employees are engaged in maintenance and/or servicing activities and present it to VGC. The Contractor's procedures must clearly outline the scope, purpose, authorization, rules, and techniques to be used for the control of hazardous energy, and the methods of compliance.

The Contractor must ensure that before any of their employees performs any servicing or maintenance on a machine or equipment, the machine or equipment is isolated and rendered inoperative.

The Contractor Safety Coordinator will ensure that employee training has been accomplished, written certification will show employee names and dates of training.

Lockout/Tagout procedures for all equipment shall be locked out or tagged out to protect against incidental or inadvertent operation when such operation could cause injury to personnel. All individuals who are working in or around the hazardous energy must put on their own lockout device. At no time will anyone remove someone else's lockout device without contacting VGC's Project Superintendent. The VGC project superintendent will ensure that all work has been completed and the system is safe to energize. The Contractor completing the work, which requires lockout/tagout, is solely responsible to notify all affected employees, implement these procedures, along with their own company procedures, and to get approval from VGC prior to the operation commencing.

Working Around Overhead Electrical

It shall be the responsibility of the contractor performing the work to have adjacent overhead electrical lines deenergized, blanketed, or by other means protected from contact by equipment or personnel.

No crane, forklift, man lift, any equipment or any part of the load and rigging to any equipment shall be allowed to come within 10 feet of a power line that is 50,000 volts or less.

Exposed Underground Electrical Wiring

No exposed or unearthed underground electrical wiring shall be approached within 30 feet except to ensure (test) that the owning utility company has shut down power. Once verification exists that power has been disconnected, work may resume.

ELECTRIC WELDING**Scope and Application**

There are a number of hazards connected with electric or arc welding, but they can be safely handled when ordinary precautions are taken.

General Requirements

1. The frame of a portable welding machine operating from an electric power circuit shall be grounded. Switching equipment for shutting down the welding machine shall be provided on or near the welding machine.
2. The electrode holder and connecting cable shall be fully insulated. Light holders shall not be used for heavy work, and welders shall avoid standing on damp or wet surfaces while welding. All equipment shall be checked regularly to make certain that electrical connections and insulation on the holders and cable are in good order. Cables shall be kept dry and free from oil and grease. They shall be arranged in such a manner that they do not lie in water, in oil, in ditches, or on bottoms of tanks. A certified electrician shall do electrical repairs and maintenance work on welding machines. Electric stubs shall be placed in containers provided by the Contractor for this purpose.
3. Where welding or cutting has to be done in the vicinity of combustible material, special precautions shall be taken to make certain that sparks do not reach such material and start a fire. If the work cannot be moved, exposed combustible materials shall be covered with fire retardant material or sheet metal during welding operations. Tanks, drums, and pipe lines which have contained flammable liquids shall be cleansed of all solid or liquid flammable material and purged of all flammable gases and vapors before welding operations are started.
4. Wood floors shall be swept clear before welding or cutting operations are started.
5. Portable hand-operated 20# ABC fire extinguishers shall be kept close at all times.
6. Leads shall not be wrapped around any gas cylinders or fuel tanks at any time.
7. Welders shall be taught to keep welding cables in an orderly fashion and away from places where it could cause a stumbling hazard or become damaged. Where possible, it shall be strung overhead high enough to permit free passage of vehicles and persons.
8. The Contractor shall barricade or isolate the area below any welding operation to prevent other trades or the public from being exposed from falling spark or slag. Proper signage shall also be put into use. The Contractor shall provide a fire watch throughout the operation and at least one ½ hour after the operation is completed.
9. The Contractor shall employ the use of a "welding screen" or "welding shield" at all times when performing any amount or quantity of welding. Such screen shall be prior approved by the Site Safety Manager.
10. Fume extractors (aka. Smoke Eaters) or approved ventilation shall be supplied and used by the performing contractor when any significant amount of welding or cutting is done indoors or in a confined area.

EXCAVATION AND TRENCHING

Scope and Application

This section provides requirements to ensure the safety of all workers who are required to work in and around excavations and to provide guidelines for locating existing underground utilities.

The Contractor's appointed Competent Person (Competent Person means one who is capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to Contractors, and who has the authorization to take prompt corrective measures) in charge of the excavation work ensures that:

- All preparatory work is conducted as described in this program before any excavation work begins.
- Excavation and trenching work is performed within the guidelines of this program.
- Soil Classification is performed before Contractors are allowed in the excavation.

Soil Classification

Soil classification means a method of categorizing soils and/or rock into categories.

- **Type A Soil**

Type A soil means cohesive soils with an unconfined compressive strength of 1.5 tons per square foot or greater.

Examples of cohesive soils are clay, silty clay, sandy clay, clay loam, and, in some cases, silty clay loam and sandy clay loam. Cemented soils such as caliche and hardpan are also considered Type A.

However, soil cannot be classified as Type A if the soil is fissured, or subject to vibration from heavy traffic, pile driving or similar effects or the soil has been previously disturbed.

- **Type B Soil**

Type B soil means cohesive soils with an unconfined compressive strength greater than 0.5 but less than 1.5 tons per square foot. Examples of Type B soils are: granular cohesion less soils including angular gravel (similar to crushed rock), silt, silt loam, sandy loam and, in some cases, silty clay loam and sandy clay loam. Included also are previously disturbed soils except those which would otherwise be classed as Type C soil and soil that meets the unconfined compressive strength or cementation requirements for Type A, but is fissured or subject to vibration or dry rock that is not stable.

- **Type C Soil**

Type C soil means soil with an unconfined compressive strength of 0.5 tons per square foot or less.

Examples of Type C soil are: granular soils including gravel, sand, and loamy sand, or submerged soil or rock and previously disturbed soils.

Unclassified soil shall be sloped 1½:1 (horizontal to vertical) or shored when excavation exceeds 4 feet in depth.

Surface Encumbrances

All surface encumbrances that are located so as to create a hazard to Contractors shall be removed or supported, as necessary, to safeguard workers in the excavation.

Underground Installations

- Prior to any type of digging each Contractor is solely responsible to complete the State One Call. **If there is no State action program in place, the subcontractor is solely responsible to notify the utility companies at their own expense.** No work is to proceed without the proper utility company marking out the area(s) of their underground material(s). Any damage to any utility is to be reported immediately to VGC.
- When excavation operations approach the estimated location of underground installations, the exact location of the installations shall be determined by hand digging only.
- While the excavation is open, underground installations shall be protected, supported or removed as necessary to safeguard employees.

Requirements

The Contractor's Competent Person responsible for the excavation shall be on site during all operations relating to the open excavation.

The Competent Person shall determine soil classification. The competent person shall reevaluate soil classification as site conditions changes.

For excavation a Registered Professional Engineer hired by the Contractor shall design over 20 feet deep, all shoring, sloping or benching. All designs shall be submitted to VGC and filed at the Contractor's field office.

All excavated materials and stockpiled materials shall be placed a minimum of 2 feet from the edge of the excavation. Loose soil or rocks shall be removed from the sides of excavation walls.

Excavations 4 feet in depth or greater shall have a stairway, ladder, ramp, or other safe means of egress within 25 feet of any employee in the excavation.

All excavations shall be inspected by the Contractor's designated Competent Person before entry, and:

- At the start of each shift
- After heavy rains
- After freezing and/or thawing temperatures occur
- After any condition that can change the integrity of the soil

For all excavations 4 feet in depth or greater where hazardous material may exist, the atmosphere in the excavation shall be tested prior to entry and periodically throughout the operation as determined by the Competent Person.

The Competent Person responsible for the crew working in the excavation shall inspect the excavation throughout the work period and stop operations when unsafe conditions exist.

The number of workers in the excavation shall be limited to the number needed to perform the work.

Water shall not be allowed to accumulate in excavations at any time. Pumps, drains, or other means shall be used to remove water constantly. Workers will not be permitted to enter a trench with standing water.

Stability of adjacent structures shall be evaluated before starting an excavation and monitored daily thereafter by the Contractor.

Emergency rescue equipment shall be readily available by the Contractor.

No employee shall be permitted underneath loads handled by lifting or excavating equipment.

Proper handrails and toe boards shall be erected and maintained at the top of the excavation when required for fall protection. EFFECTS OF EXCAVATING AND TRENCHING ON ADJOINING PROPERTY

Scope and Application

Removal of rock or concrete by blasting and pile driving causes vibrations which may be sufficient to damage structures nearby, as may the removal of earth which results in the movement of bracing systems and underpinning, or soil consolidation resulting from lowering of water table, etc.

A review of the sub-surface conditions (determined from on-site borings) and the plans of existing buildings (where available) are necessary to evaluate lateral and vertical integrity. An inspection to evaluate the condition of adjoining/existing shall be completed by the Contractor prior to (and possibly after ceasing) operations.

The following shall influence the degree of inspection:

- ◆ The distance of the structures from the hazard.
- ◆ The severity of the hazard.
- ◆ The general condition of the structures.
- ◆ Requirements by local laws, contract and/or liability.

There are four methods of inspection:

1. Casual – A visual inspection of the surrounding structures (limited to those portions readily available from the exterior) made by the Contractor Job Superintendent. This type of inspection is primarily to determine if a more in depth survey is needed.
2. Detailed – Representatives of VGC, the appropriate sub-Contractor, and the neighboring property owner(s) noting the deficiencies informally.
3. Photographic Survey – Photographs or videos of the interior or exterior of the structure and adjoining properties shall be taken by a commercial photographer or video service. All photographs or videos shall be dated and made part of the permanent job records.
4. A Complete Engineering Survey – A consultant hired to completely detail the condition of the structures.

Where job operations such as pile driving and blasting may cause vibrations affecting the nearby structures it is required that vibration measurements be made by the Contractor, making data available to VGC. This will enable the job to monitor and set up procedures to keep the energy ratio of the vibrations at a safe level.

Where settlement of the nearby street, utilities and structures may occur because of excavation and foundation work, the streets, utilities and structures shall be regularly checked for vertical and horizontal movement and a log maintained by the Contractor. Any movement shall be investigated immediately.

All inspection reports shall be copied to VGC.

FALL PROTECTION

Scope and Application

All Contractors are required to correctly use safety harnesses when working on swing scaffolds or hydraulic boom lifts when working above the protection system at floor openings, unprotected perimeters, and whenever a fall of more than 4 feet could occur.

Lifelines shall be a minimum of 3/4" manila or equivalent secured above the point of operation to an anchorage or structural member capable of supporting a minimum of 5,000 pounds.

Lanyards shall be a minimum of 5/8" nylon or equivalent with a shock absorbing system and a maximum length to provide for a fall of no longer than 6 feet. The rope shall have a nominal breaking strength of 5,000 pounds.

There will be a 4'-0" positive fall protection rule on all projects. This means the use of guard rail, safety harness with a personal fall protection device, or safety net whenever **ANYONE** is working over 4'-0" except as noted below.

Roofing and leading edge work may require that fall protection be provided by means of a trained full time safety monitor if other positive means are deemed to be infeasible by the employer and agreed upon by VGC project management. These are the only cases whereby a safety monitor system meeting or exceeding Federal OSHA/WA STATE DEPT. OF OCC. SAFETY & HEALTH regulations will be permitted.

During scaffold erection and dismantling the designated competent person overseeing the operation shall determine the feasibility of positive fall protection. If it is deemed that positive fall protection is infeasible, the competent person shall put a fall protection plan in writing which meets the WA STATE DEPT. OF OCC. SAFETY & HEALTH WAC requirements and submit it to VGC project management for review prior to commencing the operation.

The 4-foot fall policy does not apply to moving up and down ladders when using 3 points of contact or the other exceptions as listed by WA STATE DEPT. OF OCC. SAFETY & HEALTH regulations. However, when working from ladders, and an individual's work requires him/her to lean out over the siderails of the ladder, positive fall protection utilization is mandatory.

Steel erectors and metal deck installers are also required to utilize 100% positive fall protection at all times.

Double lanyards, nets, guardrails, or other means shall be used to maintain the 100% positive four-foot fall protection. The Contractor or Subcontractor is solely responsible for the development, implementation, and enforcement of this policy.

VGC Management has a Zero Tolerance for anyone or any company not abiding by this policy and **anyone not abiding by the policy shall be subject to citations and immediate dismissal from the project.** The Contractor shall also be subject to dismissal from the project.



FALL PROTECTION WORK PLAN

Project: _____

Date: _____

Subcontractor: _____

Specific work area: _____

Specific work process: _____

Potential areas of fall exposure:

Fall protection methods:

Fall protection equipment and/or systems to be implemented on this project:

Method(s) to mitigate overhead hazards to workers

Method(s) to remove an injured worker:

When not in service, fall protection equipment will be stored in the tool lock-up area. Equipment and systems must be inspected, by individual employees and crew foremen, before each use.

Individual available on site who is responsible to monitor employee safety and implementation of the plan:

Name and title Date

By submitting this plan, I affirm that my employees have been trained in the safe use of fall protection equipment and systems.

Name and title Date

Received By:

Name and title Date

FIRE HAZARDS AND PREVENTION

Scope and Application

In order to reduce to a minimum the possibility of fire damage and associated losses incurred during the construction of the project the following are guidelines and requirements to be followed by all VGC employees, Contractors, and Subcontractors involved on the project.

The control of fire hazards and the reduction of losses from fire depend upon four fundamental principles.

1. Fire prevention engineering/ jobsite preplanning.
2. Early detection and extinguishment.
3. Damage control.
4. Prevention of personal injuries from fire or panic.

Fundamentals of Fire Safety

Preplanning the site is crucial to the protection of lives and property. The basic sequence of actions that must be taken in case of fire is the basis for establishment of the site fire plan. Understanding the actions and why the sequence is important will aid in the plan's development. The actions are, in order:

1. Evacuate
2. Notify the Fire Department
3. Fight the fire if it is safe to do so

The priority of this sequence should not be broken, however, this does not mean that more than one item cannot occur at a time.

Evacuation

The first action to be taken in case of fire is the protection of lives. The fire protection program must provide for the ability of all workers to exit in case of an emergency. Key considerations include:

- Stairways and ladders used for egress must be kept free of combustible and flammable materials.
- Stairways and ladders shall not be used for storage of materials.
- Temporary lighting must be installed and maintained in working condition.
 - Post and maintain Exit signs.

Contractors need to be aware of their surroundings at all times and plan for an evacuation with documented procedures given to their employees.

Types of Fires

The Underwriters Laboratory classifies fires by three general types of extinguishing agents.

Class A Fires - Fires in ordinary materials such as wood, paper, excelsior, rags and rubbish. The quenching and cooling effects of water or solutions containing large percentages of water are of first importance in these fires.

Class B Fires - Fires in such flammable liquids as gasoline, oil and grease require smothering action. Solid streams of water are likely to spread the fire (under certain circumstances water fog nozzles may prove effective).

Class C Fires - Fire in or near electrical equipment must be smothered by using a non-conducting agent such as carbon dioxide or dry chemical compounds.

Fire extinguishment is usually accomplished by three methods:

1. Eliminate oxygen from the air. Replace air with an inert gas. Apply a non-combustible cover or a chemical which will dilute the oxygen below point of combustion.
2. Remove or shut off the fuel supply. Divert or shut off valves in liquid or gas fuel supply lines and remove the burning fuel.
3. Reduce the temperature below the ignition point. Cool the burning material with water or chemicals.

While the use of one or more than one method generally produces better results, it is important that the most effective method be employed first.

Although there are many types of extinguishers, only one type of fire extinguisher is approved for use on VGC work: the 20 pound "ABC" all-purpose dry chemical extinguisher for use on wood, paper, textiles, electrical and flammable liquids.

The use of carbon tetrachloride extinguishers is prohibited.

Manufacturer's instructions should be followed for each type of extinguisher. Complicated types of extinguishers shall be avoided. Contractor employees shall be taught how to operate each type provided so that prompt action when a fire starts can be assured. Care should be used in selecting extinguishers for each job. Each Contractor is responsible for the training of their personal.

Extinguishers shall be stand or wall mounted, visible and easily accessible at all times. They must be distributed so that the distance to an extinguisher from any point on a floor is not more than 75 feet.

Requirements

1. Shanties, tool sheds, etc:
 - a. Shall be constructed of fire-restraint materials and heated with approved fire-safe heating devices.
 - b. Shall be constructed at least 10 feet from materials which present extraordinary fire hazards.
 - c. Shall be equipped with a minimum of one 20-pound ABC fire extinguisher each.
 - d. Shall have a 55-gallon waste container adjacent to it.
 - e. Shall not be used to store oily rags, oily clothes, or fuels of any type.
 - f. Shall be constructed such that a shanty fire will not spread to adjacent areas.
 - g. Rubbish shall not be permitted to accumulate within an adjacent area to any shanty.

2. Fire Prevention:

- a. All temporary electric shall be in accordance with all current existing codes.
- b. Storage of any material within 10 feet of fire hydrants is strictly prohibited.
- c. Work areas shall be policed by the Contractor on a regular basis to prevent accumulation of material.
- d. No motors or machinery shall be left running during non-working hours except as specifically directed by VGC management.
- e. All heating equipment shall have necessary safety devices and shall be wired, piped, and operated according to all applicable Codes, Rules and Regulations.
- f. All fuel and solvent containers shall be placed on drip pans.
- g. No open burning or fires shall be permitted on site. Anyone doing so is subject to immediate dismissal.
- h. No solid fuel shall be permitted on the site.
- i. All gas cylinders such as propane, oxygen and acetylene shall be stored and tied in a vertical position in areas designated by VGC management. All stored cylinders shall be capped. Oxygen will not be stored within 20 feet of any other gas.
- j. All gas cylinders in use shall be tied in the vertical position and capped at the end of the working day.
- k. All oxygen and acetylene in use shall be on proper carts with required separations (5' fire rated) and with a fire extinguisher readily available.
- l. Each Contractor is responsible for training their employees in the proper use of fire extinguishers.
- m. Roofer's kettles shall be kept away from finished walls and material storage areas. A minimum of two 20# ABC fire extinguishers are required next to the kettles.
- n. Individuals are not permitted to wear oil or tar soaked clothing.
- o. Spark screens are required on hoist engines and salamanders.

3. Hot Work Operations: Welding and Cutting Permit Program

- a. The Project Safety Coordinator will act as the Fire Safety Manager.
- b. Each Subcontractor shall notify VGC of proposed "Hot Work" through a "Welding / Cutting Permit" application to the Fire Safety Manager. These permits must be reviewed and approved by the subcontractor prior to submitting to the VGC Safety Department.
- c. The Fire Safety Manager shall review the Permit form with the Subcontractor to assure that all areas of concern are accounted for in fire protection.
- d. The Fire Safety Manager shall keep a log of all Permits.
- e. Permissible Areas:

- i. New construction: When all fire prevention measures are taken, permits shall be authorized for the work.
 - aa. New construction work shall require the presence of a dedicated fire extinguisher (20 lb., ABC) provided by the Subcontractor performing the work and any other preventive measures as may be necessary for protection of life and property, such as fire blankets, water supply, etc.
 - bb. The Subcontractor and the Fire Safety Manager shall ensure that the surrounding area(s) are free of combustible material per NFPA 51B.
 - cc. When the work is of the nature that “hot” material may fall to areas below, the Subcontractor and the Fire Safety Manager shall ensure that those areas are free of combustible material or material that may otherwise be damaged. Work in place must be protected by the Subcontractor performing the work.
 - dd. When “Hot Work” is performed in Permit Required Confined Spaces, the applicable Standards shall be followed for Permit Required Confined Space work.
 - ee. “Hot Work” shall not be performed near fuel storage areas or other areas where combustible vapors may accumulate.
- ii. Occupied Buildings: “Hot Work” shall not be performed in occupied buildings without notification of the local Fire Department responding agency, (local Engine Company).
 - aa. The fire suppression system for the building must be in operation.
 - bb. The appropriate Building or Department Managers must be notified and the work coordinated with their operations.
 - cc. Preparation for the work and clearing of combustible materials shall be in accordance with NFPA 51B. Combustible material shall be cleared from the work area by a distance of 35 feet.
- f. All combustibles shall be protected from exposure to hot work and resulting slag. All tarps and blankets used for this shall be of fire retardant material.
- g. During welding or cutting operations, a fire extinguisher will be required and shall be the responsibility of the Contractor performing this work.

WELDING / CUTTING "HOT WORK" PERMIT

Permit # _____ Date: _____

Subcontractor: _____

Floor: _____ Room/Area: _____

CONDITIONS FOR PERFORMANCE OF WORK

1. The Subcontractor performing the work shall furnish a Designated Fire Watch. The Fire Watch shall have no other assigned duties but to ensure a Safe environment in the area during and after the activity of welding, cutting or open flame operations.
2. The Fire Watch shall clear the work area of, and ensure that it be kept free of all combustible materials in accordance with NFPA 51B. In occupied buildings, the fire suppression system shall be in operation.
3. Fire retardant tarpaulins are acceptable and shall be used where applicable.
4. All welding / cutting equipment shall be removed from the building daily. This provision applies to work performed in an existing, occupied portion of the facility.
5. The Fire Watch shall be equipped with appropriate personal protective equipment, such as eye protection, gloves, head protection, welder's jacket, etc.
6. Equipment shall be located so that exhaust fumes are naturally ventilated from the building. Where such locations are not possible, the Subcontractor performing the work shall provide mechanical ventilation.
7. All oxygen / acetylene equipment shall be transported, used and stored in strict compliance with WA STATE DEPT. OF OCC. SAFETY & HEALTH Construction Safety Orders. A separate fire extinguisher (10 BC minimum) is required at each oxygen / acetylene setup.
8. Appropriate fire extinguishers shall be kept in the work area while all work is in progress. Fire extinguishers are to be provided by the Subcontractor performing the work as follows:

<u>WORK AREA</u>	<u>FIRE EXTINGUISHER TYPE</u>	<u>NUMBER REQ'D</u>
Equipment Spaces	ABC (20 lbs.)	2
Other Spaces	ABC (20 lbs.)	1

1. Welding / cutting shall not be performed until the area has been approved by the Fire Safety Manager.
2. Upon completion of the "Hot Work", the Fire Watch shall inspect the work area and ensure that there are no lingering sparks, smoldering materials, etc.
3. The Fire Safety Manager shall be notified when the "Hot Work" is complete.
4. Permits are valid for a two-(2) week period.

Subcontractor hereby agrees to perform the work in accordance with the requirements noted above.

Permit valid from _____ to _____

Comments/Special Requirements: _____

Subcontractor's Representative: _____

Work Complete: _____

Fire Safety Manager: _____

Work Complete: _____

In the Event of a Fire

Appropriate action is the key to the prevention of loss of life and property damage. This action in the first minute is worth tons of water 10 minutes later.

1. If a fire occurs, notify VGC management immediately after evacuating personnel. If it is a fire, which cannot be extinguished immediately, notify the Fire Department by dialing **911**.
2. Extinguish the fire with non-combustibles such as sand or an available fire extinguisher, only if you are not putting yourself or others in harm's way.
3. Remove or shut off fuel supply such as removing debris or stored material or shutting off propane.
4. Each Contractor is to clear the way for the Fire Department and assist in any way directed.

All Contractors are solely responsible for their employees' compliance to all federal, state, provincial, or local laws, standards, and/or codes.

GASOLINE POWER**Scope and Application**

Most construction sites have gasoline equipment and thus introduce the hazard of potential fire and dangerous fumes. All welding equipment, generators, equipment that must be used inside the confines of an enclosed building shall have alternative means of energy production, i.e. propane or electrical powered. All Contractors on this project shall abide by the following procedures and requirements.

Fire

WA STATE DEPT. OF OCC. SAFETY & HEALTH and fire departments have regulations regarding quantity and methods of handling gasoline. The following rules will minimize the danger from fire:

1. Review WA STATE DEPT. OF OCC. SAFETY & HEALTH and local fire department requirements and comply with these standards.
2. Storage of gasoline containers must comply with WA STATE DEPT. OF OCC. SAFETY & HEALTH regulations, and fuel transfer operations must be conducted outside of the building and in approved fire cabinets.
3. When drums are used for storage, use drum pumps which are designed specifically for flammable liquids. Use safety bungs for the vent opening. These are equipped with perforated cylindrical screens which act as fire baffles. The use of a gravity feed or bottom draw drum is prohibited.
4. Use only approved metal safety cans for filling engine tanks. (automatic safety latch closer and with flash arrestors)(no plastic cans)
5. Shut down engine when refueling.
6. Have a 20 pound ABC dry chemical type extinguisher available wherever flammable liquids are handled.
7. No smoking near gasoline.
8. All drums shall be properly labeled as per WA STATE DEPT. OF OCC. SAFETY & HEALTH WAC codes re: Globally Harmonized System (GHS) Hazard Communication labeling.

Fumes

Gas engines exhaust carbon dioxide and carbon monoxide. Dioxide is heavier than air; monoxide slightly lighter. A mixture of the gases usually is heavier than air although heat may cause it to rise. Both are without color, taste or smell. Light concentrations cause headache and nausea. Death is swift in heavy concentrations. A few minutes may be too long. Don't discount this hazard. If anyone exhibits symptoms, do not attempt rescue without proper personal protection equipment (See Confined Spaces)

Do not run gas engines in pits, manholes or confined spaces without positive ventilation. Always pipe gas engine exhausts to outside air when engine is located in enclosed space. Start blower before engine. If engine stops, be sure space is well blown out by means of approved testing before sending anyone in to restart. If in doubt, check for gas with CO Tester.

Danger spots are deep excavations, pits, manholes, hoist engineers' shanties, pipe or crawl spaces under basement floors, and where gas heaters are used.

HAND AND POWER TOOLS**Scope and Application**

The Contractor is responsible for the safe condition and maintenance of all tools and equipment to be used by all contractor employees. When necessary, contractor superintendents shall be able to explain:

- Each step of a job or task
- What is to be done and why
- What hazards are involved
- How to perform the job safely
- Capacities and limitations of equipment

The Contractor Superintendent shall ensure that their employees know how to safely use tools they are required to work with.

Procedures

- Know the application, limitation, and potential hazards of the tool used.
- Select the proper tool for the job.
- Remove adjusting keys and wrenches before turning on tools.
- Do not use tools with frayed cords or loose or broken switches.
- Keep guards in place and in working order.
- Have ground prongs in place or use tools marked "double-insulated."
- Maintain working areas free of clutter.
- Keep alert to potential hazards in the working environment such as damp locations or the presence of highly combustible materials.
- Dress properly to prevent loose clothing from getting caught in moving parts.
- Use safety glasses, dust, or facemasks, or other protective clothing and equipment when necessary.
- Do not surprise or distract anyone using a power tools.
- Hammers with broken or cracked handles, chisels and punches with mushroomed heads, wrenches with sprung jaws, or bent or broken wrenches should not be used.
- Most hand-held electrical tools must be equipped with a "dead-man" or "quick-release" control so that power is shut off automatically whenever the operator releases the control.
- Portable circular saws must be equipped with guards above and below the base plate or shoe. The lower guard must retract when the blade is in use and automatically return to the guarding position when the tool is withdrawn from the work.
- All hand-held portable electrical equipment must have its frame grounded or be double insulated and identified as such tool.

- All magazine fed or powder actuated tools shall reference the section entitled "Powder Actuated Fastening Tools".

Training Requirements

The Contractors shall provide training or retraining on safe tool usage and maintenance to employees.

HEARING CONSERVATION POLICY

Scope and Application

VGC management recognizes that workers are sometimes exposed to excessive noise levels on the job. Excessive noise can, and often does, cause permanent hearing loss if engineering controls or personal protective equipment is not used.

Limiting exposure to excessive noise through engineering controls is VGC management's preferred method of control. (Engineering controls may be as simple as removing a generator from the work area and using a longer power cord.) Where engineering controls are not feasible, supervisors shall provide and ensure that their employees wear hearing protection. When hearing protection is necessary, the use of protective equipment is required.

The objective of this policy is to prevent the unnecessary loss of hearing due to excessive noise levels.

Supervisors will be aware of and will notify their Contractors who may be exposed to sound levels equivalent to an average of 85 decibels (dB) over an eight hour period that hearing protection is available and shall be utilized. As a rule of thumb, 85 dB may be defined as any level at which one has to shout in order to communicate at a distance of three feet. Contractors exposed to noise levels of 90 decibels or more shall be provided with and required to wear hearing protection, such as ear muffs or ear inserts. Contractors are solely responsible for any required noise testing for their employee(s) in their work areas.

When protective equipment is necessary; employees shall be given the opportunity to select their hearing protection from two different types of hearing protection. Usually these will be earplugs or earmuffs or a combination of the two. Contractor employees who are issued hearing protective equipment shall receive training that includes informing employees of the effects of noise on hearing and the purpose, use and care of hearing protection. This training is the responsibility of the Contractor.

Warning signs stating "High Noise Area – Hearing Protection required" will be posted by the Contractor on the periphery of all work areas where Contractor employees may be exposed to excessive noise levels.

HOUSEKEEPING

Scope and Application

This policy will apply to all work performed by VGC employees, contractors and vendors including, but not limited to, the following activities: construction, installation, demolition, remodeling, relocation, refurbishment, testing, and servicing or maintenance of equipment or machines.

All work locations will be kept clean and free of debris, clutter, and unsafe conditions at all times, including off-shift or unattended hours. All work materials and waste materials will be managed in a manner that promotes this policy.

Requirements:

- Work areas must be kept clear and free obstructions by material/debris.
- **Clean-as-you-go practices are required.** Do not wait until all work has been completed before cleaning up. Instead, break the work down into smaller tasks and clean the area after each task is completed.
- Materials will not be stored in a manner that will block, restrict, impede or prevent access to an egress path or emergency equipment, such as fire extinguishers, emergency eyewash or shower, or emergency disconnects devices. Store **ALL** material on **PALLETS** or **ROLLING CARTS**. These materials are to be stored **ON GRIDLINES** to ensure wide aisles for egress and movement throughout the entire building.
- Stairway shall not be used as storage areas for any material. Materials shall be stored only in designated areas.
- Work that may temporarily block emergency exits, safety showers, elevators, corridors, and hallways will require VGC approval and notification of all affected personnel.

Cord Management:

- At no time shall cords be strung across exit ways creating a tripping hazard, or in front of emergency equipment.
- All cords will be run overhead! If there is insufficient attachment to run the cord overhead the cord must be run around the perimeter or a cord cover may be used.
- Use cones for short duration use of extension cords (5 minutes or less).
- Support all cords that run through floors or ceilings with the appropriate means.
- All cords must be stored and put away after use. (i.e. not coiled up on the floor or ground).
- All extension cords must be equipped with GFCI protection or be plugged into a wall GFCI outlet.
- All cords must be inspected before each use.
- If the above listed safety items cannot be met, temp wiring must be installed to facilitate proper cord management.
- See cord management plan for further detail.

Material Storage:

- Materials stored in the vicinity of the area where work is performed should be limited to only those materials that will be used in the same shift.
- VGC Superintendent must approve any material stored in a work area longer than 24 hours.
- Materials should be stacked in a safe and orderly manner.

- Store **ALL** items neatly on **PALLETS OR ROLLING CARTS** located on GRIDLINES in order to ensure wide aisles for egress and easier clean-up practices.
- Gang boxes and toolboxes may not have materials stored on top of them.
- If more storage area is needed, contact your VGC Superintendent.

Chemical Storage:

- All chemicals and equipment containing chemicals must be stored in approved areas. (i.e. chemical cabinet, bunker)
- Subcontractors are responsible for removing all unused chemicals from the site at the completion of their project.
- All chemicals and containers must be properly labeled at all times.
- Secondary chemical containers must be properly marked with an approved GHS label.
- Chemical/gas cylinders must be secured in an upright position with a sufficient restraint (Chain, webbing straps, etc...) at all times.
- All dedicated chemical storage areas, for Subcontractors, must have material safety data sheets (SDS) available at the storage location.
- If you are unsure of appropriate storage areas, please contact a VGC Safety Manager for direction.

Material/Waste Disposal:

- The VGC Safety Manager and/or designee prior to use must approve all chemical materials. The VGC Safety Manager must initial the SDS for authorization of use. This requirement applies to all Subcontractors, visitors, and vendors.
- Waste disposal methods must be specified on the SDS.
- All hazardous waste must be disposed of in accordance with VGC hazardous waste program.
- All hazardous waste must be properly labeled.
- Contaminated materials must be decontaminated prior to placement in any recycle bin.
- Non-hazardous waste must be disposed of into appropriate recycle or disposal containers.
- If a subcontractor contaminates a recycling bin, then said subcontractor is responsible for all costs incurred to dump the container as waste.

Examples of Inadequate Housekeeping:

- Walkways, aisles and exit routes: Blocked aisles, doorways, or emergency exits, extension cords strung across aisles, ladders in front of or behind doors.
- Storage areas: Improperly stored chemicals or gases, unidentified or improperly labeled liquids/chemicals, boxes on the floor, materials stacked improperly, falling material hazards, excessive clutter.
- Work areas: Spilled or leaking liquids, equipment or boxes piled on top of work areas, trash on floor, materials or debris forcing an employee to work in an awkward position, wire/cables/tubing resulting in trip or snag hazards, aisles or service route entrances partially blocked by equipment or materials, trip or slip hazards, un-emptied trash carts and containers.
- Emergency equipment: blocked fire extinguishers, blocked shower/eyewash units, blocked fire hose cabinets, blocked shepherd's hook, blocked disconnect switches or circuit breaker panels.

- Ladders: Unsecured ladders leaning against walls, ladders lying on their side unsecured or barricaded, ladders left unattended.
- Electrical: Objects blocking access to electrical panels, equipment or stored material blocking access to electrical panels and transformers, electrical access covers left off equipment, electrical covers or panels in an aisle.

Contractors are solely responsible for the cleanup of their immediate work areas on a **daily** basis. Contractors are required to participate in a general cleanup effort on a weekly basis. If a contractor fails to complete housekeeping tasks, VGC management will assign those duties to another contractor and fine/back-charge the failing contractor for all expenses incurred.

It is the goal of the VGC staff at VGC to provide and maintain a clean building during construction. Early and often implementation of procedures described above will achieve this goal.

LADDERS

Scope and Application

Ladders shall be inspected periodically by a Contractor's Competent Person. The use of ladders with broken or missing rungs or steps, broken or split rails, or other faulty or defective construction is prohibited. When ladders with such defects are discovered, they shall immediately be withdrawn from service and tagged to prevent use, or destroyed.

Portable ladders shall be placed on a substantial base of a 4-1 pitch (toes touching at base of ladder with arms fully extended to side rails), have clear access at top and bottom, extend a minimum of thirty-six (36) inches above the landing and be secured against movement while in use.

Ladders used in any location where they could be displaced by traffic shall be secured to prevent displacement and shall be barricaded. The area around the top and bottom of a ladder shall be kept clear of debris and material.

When ascending or descending a ladder, the user shall face the ladder using at least one hand to grasp the ladder. An employee shall not carry an object that could cause the employee to lose balance and fall.

When working from ladders, special consideration for fall protection equipment shall be taken when working near the building perimeter or open shafts. Refer to the project fall protection policy included in this program.

Each Contractor employee shall be trained by their Competent Person to recognize the hazards relating to ladders.

WORKERS MUST USE 3 Points of contact on ladders.

LADDERS SHALL BE EITHER TYPE 1 or 1A duty rated (heavy duty use)

Step Ladders

Stepladders shall only be used in an open (fully extended) position. The top and top step of a stepladder shall not be used as a step.

Metal Portable Ladders

Portable metal ladders are only permitted in areas with NO energized electrical hazards.

Job-Made Ladders

Job –Made Ladders are allowed on our projects as long as they are built in conformance to the WAC

***ALUMINUM LADDERS ARE PROHIBITED WHEN WORKING AROUND
ENERGIZED ELECTRICAL HAZARDS***

MATERIAL AND PERSONNEL HOISTS

Scope and Application

All hoists shall comply with the manufacturers' specifications and limitations applicable to their operation. Where manufacturers' specifications are not applicable, the limitations assigned to the equipment shall be based on the determination of the using Contractor's professional engineer competent in the field. Rated load capacities, recommended operating speeds, and special hazard warnings or instructions shall be posted on cars and platforms.

Following assembly or erection of hoists, and before being put into service, an inspection and test of all functions and safety devices shall be made by the Contractor. A similar inspection and test is required following any major alterations. The Contractor shall inspect all hoists at a minimum at 3-month intervals. The Contractor shall maintain records at the site.

When hoist platform/cage is on upper level, first floor level shall be guarded to prevent entry of personnel or storage of material.

Material hoists shall conform to the regulations of ANSI A10.5 and personnel hoists to ANSI A10.4.

MATERIAL HANDLING AND STORAGE

Scope and Application

All materials shall be handled and stored with the utmost care. Contractors and Subcontractors shall ensure that their employees are properly trained in proper moving, lifting, grabbing, hoisting, team lifting, and any accessories for handling materials. No employees are to be exposed to material handling that may injure themselves or others in their area. All temporary storage of materials shall be secure, neat, orderly, and out of walkways. Materials shall not be haphazardly piled or strewn about in any work area.

VGC management shall designate areas for storage for each Contractor's materials. The Contractor is responsible to inform VGC two days prior to a material shipment arriving at the project site to ensure proper planning for storage. The Contractor is solely responsible for any materials brought on to the site.

Any equipment utilized in the movement and storage of materials shall be in good condition and shall meet the manufacturer's specifications, and all applicable federal, state, and local standards and codes. All personnel utilizing such equipment shall be properly trained as to the operation of such equipment. The Contractor is solely responsible for such training and re-training if required.

MOBILE ELEVATED WORK PLATFORM PRE-QUALIFICATION

Prior to being allowed on a VGC projects, all Mobile Elevated Work Platforms (MEWP) must be inspected to ensure compliance with VGC requirements. A sticker indicating completion of inspection will be placed on the lift. **DO NOT USE A LIFT THAT DOES NOT HAVE A VGC APPROVAL STICKER.** MEWP's (scissor lifts, zoom booms, knuckle booms) must have dual action controls to be approved for use.

Dual action controls require that there be two separate actions to activate the lift. If a MEWP arrives at site and does not have dual action controls, then it must remain inoperable until a Dual action control is installed. The dual action control may consist of a button that must be depressed in order for the controls to operate, or a toggle switch that must be activated prior to operating the MEWP controls (The toggle switch must automatically return to the center when released).

VGC will inspect the general condition of the MEWP to ensure that it meets the minimum requirements for operation of a MEWP on VGC projects. Once approved, VGC will place an orange certification sticker on the MEWP to confirm that it has been inspected and approved.

If the MEWP fails the inspection, VGC will notify the contractor of the changes required to pass the MEWP upon re-inspection.

All lifts are required to have a sticker or plaque on the lift indicating who owns the lift.

Equipment Daily Inspection

The contractor is required to complete a daily inspection sheet for all powered lift trucks, mechanical elevated work platforms, Gradalls, and bobcats. This form is available from VGC.

The inspection form includes operational and physical parameters for operation of the equipment being inspected. The equipment must be free of physical defects and in good condition prior to operating the equipment

The inspection form must be posted in a visible location during operations and a copy of the inspection form needs to be turned into VGC Safety Manager every Friday before 2:00pm.

Operator Requirements

Employees operating MEWP's, Lift Trucks, Gradalls and other similar powered vehicles must be certified to operate such equipment. Employees must have a current certification card to operate the equipment.

Employees operating lift vehicles (forklifts, gradalls) must use seatbelts during operations. At no time shall the operator leave the vehicle running if they are to leave the control area.

Equipment Operation**Spotters**

While operating gradalls and lift trucks, the contractor is responsible for supplying spotters. These spotter will be responsible for ensuring that the:

- Area around the vehicle is cleared prior to moving
- Travel path of the vehicle is free and clear of obstructions and personnel
- Overall clearance is adequate along travel path
- Load is stable prior to moving
- Operator is properly belted and ready to move
- Load does not exceed rated capacity
- Lift vehicle is in good condition and free of defects and/or leaks

If operating in congested areas, MEWP's will require spotters. The spotters will be responsible for ensuring that the area around the MEWP and the travel path are free of obstruction and clear of equipment and personnel.

Delivery Trucks

If delivery trucks are to enter common or congested areas, the contractor that is accepting the delivery is required to provide a spotter to assist the delivery truck driver.

Storage

When not in operation, the equipment must be stored in an approved location away from congested areas, fire lanes, and process areas. If applicable, forks shall be lowered to the ground and cones placed around the vehicle.

Indoor Operation

At no time shall propane or combustion engine powered vehicles operate inside a building or enclosed area. Electric vehicles are preferred indoors. MEWPs operating indoors shall be equipped with a plastic or absorbent material attached to the underside of the MEWP to catch potential leaks.

MEWP CHECKLIST

Name/Type of MEWP:		Contractor Name	
Model or Equip No.:		Contact Number	
Date:			
Shift:			
Operator or Inspectors Name: (person performing the inspections)			
Is the operator trained to operate this MEWP and does the operator have a valid operators license/card?			
	Y / N	Y / N	Y / N
Inspection Item & Description	P/F	P/F	P/F
Pass Fail Status			
1	Operating and emergency controls are in proper working condition, EMO button or Emergency Stop Device		
2	Upper drive controls interlock mechanism is functional (i.e. foot pedal, spring lock, or two hand controls;)		
3	Emergency Lowering function operates properly		
4	Lower operating controls successfully over ride the upper controls		
5	Both upper and lower controls are adequately protected from inadvertent operation.		
6	Control panel is clean & all buttons/switches are clearly visible (no paint over spray, etc.)		
7	All switch & mechanical guards are in good condition and properly installed		
8	All Safety Indicator lights work		
9	Drive controls function properly & accurately labeled (up, down, right, left, forward, back)		
10	Motion alarms are functional		
11	Safety decals are in place and readable		
12	All guard rails are sound and in place, including basket chains		
13	Work platform & extension slides are clean, dry, & clear of debris		
14	Work platform extension slides in and out freely with safety locking pins in place to lock setting on models with extension platforms.		
15	Inspect for defects such as cracked welds ,fuel leaks, hydraulic leaks, damaged control cables or wire harness, etc.		
16	Tires and wheels are in good condition, with adequate air pressure if pneumatic		
17	Braking devices are operating properly		
18	The manufacturer's operations manual is stored on MEWP (in all languages of the operators)		

OXY-ACETYLENE BURNING AND WELDING**Scope and Application**

The task of cutting metal with an acetylene flame shall be assigned only to experienced Contractor employees. Goggles meeting a minimum requirement of 7, 8, or 9 tinted shade shall be worn at all times while cutting. Proper gloves shall be worn. Outer clothing shall be free from oil or grease and of fire-resistant material. Sleeves and pockets shall be kept buttoned. High top shoes and fire-resistant leggings or high boots shall be worn.

Contractors shall provide some means of catching sparks and slag when cutting or welding. Portable, hand-operated 20# ABC fire extinguishers shall be kept close at hand at all times. Contractors shall also provide a one-hour fire watch prior to, during, and after all burning or welding operations

Acetylene shall never be used at a pressure of more than 15 pounds per square inch, as it is likely to explode above this pressure. All torched used shall be of the type with built in anti-reverse flow valves.

Handling Storage of Cylinders of Oxygen

Compressed oxygen plus oil is explosive. No oil or grease of any kind may come in contact with valve, regulator or any other portion of the cylinder or apparatus.

When shipping empty oxygen cylinders to distributors, lower portion of the green tag attached to cylinder shall be removed at the perforated line. Any green sticker label found pasted to the cylinder shall be removed. Bill of lading shall specify that the cylinders are empty and serial numbers of the cylinders shall be noted thereon.

Cylinders of oxygen, except those in actual use or required for the day's supply, shall be stored in a place designated by VGC Management, where they will not be tampered with by unauthorized persons. Oxygen cylinders shall be stored in a vertical position with caps in place.

Cylinders of oxygen shall never be stored in the same room used for the storage of calcium carbide, cylinders of dissolved acetylene or other fuel gases, or with acetylene generators. The stored oxygen cylinders shall be at least 20 feet from acetylene cylinders or separated by at least a one-half hour, 5-foot high barrier.

Open flames of any description shall not be employed in any building used for the storage of oxygen cylinders.

If cylinders are stored on the ground or open platforms, such locations shall not be adjacent to points where there is a large amount of combustible material.

Acetylene

1. When cylinders of acetylene are not in use, outlet valves shall be kept tightly closed and valve caps replaced, even though cylinders may be considered empty.
2. Cylinders shall be stored in a safe, dry, well-ventilated place where they will not be unduly exposed to the heat of the stoves, radiators, furnaces or the direct rays of the sun, designated by VGC management.
3. Cylinders of dissolved acetylene shall always be stored standing upright with valve end up and capped.

4. When shipping empty acetylene cylinders and other fuel gas cylinders to manufacturers, lower portion of red shipping tag attached to cylinders shall be removed at the perforated line. Any red sticker label found pasted to a cylinder wall also shall be removed. Bill of lading shall specify that the cylinders are empty, enumerating the type and individual numbers of such cylinders.
5. Under no circumstances shall an attempt be made to transfer acetylene from one cylinder to another or to compress acetylene into a cylinder.

General

1. When transporting, moving and storing compressed gas cylinders valve protection caps shall be in place and secured.
2. When oxygen and acetylene cylinders are hoisted, they shall be secured on a cradle, sling board or pallet. They shall not be hoisted or transported by means of magnets or choker slings. They shall not be used as a weight for crane cables.
3. Cylinders shall be secured in an upright position at all times. Oxygen and acetylene cylinders not in use shall be separated by 20' or a 1/2 hour fire rated wall. Gauges shall be removed at the end of each work shift and properly stored.
4. Cylinders shall be handled carefully, never shall be dropped, and shall be placed so they will not fall or be struck by other objects.
5. Partially used cylinders shall be closed at the valves.
6. When exhausted, cylinders shall be returned as rapidly as practicable to the storage building or place, and from there to the manufacturer. Empty cylinders shall be marked "Empty" and stored apart from full cylinders to prevent confusion. Valves shall be closed and valve protection caps replaced.
7. Carts shall have fire extinguishers attached.
8. Fuel and oxygen hoses, including couplings, shall be inspected frequently to insure they are not frayed or otherwise damaged.
9. Storage of compressed gas hoses shall only be in a ventilated gang-box.
10. Hot work permits must be issued per the Fire Prevention- Hot Work Permit Policy
11. The use of "Welding Screens" or "Welding Shields" shall be used at all times.

POWDER ACTUATED FASTENING TOOLS

Scope and Application

Generally, two types of Powder Actuated Fastening Tools are available for use on our work. They are high velocity and low velocity types. Fasteners driven by both types have approximately equal holding power. The greatest number of serious injuries and fatalities has been from misuse of high velocity tools.

Therefore, to reduce the possibility of injuries, **ONLY LOW VELOCITY POWDER ACTUATED FASTENING TOOLS** shall be used on VGC projects. The stud, pin, or fastener of these tools shall be caused to have a velocity not to exceed 300 feet per second when measured 6-1/2 feet from the muzzle by accepted ballistic test methods.

Contractor Superintendents shall enforce compliance with WA STATE DEPT. OF OCC. SAFETY & HEALTH regulations governing the use of the tools along with the contents of this bulletin.

The use of Powder Actuated Fastening Tools shall be governed by the following rules:

1. Tools shall meet requirements of the latest edition of ANSI A10.3.
2. Only Contractor employees qualified by instructions of the manufacturer's qualified representative and/or licensed by the state or local authorities shall be assigned to use a Powder Actuated Fastening Tool. **All qualified employees shall carry proof of training by way of a training identification card at all times.**
3. Only cartridges and fasteners supplied by the manufacturer of the tool shall be used.
4. Powder Actuated Fastening Tools shall be handled with the same care as firearms. Horseplay by any Contractor employee (i.e. pointing an armed or unarmed tool at anything other than the work, target practice, making safety devices inoperative, or other unsafe acts, etc.) will be grounds for immediate and permanent removal from the job site.
5. All safety devices incorporated in the tool by the manufacturer shall be used at all times. A sign, minimum 8" x 10" with 1" letters, stating "Powder Actuated Tool in Use" or equivalent shall be posted by the Contractor in area of use. (ANSI A10.3)
6. Powder Actuated Fastening Tools approved for use on this project:
 - a) Piston Tool - A Low Velocity type utilizing a piston activated by the power of a blank cartridge furnished by the Tool Manufacturer to drive a stud, pin, or fastener into a work surface.
 - b) Powder Assisted Hammer Drive Tool - A Low Velocity type utilizing a captive piston activated by a blow from a 4 lb. hammer supplemented by the power of a blank cartridge furnished by the Tool Manufacturer to drive a stud, pin, or fastener into a work surface.
 - c) Butane Powered "FAST TRACK" tools may also be used in substitution of PAT's.
7. All used and unspent cartridges shall properly be disposed of per manufacturer's recommendations.

PROTECTIVE EQUIPMENT FOR PERSONNEL

Scope and Application

Contractors are exposed to flying material chips, falling objects, heat, light and other hazards requiring special personal protective equipment. Each individual Contractor is responsible for issuing the proper personal protective devices to their Contractors. Federal, State and local safety rules shall be checked regarding the use of such equipment. Where available, use equipment approved by the National Institute of Safety and Health. Used personal protective equipment shall never be given to an employee without having been cleaned and sterilized.

Head Protection

(ANSI Z89.1) Hard hats shall be worn by all job Contractors and visitors while on the job site as a condition of employment or visitation. **NO EXCEPTIONS.** Impact resistant hard hats provide protection only when the inside web suspension is intact and is adjusted to correct head size with proper crown clearance. No “soft top” welding shall be permitted.

Eye Protection

(ANSI Z87.1) Eye protection with side shields and/or one-piece goggles are required to be worn by all job Contractors and visitors while on the job site as a condition of employment or visitation. **NO EXCEPTIONS.**

All Contractors involved in pumping or pouring of concrete shall provide their employees at the point of discharge with a wire mesh face screen along with the required use of safety glasses to prevent caustic burns to the face.

Cup type chipper goggles shall be used by workers in heavy breaking or drilling.

Face shields shall be worn for protection from flying particles produced from light drilling, breaking, chipping and from power saws, and are particularly effective for Contractors who wear corrective glasses. Adapters for use with hard hats or caps are required. Shaded spectacle glasses or shaded face shields shall be worn by Contractors engaged in oxy-acetylene burning and welding by Contractors engaged as electric welders' helpers. Shade 7, 8, 9 or darker is required.

All Contractors engaged in electric or arc welding shall use welding masks and hoods. Contractors shall consult suppliers for the exact shade to match the amperage tube used.

Respiratory Protection

Contractors exposed to dust, fumes, and/or gases shall be provided with proper respiratory protection designed to protect against the particular substance encountered. The Contractor is solely responsible for obtaining the proper medical clearance, fit testing, and training per WA STATE DEPT. OF OCC. SAFETY & HEALTH standards, and to provide the appropriate equipment.

Refer to “Respiratory Procedures in the Environmental Section”.

Hand Protection

Various types of gloves are made to protect hands against particular hazards, i.e., rubber gloves to handle alkalis and other chemicals, leather gloves to handle rough items as reinforcing steel, lumber, masonry, etc., and special leather gloves to protect against welding heat sparks and slag. All trades will use gloves at all times, where conditions require, the “finger” portion of the gloves may be cut out. Sheet metal workers will be required to wear “full gloves.”

Foot Protection

Contractors shall wear metatarsal foot guards when working with soil tampers or where falling objects could be dropped on one’s shoes. Thin sheet steel insoles are available to protect against nail punctures during stripping operations.

All personnel will wear sturdy work boots with durable side walls, toes, and hard soles. Soft shoes or sneakers are not permitted. Visitors shall wear appropriate sturdy shoes or be kept out of the construction area.

Body Protection

All personnel shall wear shirts and long trousers to protect against the elements and work site hazards. No sleeveless shirts, tank tops, mesh shirts, short, or sweat pants will be permitted. Sleeves shall extend a minimum of 4” from the top of the shoulder.

At least one article of High Visibility clothing will be worn unless specifically not permitted by owner. In cases where the owner does not allow High Visibility clothing VGC safety director must approve alternate clothing requirements.

Special clothing is required when working in very hot, cold or wet work places, or when working with some chemicals, such as alkalis. Contractors are responsible to provide their employees with the proper clothing in these situations.

Special Protective Equipment

Construction Contractors working in certain operations (chemical work, etc.) shall be provided and wear the specialized protection equipment designed for that particular operation. (Wood-soled shoes, non-sparking tools, chemical goggles, etc.) The SDS shall be consulted regarding protective equipment required.

Hearing Protection

See Hearing Conservation Policy.

TEMPORARY PROTECTION

Description: Include all labor, materials, equipment and services necessary for, and incidental to the execution and completion of barriers and protection whether or not indicated on the Drawings or mentioned herein. The Subcontractor who creates a hazard or whose work poses a threat of damage to personnel and/or contiguous work will be responsible for providing and maintaining barricades and other protective means and actions and as noted below.

- A. Regulations: Comply with all requirements of WA STATE DEPT. OF OCC. SAFETY & HEALTH, state, municipal rules, regulations, ordinances and laws to protect all personnel and public from endangerment, damage or injury. Reference the VGC site-specific safety plan for further details.
- B. Performance: Temporary measures will provide adequate safety, visibility, markings and strength to sustain loads which they may be subject to and in accordance with WA STATE DEPT. OF OCC. SAFETY & HEALTH.
- C. Except as noted in this Section or within the specifications themselves, the following services will be provided to all Subcontractors for their benefit and without cost to them, except for the Subcontractors who are required by the terms of their contract to provide these services for the project as a whole.
- D. Subcontractors requiring temporary protection services, over and above the temporary protection services described herein, will provide the additional services for themselves.

BARRIERS, GUARD RAILS AND COVERS

- A. Each Subcontractor will provide and maintain guard rails, hand rails or covers at all floor openings, at edges or areas subject to change in elevation, or subject to overhead danger created as a result of their work in accordance with WA STATE DEPT. OF OCC. SAFETY & HEALTH regulations.
- B. Movement of Barriers: If movement of barriers is required to facilitate the work, then notice must be provided to VGC site management prior to work taking place. Barriers will be moved, replaced or modified by the Subcontractor. Utilize all necessary safety devices and replace barriers immediately if installed work does not provide adequate protection.
- C. Any barriers, guard rails, covers not replaced by any Subcontractors will be replaced by VGC at the Subcontractors expense. No notice will be given prior to VGC replacing these barriers, guard rails, covers. A deductive change order will be issued immediately.

LIGHTS, FLASHERS AND WARNING DEVICES

- A. Each Subcontractor, for his work, will provide and maintain devices of adequate warning and visibility for safe passage around or near the work, whether within or outside the limits of the Contract.

ACCESS

- A. Each Subcontractor will provide and maintain means of safe footways and access to and around their work. Access includes gates, stairs, ladders, ramps, walkways, bridges, roads, etc.

SCOPE OF WORK

- A. Each Subcontractor will be responsible for providing all temporary protection, including warning signs, for his work in accordance with the governing laws and codes, including WA STATE DEPT. OF OCC. SAFETY & HEALTH.
- B. Each Subcontractor for their work is to provide warning and information signs that are necessary to comply with official regulations and good construction practice.
- C. The Subcontractor responsible for the work will provide such cutting, patching or revision of the protection as required for the installation of his work.
- D. All Subcontractors will provide all required screening, platforms, protection barriers, handrails, etc., related to hoist facilities they furnish and operate.
- E. All temporary work, including maintenance and removal, will be done at such times and in such locations to meet job requirements, as directed by VGC's Superintendent.
- F. Should the work of any Subcontractor require the removal of railings, barricades or other protective devices, that Subcontractor will:
 - 1. Notify VGC's Superintendent in advance.
 - 2. Perform the work in question in as expeditious a manner as possible.

Replace the removed safety devices to the full satisfaction of VGC's Superintendent.

PROTECTION OF OPENINGS AND OPEN SIDED FLOORS AND DECKS

Scope and Application

Falls of workers from, and workers struck by materials falling from floors and decks of structures during construction are not frequent but are usually severe. The object of this Policy is to present the common methods of worker protection in these two loss areas.

Frequently, railings and covers shall be moved in order for material to be hoisted or to perform other work and then replaced. In either case, procedures and designs to facilitate swift and safe removal and replacement shall be developed during pre-job or pre-operational planning and strict enforcement of those procedures required. 100% positive fall protection is required and must be maintained during the installation and removal of these devices.

The use of metal banding or chains (except when furnished by the manufacturer of the equipment) is prohibited as perimeter or other fall protection.

Floor and Roof Openings

Floor and roof openings shall be protected by a standard railing or cover. All "skylights" shall be protected in the same manner.

Floor and Roof Opening Covers

Covers shall support without failure at least twice the weight of the Contractors, equipment, and materials that may be imposed on the cover at any one time.

All covers shall be secured so as to prevent displacement.

All covers shall be color coded or marked with the words "hole" or "cover".

Standard Railing

The top edge height of a top rail shall be 42 inches plus or minus 3 inches above the walking/working level.

Note: *When Contractors are using stilts, the top height of the top rail shall be increased an amount equal to the height of the stilts.*

Midrails shall be installed between the top rail and the walking/working surface at a height of 21 inches, or half the overall distance.

Toe boards shall be a minimum of 3-1/2 inches in vertical height with only a quarter inch clearance off the floor. There shall be no opening greater than one inch between toe board members.

The top rail shall have a breaking strength of 200 lbs. applied within two inches of the top edge, in any outward or downward direction at any point along the top edge.

Midrails 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. Additional midrail may be required if the top rail is greater than 45 inches in height.

Toe boards shall be capable of withstanding, without failure, a force of at least 50 pounds applied in any downward or outward direction at any point along the toe board.

For wood railings, the posts shall be at least 2" x 4" stock spaced not more than 8 feet apart. The top and midrail shall be of 2" x 4" stock. Toe boards may be constructed of 3-1/2 inch board set on edge. No double-headed "duplex" nails are to be used in the construction of these railings.

For pipe railings, posts, top rails and intermediate railings shall be at least 1-1/2 inch nominal diameter (schedule 40 pipe) with posts spaced not more than 6 feet apart on centers.

For structural steel railings, posts, top rails and intermediate rails shall be at least 2" x 2" x 3/8" angles, with posts spaced no more than 6 feet apart on centers.

When wire rope is used for guardrails, the cables may be 1/2 inch wire rope, but in no situation may they be less than 3/8 inch steel cable; any coatings used on the cables to prevent cuts or lacerations will be over the 3/8 inch diameter. When wire rope is used for top rails it shall be flagged at no more than six-foot intervals with highly visible materials.

Posts shall not be more than 6 feet on center. For cable safety railings, cables shall be looped and triple clamped at the connecting points. Single cables running past each other with one clamp are not acceptable.

AT NO TIME WILL ANY GUARDRAIL BE USED AS A HORIZONTAL ANCHORAGE FOR PERSONAL FALL ARREST EQUIPMENT UNLESS SPECIFICALLY DESIGNED AND MAINTAINED FOR THIS PURPOSE. STAMPED ENGINEERING DOCUMENTATION MUST BE READILY AVAILABLE ON SITE FOR ANY GUARDRAIL WHICH DOUBLES AS A HORIZONTAL ANCHORAGE.

IMPALEMENT PROTECTION

Scope and Application

During the construction of reinforced concrete buildings, Contractors erect forms or perform other duties over exposed vertical or upturned reinforcing bars, bolts, or other protrusions (i.e., conduits/pipes/rebar). Serious injuries and deaths have resulted from falls on these protrusions. Also, floor slab reinforcing that extends beyond a section of slab in place can be an Incident hazard.

Contractors are not be permitted to work above vertical protruding reinforcing steel unless it has been protected to eliminate the hazard of impalement.

Several approved methods to protect against this hazard are:

1. Approved/Engineered Rebar protection caps
2. Plank covers for rows of bond bars.
3. "Barguard": (produced by the American All Safe Company, Inc., Buffalo, New York) placed over each bar. (check local or state regulations)
4. Continuous 2"x4" wood rail secured to avoid displacement.

Wire mesh or reinforcing bars extending beyond a section of slab in place shall be bent down and secured to eliminate a tripping hazard. Otherwise, Contractors shall be prohibited from walking over the area.

SAFETY SIGNS AND BANNERS

Scope and Application

Warning, Danger, No Trespassing and other signs, correctly posted, help to protect the public and Contractor employees from Incidents and incidents.

Proper signs shall be posted and maintained in good condition wherever hazardous conditions exist by the Contractor. A sufficient supply of the necessary signs shall be kept on hand for replacement and to cover new hazards as they develop. Additional posting requirements to be completed by the Contractors are found in the Federal Occupational Safety and Health Act, Construction Standards as well as in WA STATE DEPT. OF OCC. SAFETY & HEALTH Guidelines. Such requirements include but are not limited to posting for lasers, powdered actuated tools, and overhead hazards.

SCAFFOLDING**Scope and Application**

The following rules are required during the erection and use of scaffolds by all Contractors:

- a. All scaffolds are to be built under the supervision of a Competent Person.
- b. All scaffolding shall be inspected daily prior to use by a Competent Person. Documentation shall be kept at the access point to the scaffold in the form of a tag.
- c. All rolling scaffolds shall have the wheels locked while the scaffold is in use.
- d. Tubular welded rolling scaffolds require a horizontal/diagonal brace.
- b) All rolling scaffolds shall be fully planked while in use and guardrails with toe boards in place when the scaffold reaches a height of 6 feet.
- c) Baker style scaffolds shall be prohibited from use on VGC sites.
- d) Properly secured ladder access shall be provided for all scaffolds.
- e) Cross bracing does not take the place of a guardrail.
- f) End rails shall be part of the guard rail system on all scaffolds.
- g) Scaffolds shall be secured to the structure when the scaffold height is four times the minimum base dimension and every 26 feet thereafter.
- h) Independent life-lines for each worker on a swing scaffold are required. They shall be secured to a firm anchorage point meeting or exceeding WAC standards separate from the scaffold anchorage.
- i) Scaffolds higher than four times its least base dimension shall be tied off to a structure or use outriggers.
- j) Scaffolds shall be constructed on a firm, stable base. If scaffolds shall be constructed on soft ground, proper mud sills shall be used.
- k) Never erect a scaffold without a base using screw jacks and sole plate. Never put an open pipe end directly on concrete, a wood support, asphalt paving or soil, as it may shift during use.
- l) 100% Fall protection shall be provided at all heights above 6 foot regardless of the type of scaffold. This includes the erection and dismantling processes. If fall protection is infeasible or creates a greater hazard, pre-approval must be obtained from the VGC safety department prior to the start of operations.
- m) Whomever removes a guardrail is responsible to replace it, if they do not they are subject to removal from the project.
- n) All Scaffolding Structures on VGC will be required to have handrails regardless of height
- o) The VGC Construction Site Safety Manager will work with Subcontractors to formulate a "Tagging Program".

Scaffold Planking

All planking shall be 2" (nominal) selected for scaffold plank use as recognized by grading rules approved by American Lumber Standards for the species of wood used. The maximum permissible spans for 2" x 10" (nominal) or 2" x 9" (rough) planks are as follows:

<u>WORKING LOAD</u>	<u>PERMISSIBLE SPAN</u>
<u>1bs./SF</u>	<u>feet</u>
25	10
50	8
75	7

- a) The maximum permissible span for 1-1/4" x 9" or wider plank of full thickness is 4' with medium loading of 50 lbs. per sq. ft.
- b) Platform planks shall be laid with no openings more than 1" between adjacent planks or scaffold members.
- c) All planks or platforms in a continuous run shall be overlapped (minimum 12") or secured from movement.
- d) Wood scaffold planks, unless cleated or otherwise restrained at both ends, shall extend over their end supports not less than 6" or more than 12".
- e) The use of commercially available aluminum and wood walk boards with positive locking devices are recommended.
- f) Engineered scaffold systems may have plank lengths that exceed the above table. Note: The table is taken from the non-mandatory Appendix of Subpart L.

SPRAY ON FIREPROOFING

Scope and Application

Spray-on Fireproofing Operations can create a number of safety, health, and environmental hazards if not carefully managed.

Blowing wind may further aggravate the hazards from overspray and fall-out of spray-on fireproofing.

The following shall be required to keep potential hazards to a minimum:

1. Contractors who spray and mix fireproofing material shall wear NIOSH approved respirators for toxic dusts. Refer to VGC respiratory protection policy for details.
2. Other trades shall be kept out of the areas being sprayed.
3. The Contractor shall clean floors of spray fall-out as it accumulates and this placed in bags or in closed containers.
4. When fireproofing is completed in an area or on a floor, the material shall be completely removed from the floor before the overspray protection is removed.
5. All fireproofing material that has collected on or in the overspray protection shall be completely removed as the protection is removed. No material shall be allowed to fall outside of the building or left on the floor.
6. Dust created by dumping dried bagged material into the mixer shall be controlled.
7. Empty bags shall be neatly stacked and tied. No dried material shall be allowed to contaminate the area.

To contain overspray, exteriors shall be enclosed. To avoid disturbing fireproofing on exterior columns and spandrel beams, considerable care shall be taken when removing protection. It is recommended that plastic tarpaulins be used as the spray fireproofing will not stick to this material.

Special care shall be taken to minimize overspray from the cementitious spray-on fireproofing on floors and platforms to avoid causing exceedingly slippery conditions. The Contractor is solely responsible to keep the spray on fireproofing work area cleaned up on a continuous daily basis.

STEEL ERECTION HIGH LIGHTS

Referencing the revised Steel Erection Standard as of July 18, 2001

Steel Erection Phase

During the steel erection phase, Subcontractors shall comply with WA State Dept. of Occ. Safety & Health and VGC policy of 100% fall protection.

The running length of the wire rope protection shall not exceed two bay widths (24 feet), and be equipped with support stations every 8 feet.

There will be install a turnbuckle for maintenance of the protection (to keep tight): a minimum of 3 Crosby clips. The use of lap joints is prohibited.

Requires qualified person to train exposed employees in fall protection,

Requires qualified person to train exposed employees in special, high-risk activities.

Site Layout and Construction Sequence

Require certification of proper curing of concrete in footings, piers, etc. for steel columns.

Requires controlling Subcontractor to provide erector with a safe layout including pre-planning routes for hoisting loads.

Structural Steel Assembly

Provides safer walking/working surfaces.

Provides specific work practices regarding landing deck bundles and promoting the prompt protection from fall hazards in interior openings. **See the WA State Specific requirements for full fall protection regulations which are to be followed as a minimum standard.**

TRAFFIC CONTROL

Scope and Application

Outside the job-site perimeter

When operations are such that signs, signals, and barricades do not provide the necessary protection on or adjacent to a highway or street, flagmen, or other appropriate traffic controls shall be provided by the Contractor completing the operation.

Signaling directions by flagmen shall conform to American National Standards Institute D6.1-1971.

All Flaggers must have a valid flagger certification card on their person when flagging.

Street flaggers must use 24 inches square or sign paddles.

In periods of darkness, subcontractors must submit a supplemental traffic control plan. Flaggers shall be provided with and shall wear ANSI approved clothing while flagging. Warning garments worn at night shall be reflectorized material.

All Contractors receiving materials are solely responsible for the traffic control during the unloading processes and shall provide the necessary personnel to complete such tasks. All efforts shall be made to ensure trucks with materials are unloaded on site.

Inside the job-site perimeter

Subcontractors shall follow the approved and posted site traffic control plan and shall stage materials only in pre-approved areas.

5 mile per hour speed limit shall be enforced for ALL EQUIPMENT. Failure to adhere to the speed limit will result in a citation per the citation schedule.

On-site parking will be allowed by specific approval only. Violators will be removed from the project.

Equipment is to yield to pedestrians at all time.

Refer to the Traffic Control Plan in the appendix for more detail.

UTILITIES

Scope and Application

Prior to any type of digging each contractor is solely responsible to complete the State One Call. **If there is no State action program in place, the subcontractor is solely responsible to notify the utility companies at their own expense.** No work is to proceed without the proper utility company(s) marking out the area(s) of their underground material(s). Any damage to any utility is to be reported immediately to VGC.

After the One Call has been completed, the utility company shall mark out the location(s) of their underground material(s). When excavation operations approach the location of the marked underground installation, the exact location of the installations shall be determined hand digging within three feet of the anticipated location of the utility.

While the excavation is open, underground installations shall be protected, supported or removed as necessary to safeguard employees.

Any damage to any utility is to be reported immediately to VGC, and is the sole responsibility of the damaging Contractor.

SECTION C

ENVIRONMENTAL ISSUES

ASBESTOS

Scope and Application

Asbestos is a widely used, mineral-based material that is resistant to heat and corrosive chemicals. Typically, asbestos appears as a whitish, fibrous material, which may release fibers that range in texture from coarse to silky; however, airborne fibers that can cause health damage may be too small to see with the naked eye.

Contractors are not allowed to perform any work involving asbestos or asbestos-like materials unless specifically stated in a contract and after proper training, licenses and insurance are obtained. However, if contractors suspect the presence of such materials at any work site, they shall immediately stop work and inform their supervisor.

If a Contractor is required to work in and/or around asbestos, that Contractor is solely responsible to meet all applicable Federal OSHA/WA STATE DEPT. OF OCC. SAFETY & HEALTH standards regarding asbestos.

General Requirements:

1. Contractors shall not touch, remove, demolish, or in any other manner disturb materials that are suspected to contain asbestos.
2. Contractor's superintendents will immediately stop work in the affected area and will inform VGC if asbestos is suspected to be present at a location.

BLOODBORNE PATHOGENS

Scope and Application

Bloodborne Pathogens are disease-causing organisms transmitted through contact with infected blood and other bodily fluids. Diseases such as the Human Immunodeficiency Virus (HIV) and Hepatitis B are among the most common forms of bloodborne pathogens. Any exposure to an infected individual's body fluids may result in transmission of bloodborne pathogens, which could lead to disease or death.

Requirements

1. When dealing with blood or other bodily fluids, Contractor employees are required to follow Universal Precautions. According to the concept of Universal Precautions, all human blood and other human body fluids are treated as if known to be infectious for HIV, Hepatitis B, and other bloodborne pathogens.
2. All Contractors are required to make available to their employees rubber gloves rated at 5 microns or less and resuscitation masks.
3. All Contractor certified first aid providers are required to wear disposable latex or nitril gloves and eye protection while performing first aid on an injured individual. If rescue breathing or CPR is performed, a resuscitation mask shall be provided by the Contractor for the protection of the injured and the provider.
4. All blood spills shall be immediately contained and cleaned with an anti-viral solution, or by a solution of bleach and water containing at least 10% bleach, by the Contractor. Bleach water solution shall be allowed to sit for at least 20 minutes prior to cleanup.(Unless local authorities prohibit such action)
5. Any material saturated with blood shall be considered Regulated Waste. This means 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; and items that are caked with dried blood or other potentially infectious materials. Discarded Band-Aids and gauze containing small amounts of blood products are not considered regulated waste. Disposal of all regulated waste shall be the responsibility of emergency medical personnel or the Contractor of the injured employee. Disposal shall occur in accordance to state law.

Training

At least two of each Contractor's onsite personnel shall be trained in First Aid and CPR, and they shall also be trained in the decontamination of blood spills. Contractors are solely responsible for this training.

Rodent Control –Vectors of Disease

Rodent Control- As in any project in the greater Seattle area the presence of rodents needs to be considered. The following contains actions to mitigate the infiltration of such rodents and the ultimate eradication of such vermin.

- a. All contractors shall keep foodstuffs, garbage, and consumable products in sealed containers.
- b. All such garbage and rubbish shall be removed on a **DAILY** shift basis.
- c. Break and lunch areas- Each contractor shall keep his or hers lunch area clean and free of food stuffs and or garbage.
- d. Break and lunch areas- The contractor and his or her employees shall break and lunch in designated lunch and break areas.
- e. Eradication- Should infiltration of such vermin occur, VGC Construction shall take steps to higher a “rodent control” professional for the purpose of eradicating rodents from the property.

CARBON MONOXIDE

Scope and Application

Carbon monoxide is formed by the incomplete combustion of carbonaceous materials such as coke, oil, gasoline, and natural or manufactured gas. It is flammable, toxic, non-irritating, tasteless, odorless, and heavier than air. When inhaled it combines with hemoglobin of blood, excluding oxygen from the tissues, ultimately resulting in asphyxia. Some of the common symptoms of carbon monoxide poisoning are shortness of breath, headache, dizziness, confusion, lethargy, muscular weakness and nausea.

Temporary heaters and/or gasoline motors used where people are working in confined and/or depressed areas produce the greatest carbon monoxide poisoning exposures and are prohibited on this project.

Contractor Testing Requirements - Use of any device that discharges the products of combustion into an inside work area of any employee requires testing defined below:

1. Test the work area to determine the concentration of carbon monoxide at least three times each 8 hour period.
2. Test several different points within the area and at the breathing heights of an employee. Follow the 2x2x2 rule when monitoring; 2 minutes x 2 for every foot of hose out, every 2 feet of working height.
3. Maintain a written record of these tests, noting the date, time and result of each test.
4. Remove the employees from the area when the concentration of carbon monoxide reaches 25 PPM (.005%). Ventilation shall be provided to reduce the concentration below 25 PPM before the employees are allowed to resume work in the area.
5. Test more often than 3 times per day when the concentration of gas increases to 20 PPM.

Contractor use of Solid Fuel Salamanders - Prohibited within buildings and on scaffolds.

CARBON TETRACHLORIDE

Scope and Application

Carbon Tetrachloride (CCl₄), a poisonous, nonflammable, colorless liquid, has been used extensively as a cleanser and as a fire extinguishing agent. Individuals have died from exposure to its fumes even while working in the open in a short period of two hours. The usual symptoms are nausea and headache. The liver is violently attacked and death follows swiftly.

The use of Tetrachloride solvents is prohibited on this project. If there is an exceptional condition that requires the use of this chemical, elaborate precautions for ventilation, respirators, etc. shall be followed, and prior approval given by the VGC Superintendent.

Fire extinguishers containing tetrachloride are prohibited on this project.

Alternate Cleaning Solvents

Safer cleaning fluids with lower toxicity which is not cumulative and that do not react with steel, aluminum, copper or brass are required. Adequate ventilation is required.

Cleaning Solvent Protection

Chemical resistant gloves shall be used as all solvents remove oil from the skin.

CONFINED SPACES

Scope and Application

According to the National Institute of Occupational Safety and Health (NIOSH) the definition of a confined space is one that by design has limited openings for entry and exit, is large enough to bodily enter, and is not designed for continuous human occupancy. Confined spaces may be present on VGC projects. Both existing and new confined spaces may be open on VGC projects during the scope of work. Hazardous confined spaces are divided into three main categories:

Lack Of Oxygen

Normal air is 19.5-21% oxygen by volume. Should the percentage drop to near 17% drowsiness and impaired ability to think clearly occur. Anything below 12% causes unconsciousness.

Combustible Or Explosive

Any contaminant in a confined space creates the possibility of fire or explosion. Heat, static electricity, etc. can cause ignition. Many gases are heavier than air and collect in the bottom of pits, trenches, sewers, and rooms. Not only gases are a problem, dusts too can be explosive. Many operations, particularly cutting and welding, create hazards in confined spaces since the use of any combustible or explosive chemical in a confined space allows the buildup of dust and vapor.

Toxic Atmosphere

We are all aware of the dangers of toxic substances in storage tanks, the less obvious are the toxic situations you might find in construction. Toxic chemicals can be brought into confined spaces. Welding, cutting, painting, etc. can raise the level of chemicals in a confined space to hazardous levels. We shall recognize that confined space hazards exist in construction and are not a problem confined to storage tanks, silos, etc.

There are two (2) types of confined space:

- Non-Permit Confined Space
- Permit-Required Confined Space

Non-permit confined space is defined as any space that:

- Has a limited or restricted means for access and egress.
- Is large enough and configured in such a way that an employee can bodily enter and perform work.
- Is not designed for continuous occupancy.
- Does not pose a health or safety risk as described in permit-required confined space

Examples include but are not limited to non-energized HVAC equipment, certain trenches and excavations. These shall be evaluated by the "competent person" in charge of the work who is *fully familiar* with the standards relating to confined space.

Permit-required confined space is defined to include one or more of the following:

- Contains or has the potential to contain a hazardous atmosphere.
- Contains a material that has the potential for engulfing an entrant.
- Has an internal configuration that could trap or asphyxiate an entrant.
- Contains any other recognized serious safety or health hazard.

Examples of this type of space include but are not limited to: caissons, tanks, vessels, and underground piping and tunneling.

Requirements:

Contractor responsibility:

1. Identify the Confined Space.
2. Coordinate for shut off, lock out and tag out all energy sources and mechanical hazards.
3. Verify ventilation or engineering controls of the confined space.
4. Obtain test results of the atmosphere from the subcontractor.
5. Verify rescue and fall protection requirements are being utilized
6. Coordinate with the VGC project staff all requirements for the confined space operation.
7. Inform the VGC Superintendent of the “competent person” designated for the work.
8. Submit their Confined Space Program to the VGC Superintendent for review and approval.
9. Atmosphere testing at start of work and after a distinctive break (i.e. lunch break).
10. Coordinate for local rescue teams services and confirm they are trained in confined space entry/rescue.
11. Have on site the fall protection, perimeter protection, signage and personal protective equipment necessary for working in a confined space.
12. Mechanical and alternate means to evacuate personnel from the confined space.
13. A precautionary placard shall be posted at each entry leading to the confined space. The placard is to be posted as soon as the confined space is accessible and is not to be removed until the confined space is closed to access. The entry permit is to be displayed along with the placard at all times.

Safety Equipment

1. Personal protective clothing and equipment is to be used in accordance with the hazards and work procedures anticipated.
2. Air-line respirators are approved for use where irritating vapors are encountered. However, under no circumstances shall air-line respirators be used to enter confined spaces which contain toxic vapors or are oxygen deficient, unless approved by Safety/Industrial Hygiene.

Entry

Only after the "Confined Space" has been determined safe for entry, and the preceding condition satisfied will personnel be allowed to enter the area to begin work. To ensure continuing safety, the Oxygen/Combustible Gas Detector shall be kept in the "Confined Space", turned on, as a constant monitor during the entire period personnel are working in that "Confined Space."

Training:

Entrants, attendants, rescuers and entry supervisors shall be trained by the Contractor or his designee prior to performing any duties relating to permit-required confined space.

Recordkeeping:

Copies of all Contractor atmosphere testing, entry logs, training, and any medical records shall be given to VGC for record retention.

CONFINED SPACE ENTRY PLAN

Date: _____

Project: _____

Subcontractor: _____

Specific work area: _____

Specific work process: _____

Method(s) of monitoring the atmosphere: _____

	Pre-entry levels (PPM)	Levels during work (PPM)
Oxygen	_____	_____
Carbon monoxide	_____	_____
Combustibles	_____	_____
Toxic fumes	_____	_____

OSHA and/or NIOSH standard levels: LEL _____

PEL _____

IDLH _____

Method(s) of ventilation: _____

Volume (ft³) of space to be entered: _____

Volume rating (ft³/min) of ventilation equipment: _____

Emergency rescue methods and equipment: _____

Explosion-proof equipment (when applicable): _____

Personal protective equipment (PPE): _____

Procedures

1. Safety plans submitted to VGC Project Superintendent prior to beginning work.
2. Atmospheric testing completed prior to entry.
3. Ventilation system is in operation.
4. Continuous air monitoring of work space while work is being performed.
5. Appropriate PPE for employees; appropriate PPE established by air monitoring for PPM levels per NIOSH and SDS.
6. Rescue equipment and procedures in operation.
7. Lockout/tagout systems in place per VGC procedures.

An individual is available on-site who is responsible for monitoring employee safety and implementation of this plan.

Name and title

Date

Received by:

Name and title

Date

CONTAMINATED SPILLS

Scope and Application

Contaminated spills is the introduction of undesirable element or substances into the ground that may or may not impact the environment in a negative way. This can be caused by several sources both past and present. Contamination refers to the impact of these sources in any amount and at any degree below or above permissible levels for health and safety toward the environment or to life. Hazardous means it has elevated above the permissible levels for health and safety toward the environment and life and is regulated under government standards.

VGC's primary concern is to protect the workers and the environment in the event of an Incidental spill on this project.

Requirements of Contractors

1. If a spill occurs at the project, the spill shall be isolated/contained to prevent contamination of the surrounding area, waterways, sewer systems or any other environmental impact.
2. The Contractor is responsible for all the costs associated with the cleanup and disposal of the contaminated/hazardous materials.
3. If a spill occurs, the Safety Data Sheet (SDS) for the chemical will provide the emergency information necessary to address the spill. Also, the emergency cleanup team will need a copy of the SDS in order to begin the cleanup process.
4. The Contractor shall immediately notify VGC in the event of any spill.

Training

All Contractors shall have the appropriate trained employees assigned to the project that are capable of handling spills. Whenever chemicals are brought on site the material safety data sheet shall be reviewed with all personnel exposed to it.

Recordkeeping

All Contractor records regarding spills shall copied and given VGC for filing.

FLUORESCENT LAMPS

Scope and Application

In addition to the possibility of cuts from glass fragments, serious injury can result from broken fluorescent tubes due to the release of the small amounts of mercury vapor they contain. Mercury vapor, even in very minute quantities, is hazardous. Persons exposed in close proximity or who are cut shall consult a doctor immediately so they may take necessary precautions.

Special regulations also affect the disposal of fluorescent lamps.

HAZARD COMMUNICATION**Scope and Application**

The WA STATE DEPT. OF OCC. SAFETY & HEALTH Hazard Communication Standard requires that all employers with employees exposed to hazardous chemicals at their worksite establish a hazard communication program. The regulation is more commonly known as "HazCom" or the "Right to Know Law". This program shall transmit information to the employees about the hazardous chemicals they are, or may be, exposed to at the site. This is accomplished by labels on containers, Safety Data Sheets (SDS), hazardous chemical jobsite survey and training programs.

Safety Data Sheets (SDS's)

1. The VGC Superintendent with the help of his staff is responsible for obtaining and maintaining the on-site file of all SDS's supplied by distributors, manufacturers, and subcontractors. While all SDS's may not be uniform in appearance, they shall convey the same message:
 - a. Identity of the product
 - b. Known acute and chronic health effects
 - c. Exposure Limits Threshold Limit Values (TLV's)
 - d. If the product is a suspected carcinogen
 - e. Personal protective equipment to be used
 - f. Emergency and First-Aid Procedure
 - g. Identification of the party responsible for the SDS
 - h. Target organ affected
2. VGC shall ensure that an SDS is obtained with each shipment of any material on the hazard substance survey list, shall one not be obtained at that time, VGC shall follow-up in writing to the parties involved to obtain one within 72 hours of the notification.

Container Labeling

1. The VGC Superintendent and/or his designee shall verify that all containers received for use are:
 - i. Clearly labeled as to content
 - j. Appropriate warnings noted, and
 - k. Names and addresses of the manufacturers listed
2. The labeling system used shall comply with the newly adopted Globally Harmonized System (GHS) for chemical labeling. All secondary containers used with small quantities of a given material shall also be properly labeled.
3. Labels may be in writing, pictures, numerical system, or any combination of the above as along as they comply with published GHS standards. The message shall be understood as to the nature of the hazard, personal protective equipment needed, parts of the body effected, and emergency procedures to take.

Employee Training and Education

1. The VGC Superintendent is responsible for the training of VGC employees with regards to the Hazard Communication policy and program. All Contractors and Sub-contractors are responsible to train their own employees.
2. Training of all personnel can include, but not limited to:
 - a. In-house seminar
 - b. Guest speakers
 - c. Use of visual aides
 - d. On-site updates of new products and materials and other related hazards
3. Instruction shall include, but not limited to:
 - a. How to read and understand the information provided on the SDS's and labels supplied by the subcontractors and suppliers
 - b. An overview of the requirements contained in the Hazard Communication Standard
 - c. Discussion of chemicals included in welding or burning, cement, cleaning solvents, gluing processes, *wood dust processes, and other such common items*
4. After attending the training session, each employee will sign a form to verify that they have been properly trained with regards to the Hazard Communication Standard and that they understood the project's policy regarding this standard. The form is to be filed at the jobsite.
5. Training of all new VGC personnel will take place as they are assigned to their respective position.

Hazardous Non-Routine Tasks

1. Periodically, employees are required to perform hazardous non-routine tasks. Prior to starting work on such projects, each affected employee will be given information by their Contractor about hazardous chemicals to which they may be exposed during such activity. The information shall include, but not limited to:
 - a. Specific chemical or process hazards
 - b. Protective/safety measures that the employee will take to prevent exposure
 - c. Measures the project has taken to lessen the hazard including ventilation, respirators, presence of other employees, and emergency procedures
2. An example of non-routine tasks is confined space entry, i.e. checking the bottom of caissons, entering manholes, etc.

Contractor Hazard Communication

1. All contractors, subcontractors, and sub-subcontractors are solely responsible to abide by the Hazard Communication Standard in regards to the training of their own employee, their SDS Recordkeeping, their notification procedures, and any other aspects of the requirement.
2. All contractors, subcontractors, and sub-subcontractors are to supply the VGC Superintendent with a written copy of their Hazard Communication Program along with SDS's of any chemical materials brought on to the jobsite.

Exchange of SDS's

1. The exchange of SDS's on this project shall take place initially when the contractor comes onto the site at regular site safety meetings, and/or at any other designated time by the VGC Superintendent.
2. All contractors, subcontractors, and sub-subcontractors are to abide by this exchange and are to immediately inform the VGC Superintendent of any new chemical substances brought onto the jobsite.

Updating Inventory Listings

1. The updating of chemical inventory lists shall be completed as new SDS's are received. Updated lists shall be exchanged at the regular site safety meeting. A master list shall be kept at the VGC office.
2. All contractors, subcontractors, and sub-subcontractors are to abide by this updating exchange and are to immediately inform VGC Superintendent of any new chemical substances brought onto the jobsite.

LEAD**Scope and Application**

Lead is a hazardous material and thus is highly regulated to protect people (workers and public) and the environment.

Lead can get into your body as fumes containing lead are formed during the melting or paving process when lead is heated to extreme temperatures, i.e., plumbing, removing paint or soldering.

Dust containing lead is formed during sandblasting, grinding, sanding or cutting processes. Mist containing lead is formed during spray-painting operations that use lead base paints.

It is VGC's intent to never expose workers to the hazards created by improper handling of lead materials. If a Contractor shall perform work with lead, the Contractor is solely responsible to follow the Federal WA STATE DEPT. OF OCC. SAFETY & HEALTH standards on lead. (See VGC lead program)

General Requirements:

1. Contractors shall not touch, remove, demolish, or in any other manner disturb materials that are suspected to contain lead unless procedures have been approved by the VGC Superintendent.
2. Contractor's superintendents will immediately stop work in the affected area and will inform VGC if lead is suspected to be present at a location.

Lead Work

In the event work shall proceed with lead containing materials, the following shall be required to ensure compliance with Federal laws:

Exposure Assessment

If lead is suspected in a work area, an exposure assessment shall be performed. Protection at levels appropriate to the exposure levels of the task being performed shall be used until the assessment results are known. An exposure assessment includes:

- Initial air monitoring
- Periodic air monitoring where results:
 - Less than the Action Level (30 ug/cu.m.): Sample when process changes
 - Action Level to PEL (50 ug/cu.m.): Sample every 6 months
 - PEL: Sample every 3 months
- Employee Notification in writing within 5 working days after the receipt of sample results.

Engineering Controls

Because lead is a cumulative and persistent toxic substance and because lead-caused health effects may result from low levels of exposure over prolonged periods of time, engineering controls and good work practices shall be used where feasible to minimize employee exposure to lead. At a minimum, exposures shall not exceed the OSHA interim final PEL of 50 micrograms per cubic meter of air (50 ug/cu.m.) averaged over an 8-hour-period. When feasible engineering controls and work practices controls cannot reduce worker exposure to

lead to at or below 50 ug/cu.m., respirators shall be used to supplement the use of engineering and work practice controls.

The Contractor appointed Competent Person shall review all site operations and stipulate the specific engineering controls and work practices designed to reduce worker exposure to lead.

Exhaust Ventilation

If required by the concentrations of lead, power tools used for the removal of lead-based paint shall be equipped with dust collection shrouds or other attachments in order to exhaust the contaminated air through a high-efficiency particulate air (HEPA) vacuum system. Operations such as welding, cutting/burning, heating shall be provided with local exhaust ventilation. HEPA vacuums shall be used during clean-up activities.

Housekeeping

An effective housekeeping program involves at least daily removal of accumulations of lead dust and lead-containing debris. Vacuuming lead dust with high-efficiency particulate air (HEPA)-filtered equipment or wetting it with water before sweeping are effective control measures. Such cleaning operations shall be conducted, whenever possible, at the end of the day, after normal operations cease. Furthermore, all persons doing the cleanup shall be provided with suitable respiratory protection and personal protective clothing to prevent contact with lead.

In addition, all lead-containing debris and contaminated items accumulated for disposal shall be collected and put into sealed impermeable bags or other closed impermeable containers. Bags and containers shall be appropriately labeled as lead-containing waste. These measures are especially important as they minimize additional sources of exposure that engineering controls generally are not designed to control.

Respirator Protection

In the event that respirator protection is necessary all Contractor employees shall follow the project Respiratory Protection Program.

Medical Surveillance

When a construction employee is occupationally exposed to lead at or above the action level of 30 ug/cu.m. on any one day in a calendar year, the employee shall be provided initial medical surveillance consisting of biological monitoring in the form of blood sampling and analysis for lead and zinc protoporphyrin levels. Blood lead levels are currently the best indicator of personal lead exposure. Workers potentially exposed to lead at or above the action level shall be monitored for the presence of lead in the blood and the effects of lead on the blood-forming system. Full medical surveillance is to be provided to employees exposed to lead at or above the action level for more than 30 days per year.

The following conditions necessitate an immediate medical consultation including, as determined by the qualified medical provider, a physical examination and a blood sample for lead analysis (biological monitoring):

- whenever a worker develops signs or symptoms associated with lead toxicity; and
- before a worker restarts work following medical removal.

Biological Monitoring

Baseline blood levels is a requirement prior to the start of all projects contaminated with lead. The purpose of biological monitoring is to identify workers with elevated blood lead levels. The data from biological monitoring is objective evidence of a worker's body burden from lead exposure and this data can be used to follow changes in worker exposure.

Blood lead and zinc protoporphyrin (ZPP) or free erythrocyte protoporphyrin (FEP) shall be monitored for those workers exposed to lead. In general, workers in high-risk occupations shall be monitored as often as needed to prevent adverse health effects.

Recordkeeping

The Contractor shall maintain any employee exposure and medical records to document ongoing employee exposure, medical monitoring and medical removal of workers. This data provides a base to properly evaluate the employee's health.

Employers shall properly record cases on their OSHA form 300 when the worker:

- has a blood lead level that exceeds 50 mg/dl;
- has symptoms of lead poisoning, such as colic, nerve damage, renal damage, anemia, or gum problems; or receives medical treatment to lower blood lead levels or for lead poisoning.

In addition, Contractor employees, their designated representatives, and WA STATE DEPT. OF OCC. SAFETY & HEALTH shall be provided access to exposure and medical records.

PROJECT RESPIRATORY PROTECTION PROGRAM

To assist the program administrator, certain aspects of the program will be delegated to others according to the form Organizational Responsibility Chart. All supervisors are responsible for carrying out the program for employees under their supervision.

Program Elements**Program Administration**

Our Respiratory Protection Program begins with this written plan describing the procedures that we practice.

Just as our business is dynamic and needs periodic review, so does our Respiratory Protection Program. Suggestions and comments from employees about exposure conditions, respirators, personal health changes and training issues will be addressed promptly. Also we will conduct a formal annual audit of the entire program. The form Respirator Program Evaluation Worksheet of the Guide is used to document the evaluation and to record recommended changes.

Workplace Exposure Assessment & Ongoing Surveillance

Our first task in the workplace is an exposure assessment to identify harmful airborne contaminants, their extent and magnitude, and how to control them.

We must ensure that employee exposure does not exceed the permissible concentrations specified in the WAC 296-155-17317. This often requires a person who is professionally trained to evaluate the processes and procedures and to conduct exposure monitoring. Consequently, we may need to seek advice and assistance from our Workers' Compensation Insurance carrier or an industrial hygiene-consulting firm to complete the exposure assessment.

Results of these evaluations will be summarized and a record maintained in the jobsite project files. Additional evaluations are necessary if exposures change due to new materials, process changes or other conditions increasing the degree of employee exposure or stress, and these evaluations will be added to the form.

Respirator Selection

In those instances where engineering and administrative means do not achieve the desired control, or in the case of an emergency, respirators must be worn. Different types of respirators are available for a variety of applications, and we must ensure that the proper NIOSH/MSHA approved respirator is selected and used for the kind of work being performed and hazards involved.

When respirator selection is complex, we may have to seek professional assistance. Otherwise, we will use selection criteria in Appendix F, protection factors in Appendix G, and criteria listed under Respirator Selection of the Elements of an Effective Respiratory Protection Program, in the Guide to Respiratory Protection at Work. The manufacturers recommended use and application documentation will govern the scope a respirator will cover.

The form Respirator-Selection Information is to be completed to document the selection process and record the choices.

Respirator Care

Respirators shall be maintained, stored, and cared for in accordance to the manufacturer's recommendations.

Evaluating Respirator Wearer Health Status

Even with appropriate equipment and adequate training provided, an employee's health status must be considered before allowing respirator use. The wearer's physical and medical condition, duration and difficulty of the tasks, toxicity of the contaminant, and type of respirator all affect an employee's ability to wear a respirator while working. Also, respirators are uncomfortable and may reduce the wearer's field of vision. Therefore it is prudent for us to evaluate the employee's physical ability to wear a respirator. Construction work or work with lead, asbestos, cotton dust and certain carcinogens make this evaluation mandatory.

Each respirator wearer will be given a medical evaluation. The project will make appropriate arrangements with a proper medical organization to perform the evaluation. A Medical Evaluation and Work Restriction report as well as a Respiratory Protection Notification form allowing use of a respirator is to be obtained for each individual. The form and report approving use are to be on hand at the project site prior to an individual using a respirator.

Respirator Fit Testing & Assignment

After we select the appropriate type of respirator and certify the employee's ability to work while wearing a respirator, we will conduct a qualitative fit test to choose the best fitting face piece and determine the specific brand, model and size for each employee.

Quantitative fit is the preferred alternative to qualitative fitting. Although it requires specialized equipment and trained personnel, some exposures, for example asbestos, require a quantitative fit test.

Qualitative fit testing and assignment will be performed by a firm qualified to perform the testing and at a minimum Comply with the procedures in Appendix C of the guide. A Qualitative Fit Test Record form indicating successful completion of the test will be obtained from the firm providing the fit testing. The form will record test result and document respirator assignment

Training

Once the employee is fitted with the correct respirator for the task, we want to ensure the individual is thoroughly trained in the need, use, limitations, inspection, fit checks, maintenance and storage of the equipment. Ordinarily this training is initiated during the fit test and will at a minimum meet the training described in Appendix E of the Guide.

The manufacturer with the equipment provides detailed instructions for use and care of the respirator, and this information is to be used in the training. The form Respirator User Training and Education is a guide and record of training received.

Record keeping

We document each major component of our program to: verify that each activity has occurred; evaluate the success of the program; and satisfy regulatory requirements.

These records include the written program, exposure determination, respirator selection, physical status evaluation, and fit testing and respirator assignment, training form and program assessment.

VGC
CONSTRUCTION MANAGEMENT LEAD COMPLIANCE PROGRAM

PROGRAM EVALUATION WORKSHEET

Name:

Position:

Date:

	Yes	No
1. Are proper types of respirators selected?	_____	_____
2. Are employees wearing respirators properly trained?	_____	_____
3. Are correct respirators selected?	_____	_____
4. Are respirators worn properly?	_____	_____
5. Are respirators properly maintained and cleaned?	_____	_____
6. Are respirators properly stored?	_____	_____
7. Has employee been fit tested?	_____	_____
8. Are employees records maintained?	_____	_____
9. Is employee being periodically screened medically to determine whether he/she can Safely wear a respirator?	_____	_____
10. Has air contaminant monitoring been conducted for raw material or production process changes?	_____	_____

Comments:

Signature

RESPIRATOR USER TRAINING & EDUCATION

1. The respirator user will be instructed in the nature of the hazards for which the respiratory protection is being provided, and informed of possible consequences that if exposed to the hazard without adequate protection. Health hazard guidelines are contained in the training program and Material Safety Data Sheets. The respirator user will also be made aware that every reasonable effort is being made to reduce or eliminate the hazard.
2. Instructions will cover the respirator's capabilities and limitations, and the function and possible malfunction of each part of the respirator.
3. The respirator user will be instructed in his/her responsibility for equipment inspection prior to use. Appropriate points of inspection will be included. Each respirator user will use his/tier respirator during this part of the training, and learn how to obtain replacement parts or new equipment.
4. Instruction will be given on donning methods, proper fitting and adjustments of the equipment.
5. Instruction and training will cover respirators storage, cleaning and maintenance, and methods to assure adequate fit and function of the respirator each time it is donned.

TRAINING RECORD

Name	Department	Respirator Type	Use	Date	Initial
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Trainer's Signature - and initial all dates

VGC

RESPIRATOR SELECTION SUMMARY

Location and / or Operation #)	User Name	Respirator Mfr., model, size, type	Air Contaminants	Respirator Selection Criteria (I.D.
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

SILICA DUST

Scope and Application

Silica is the main component found in sand, quartz and granite rock. Excessive amounts of silica dust may be generated during activities such as: sandblasting, rock drilling, roof bolting, foundry work, stonecutting, drilling, quarrying, brick/block/concrete cutting, gunite operations, lead-based paint encapsulate applications, asphalt paving, cement products manufacturing, demolition operations, hammering, and chipping and sweeping concrete or masonry.

Silica can cause silicosis, a serious and sometimes fatal respiratory disease. Silicosis develops from breathing silica dust on the job. It occurs in direct proportion to the percentage and the concentration of silica in the air and to the duration of exposure. The tiny hairs, mucous membranes, and other protective mechanisms of your upper respiratory tract and bronchi stop large silica particles, but the smallest dust particles are carried to your airways. These silica particles become lodged in the tiny air sacs of the lungs, which can prohibit oxygen from getting into the blood.

Symptoms of silicosis can either be chronic, appearing after 5 to 10 years of being exposed to invisible silica dust without using respiratory protection, or symptoms can be acute appearing after only a few weeks of working in thick clouds of silica without respiratory protection. Early stages of silicosis often go unnoticed but continued exposure may cause shortness of breath, possible fever and sometimes-bluish earlobes or lips. Fatigue, extreme shortness of breath, loss of appetite and chest pain occur down the road. Respiratory failure can occur, which can cause death.

Silica is also capable of causing lung cancer with prolonged heavy occupational exposures. Workers with impaired lung function due to silica exposure are also more susceptible to other respiratory disease such as tuberculosis.

Requirements

In order to determine whether a product contains silica, the Material Safety Data Sheet shall be obtained and inspected by the Contractor. In the event silica is present in the products, the following safe working procedures shall be followed to eliminate or control silica dust exposure:

1. Contractor initiated engineering controls shall be utilized to eliminate the hazard whenever feasible.
2. Contractor initiated air tests or historical data are required to confirm the controls in place are working and whether PPE is or is not required.
3. After working with products that contain silica, each individual will be required to thoroughly wash their hands before eating, drinking or smoking. Eating, drinking or smoking near silica is strictly prohibited.
4. Wet down dry materials and surfaces before cutting, chipping, grinding, sanding, sweeping or cleaning. All block cutting operations shall be performed by the wet cut method.
5. Use power tools with built-in dust extraction units to capture the dust before it is released into the air.
6. For abrasive blasting, replace silica sand with safer materials. The National Institute for Occupational Safety and Health highly discourages the use of sand or any abrasive with more than 1% crystalline silica in it. Garnet, slags, and steel grit and shot may be good substitutes.

Respiratory Protection

Dust masks, or particulate respirators are not an acceptable respiratory protective measure. A minimum half face respirator will be required. The type of respirator needed will depend upon the silica concentration levels and shall be determined by the Contractor.

Medical surveillance/screening requirements are required for all employees exposed to silica operations requiring respiratory protection and shall be the responsibility of the Contractor.

Training

All individuals working with silica containing products shall be trained by the Contractor in the hazardous effects of being exposed to silica dust.

All individuals performing tasks involving sanding, chipping, grinding, scraping, cutting, crushing or drilling are required to be trained in the proper use of such tools, in addition to the proper methods of reducing or eliminating silica dust.

Each individual required to wear respiratory protective equipment will be trained in accordance with the Contractor's respiratory protection program which shall meet at a minimum the project's program. The Contractor is solely responsible for such training and all costs associated with it.

Record keeping

All training that takes place-involving silica needs to be documented with the type of training and the signatures of all that attended the training. Contractor training needs to be updated on an annual basis.

SECTION D
MEDICAL ISSUES

FIRST AID/CPR

Scope and Application

All Contractors shall have at least one person certified in first aid and CPR at the job site at all times. Contractors are solely responsible to ensure the required and proper training of their employees.

Contractors shall provide an ANSI (Z 308.1-2014) approved first aid kit on this job site. The Contractor site superintendent is responsible for ensuring that the kit is properly stocked and maintained, and inspected weekly per OSHA requirements. Only trained first aid personnel shall administer first aid at the job site.

This first aid kit will also contain equipment and materials to be compliant with 29 CFR 1910.1030 - Blood borne Pathogens, including mouth-to-mouth resuscitation devices, powdered bleach, and latex disposable gloves.

Contractors shall be responsible to supply their employees with appropriate amounts of potable water.

ON SITE MEDICAL ASSISTANCE (IF APPLICABLE)

Scope and Application

VGC will **not** have an onsite medical facility beyond first aid stations. If the injury is severe outside medical assistance shall be called by dialing **911**. After **911** is called, the Contractor shall immediately contact VGC for assistance.

RETURN TO WORK

Scope and Application

In order to provide prompt quality medical services and to return injured employees back to work on the project as soon as possible, each Contractor should establish a “light duty” or “restricted duty” policy for their employees in the event they are injured on this project and cannot perform their normal daily duties. This applies to all Contractors on this project.

Restricted Duty shall be an assignment provided to an employee who, because of a job-related injury or illness, is physically or mentally unable to perform all or any part of his/her normal assignment during all or any part of the normal workday or shift.

Procedures

1. All work related injuries must be reported to your supervisor and VGC.
2. If any employee has any doubt as to where to go for medical treatment for a job-related injury, they must contact VGC.
3. VGC policy is to return Contractor employees to work as soon as possible after a job-related injury or illness has occurred. All possible opportunities will be considered to provide Restricted Duty Assignments.
4. When an injured employee returns to work, all physical and mental limitations must be evaluated so that additional injury or aggravation does not occur. The safety of other employees working with the injured individual must also be considered.
5. Injured employees may return to work on Restricted Duty under the following circumstances:
 - The employee's attending physician has determined the physical restrictions.
 - The contractor has a task that can be assigned that meets the restrictions.
 - VGC Managers, Supervisors, and Foreman are informed of the restrictions.
6. The employee must receive full medical release from a physician before resuming normal work activities, which would violate medical restrictions.
7. No employee on Restricted Duty will be allowed to work more than forty (40) hours per week.
8. The injured employee will remain on the project where the injury occurred while on restricted duty.

SUBSTANCE ABUSE PROGRAM

ALL EMPLOYEE'S WORKING ON VGC will be Drug screened prior to working on VGC sites.

Purpose

To help insure a safe, healthy, and productive work environment for the employees of VGC and others on our work sites or Company property, to protect Company property and to insure efficient operations, VGC has adopted a policy of maintaining a workplace free of drugs and alcohol. This policy restricts certain items and substances from being brought onto, or being present on Company premises or work sites or individuals from reporting to work or working with measurable levels of illegal and non-prescription drugs, alcohol and other controlled substances which may affect their ability to perform work safely.

Individuals under the influence of drugs or alcohol on the job pose serious safety and health risks not only to the user, but also to all those who surround or come in contact with the user. Therefore, VGC asks for your full cooperation and support in implementing this policy.

Any current individual who feels that he or she has a drug or alcohol related problem is encouraged to seek professional help. Any individual voluntarily seeking such help will be referred to professional assistance by VGC Construction or their employer and any such action by an individual shall be kept strictly confidential.

We will accept the substance abuse testing cards provided by the respective individual's company, trade union, or associations pending our review and acceptance of the employee's company or trade union substance abuse program. If accepted, the testing card will only count towards the "pre-employment" or "initial" test. After this point, the individual will be part of our permanent program falling under all of the guidelines, including post- incident, probable cause, re-employment, medical examination, annual, and random testing depending upon the size of each particular project.

Scope and Application

This policy applies to all VGC Construction employees, contractors, subcontractors, and construction managers, and others working on any VGC Construction project or on VGC property including but not limited to craft personnel, management personnel, temporary personnel, or consultants. The substance abuse screening policy includes pre-employment, post- Incident, probable cause, re-employment, medical examination, annual, and random testing depending upon the size of each particular project.

Applicable Definitions

- Medical Review Officer- A licensed physician responsible for receiving laboratory results generated by a substance abuse screening program who has knowledge of substance abuse disorders and who received appropriate medical training to interpret and evaluate an individual's medical history and other relevant biomedical information. The MRO is certified by either the American Medical Association (AMA) or the American College of Occupational and Environmental Medicine (ACOEM).

- National Institute on Drug Abuse (NIDA)- A federal government organization, which certifies substance abuse laboratories.

- Negative Test- A negative screening obtained if: (1) the screen test indicated the absence of legal or illegal substances in excess of the screen limit, or (2) the screen test indicates the presence of legal or illegal substances in excess of the screen limit but the confirming test indicates the absence of legal or illegal substances in excess of the confirming limits.
- Non-Negative Test (Alcohol)- A Non-Negative test result is obtained if substance abuse tests indicate the presence of alcohol at or in excess of the test limit of 0.04% blood alcohol content.
- Non-Negative Test (NIDA 5-Panel Screen) - A Non-Negative test result is obtained if the substance abuse 5-panel test results indicated the presence of illegal substances as verified by the designated medical staff.
- Non-Negative Test (NIDA 10-Panel Screen) - A Non-Negative test result is obtained if: (1) substance abuse test results indicated the presence of illegal substances in excess of both the screen and confirmation limits, as verified by a Medical Review Officer, and (2) the Medical Review Officer has determined that the test results do not stem from the use of prescription counter medicines, food, or any cause than the use of illegal substance.
- Pre-Employment- Screening of prospective individuals to ascertain whether an applicant is capable of safely performing their duties and of meeting the prerequisites for employment on any VGC Construction project.
- Probable Cause- Probable cause shall be defined as those circumstances, based on objective evidence about the worker's conduct in the workplace, that would cause a reasonable person to believe that the worker is demonstrating signs of impairment due to sickness, alcohol, or other drugs. In most case, the objective evidence giving rise to probable cause will be observed by at least two individuals, ideally a VGC Construction employee and an employee of a contractor, but recognizing that in certain circumstances the observation may be made by only one individual. Examples of objective evidence include when a worker shows signs of impairment such as difficulty in maintaining balance, slurred speech, or erratic, or atypical behavior.
- Random- VGC Construction, upon its discretion, upon notice to any contractor, subcontractor, or individual, requires periodic substance abuse screenings of the employees of that contractor, subcontractor, or individual assigned at any VGC Construction workplace.
- Annual- VGC Construction, upon its discretion, upon notice to any contractor, subcontractor or individual, may require an annual drug screen from all individuals in employ at any VGC Construction workplace.

Rules

1. Possessing, manufacturing, distributing, dispensing, and/or the use of illegal drugs, drug paraphernalia, unauthorized controlled substances and other intoxicants on or in Company property, projects, or other work sites is prohibited and may result in disciplinary action up to and including suspension or termination.
2. Reporting to and being at work under the influence of illegal drugs or unauthorized controlled substances is prohibited. Reporting to and being under the influence of a quantity of alcohol or other legal intoxicant which can adversely affect the individual's performance or the safety of the individual or those surrounding the individual is also prohibited. Violation of this rule may result in disciplinary action up to and including suspension, barring, and/or termination.
3. Legally prescribed drugs may be permitted on or in VGC property or a work site provided that the drugs are prescribed by an authorized medical practitioner for current use by the person in possession of the drugs. Reporting to and being at work with a quantity of prescribed or over-the-counter drugs, where such use prevents an employee from performing the duties of the job, or poses a safety risk to the employee and/or other persons or property is prohibited. If an employee knows of any possible hazardous effects of taking or using a valid prescription or over-the-counter drug when on Company property or work site he or she shall notify his or her immediate supervisor, who in turn will notify the business unit's Operations Manager, if in the unit's office, or the highest ranking VGC employee, if on a work site or project. The employee may remain on his or her job or may be required to leave his or her work site or other appropriate action may be taken as determined by VGC management to maintain the safety of the environment for the employee and others. Failure to notify supervision as required by this policy may result in disciplinary action.
4. Any individual who voluntarily reports that he or she is in violation of this policy will be encouraged by management to seek professional help to overcome his or her problem. A list of professional service institutes is available to any employee upon his or her request and such request shall be kept confidential by the employee's supervisor, management, and the Human Resource Department.
5. Any individual who is found to be in violation of this policy may be subject to discipline up to and including Termination.
6. Conduct constituting grounds for drug testing may also subject the employee to discipline up to and including termination.
7. The possession or use of alcohol on or in Company property or work sites is prohibited except for special circumstances or events which are authorized by an officer-level Manager of the Company.
8. Nothing set forth in this policy shall be construed as a limitation upon the right of the Company to terminate an employee at any time and upon any reason and the right of the employee to resign at any time for any reason.

Testing Requirements**VGC Construction Employees in all phases of work**

Any employee will, to the extent consistent with applicable federal, state and local laws, be requested to undergo a diagnostic test for the use of illegal and non-prescription drugs, alcohol or other substances under any of the following or other circumstances which may be determined by Company management:

1. Pre- employment-- Prior to employment, after a conditional offer of employment, or prior to an assignment to a work site.
2. Post incident-- If involved in a workplace incident resulting in personal injury to the individual or others working in the area, or damage to property or workplace, or circumstances which could have resulted in personal injury to either the employee or others, or damage to property, when there is reasonable suspicion to believe that the incident has occurred due to drug or alcohol use.
3. Probable cause-- When there is reasonable suspicion to believe that an employee is under the influence of illegal drugs, unauthorized controlled substances, alcohol or other intoxicants while on the work site or Company property during work hours, or that the employee has reported to work under the influence of illegal drugs, unauthorized controlled substances, alcohol or other intoxicants which could affect the safety of the individual and/or others.
4. As part of any periodic medical examination provided or required by the Company.
5. Upon re-employment following the employee's stay at a rehabilitation center for drug or alcohol abuse.
6. As required by VGC /Owner contract agreements or applicable government regulations.
7. Random-- When the Company, upon its discretion, requires periodic screenings.
8. Annual-- When the Company, upon its discretion, requires annual screenings.

Testing Procedures

1. All employees or agents of contractors hired to perform any of the work under any of the contracts or who participate in any fashion under any of the contracts, or who work in unit offices will be required to participate in a Drug test administered by a VGC designated medical representative prior to commencing any type of work.
2. The drug screen shall consist of a five panel "test cup" or certified equivalent as the initial test. If a confirmed positive is taken from this procedure, the individual may elect to leave the VGC premises or have the sample sent off to an approved laboratory for further ten panel screening. In any event, the individual shall not be permitted to commence any type or fashion of work on the VGC property, unless the ten panel results are returned negative. Upon these negative results, the individual may assume work on the project but still is subject to all sections of this policy.
3. No individual or personal search, urine drug test, or blood test will be conducted without the individual's consent. The individual shall be required to sign a consent form. Refusal to give consent shall be cause for permanent dismissal from VGC property.
4. A "hand held" Breathalyzer unit, similar to those used by law enforcement for field sobriety tests, will be used for the alcohol screen.

5. All 5 panel substance abuse screenings shall come under the control and supervision of a physician with confidentiality protected in accordance with state law and the "American Medical Association's Code of Ethical Conduct for Physicians Providing Occupational Medical Services" and/or the Medical Review Officer manual, as developed by the National Institute on Drug Abuse (NIDA).
6. If an employee tests "non-negative" they shall have the right to have the secured portion of the urine sample independently re-tested by a NIDA certified laboratory of their choice at their own expense. If the independent re-test is "negative," the employee shall be allowed to submit results to the VGC approved Testing Agency for review. If it is found that the first result was incorrectly reviewed the employee shall resume work immediately and be reimbursed by their immediate employer for the costs of such independent test.
7. Confirmation of positive results under the five panel screen shall be conducted using the approved test cup method or equivalent as recognized by the U.S. Department of Health and Human Services.
8. A "non-negative" substance abuse screen shall mean test levels on both the screening test and confirmatory test that are recognized by the "U.S. Mandatory Guidelines for Federal Workplace Drug Testing Programs". A "non-negative" alcohol test result shall mean blood alcohol levels are officially recognized as demonstrating alcohol intoxication at or in excess of .04.
9. If an individual tests positive under the five panel screen and the sample is sent on for the ten panel screen and it returns negative, the individual's immediate employer shall reimburse the individual for any lost time which may have occurred.
10. Only the VGC approved substance abuse screening testing results shall be accepted, unless otherwise stated in this policy. No other programs, results, or procedures are accepted in lieu of this policy unless approved by VGC management.
11. Individuals who are terminated from working with or at VGC after subsequent to a non-negative test can be returned to work only if the following criteria is met:
 - The individual successfully completes a Certified/Recognized Substance Abuse Rehabilitation Program at their own expense or at the expense of their employer if such employer has an accepted program in place.
 - The employer submits a written request to the Unit Director of Safety and Loss Control for approval prior to his/her return to work. A copy of the certificates of completion must be attached.

Searches

VGC reserves the right to search any person entering the work site or Company property and to search any property equipment and storage areas for illegal drugs, drug paraphernalia, unauthorized controlled substances, alcohol or other intoxicants. This shall include, but is not limited to, clothing, personal effects, vehicles, buildings, plant facilities, offices, parking lots, desks, cabinets, lockers, closets, lunch and tool boxes, and equipment.

Refusal

Any individual who refuses to submit to a diagnostic test, as permitted by law and/or an applicable collective bargaining agreement, or to a search, may be subject to disciplinary action up to and including suspension or termination. Any individual refusing to submit to a search may be denied access to, or be asked to, immediately leave any work site or Company property, and

his or her employer shall be notified of such action.

Cost of Testing

If an individual is requested by an authorized representative of the Company to submit a substance abuse test, VGC will pay for the cost of that test and the confirmatory test of the same specimen.

Notification of Authorities

VGC Construction will report information concerning possession, or distribution of any illegal drugs or unauthorized controlled substances to law enforcement officials, and will turn over to the custody of law enforcement officials any such substances found during a search of an individual or property. VGC Construction will cooperate fully in the prosecution and/or conviction of any violators of the law.

Employees Convicted of Drug Offences

In accordance with federal law H.R. 5210, "The Drug Free Workplace Act Of 1988" each individual must, as a condition of continued employment on a federal contract or grant notify his or her "Operations Manager" on any conviction of a criminal drug offense within five (5) days after said conviction. VGC Construction will notify the Federal Contracting Agency of criminal drug convictions within 30 days after VGC has received notice. Any employee so convicted must satisfactorily complete a drug rehabilitation program and agree to periodic testing any time thereafter. Failure to report such a conviction and/or participate in a drug rehabilitation program may result in disciplinary action up to and including suspension or termination.

Cooperation with VGC Construction

All individuals, as a condition of continued employment with VGC or on a VGC project, have an obligation to cooperate with any VGC investigation of drug or alcohol abuse in the workplace. Failure to cooperate with any such investigation may result in disciplinary action up to and including suspension or termination.

THIS POLICY IS NON-DISCRIMINATORY AND APPLIES EQUALLY TO ALL EMPLOYEES, OUTSIDE INDIVIDUALS WORKING WITH VGC CONSTRUCTION, AND OFFICERS OF THE VGC CORPORATION AND ITS SUBSIDIARIES.

Penalties

- 1) Possession of illegal drugs, unauthorized controlled substances or drug paraphernalia on VGC Construction property or work site, as set forth in the Drug & Alcohol policy:
 - First Offense: Termination.
- 2) Distribution of illegal drugs, unauthorized controlled substances or drug paraphernalia, as set forth in the Drug and Alcohol policy on company property or work site:
 - First Offense: Termination
- 3) Use of illegal drugs or unauthorized controlled substances:
 - a) If individual voluntarily asks for help: initially no suspension or termination- individual will be given aid on where to seek help to overcome the problem. Thereafter, the employee may be subject to disciplinary action or termination.
 - b) If discovered by actions and/or testing:
 - i) First offense: Immediate removal and/or termination from the work site.
 - VGC Construction employees will be afforded an opportunity to enter and actively participate in a rehabilitation program such as Smithers Institute or another rehabilitation program paid for by the VGC. The individual may be eligible for rehire if he or she provides proof of completion of the program and that he or she is currently drug free.
 - Employees of subcontractors, suppliers, etc. will be barred from entering VGC Construction property with notice being sent to their employer.
 - ii) Second Offense: (VGC Employee Only) Termination. An Individual who enters a formal inpatient rehabilitation facility for a minimum of four (4) weeks, completes the program, becomes drug free and agrees to periodic testing to confirm this may be eligible for rehire.

- iii) Third Offense: (VGC Employee Only) Termination.
- 4) Reporting to work under the influence of alcohol:
- a) First Offense: Immediate removal and/or termination from the work site
 - VGC Construction employees must enter a rehabilitation program such as Alcoholics Anonymous, actively participate in such a program and provide written proof of the same, for eligibility for acceptance back on the work site.
 - Employees of subcontractors, suppliers, etc. will be barred from entering VGC Construction property with notice being sent to their employer.
 - b) Second Offense: (VGC Employee Only) Termination. An individual who enters a formal inpatient rehabilitation program for a minimum of four (4) weeks, completes the program, becomes alcohol free and agrees to remain alcohol free and further agrees to periodic testing to confirm this may be eligible for rehire.
 - c) Third Offense: (VGC Employee Only) Termination.
- 5) Unauthorized possession of alcohol on company premises, excessive absenteeism, erratic job performance, frequent incidents, errors in judgment.
- a) VGC Construction employees will be confronted by an officer-level supervisor accompanied by a representative of the Human Resource Department and/or the employee's immediate supervisor and asked if he or she has a problem. If the employee volunteers that a problem with the drugs or alcohol exists, the employee will be given help in finding an outpatient program to overcome the problem. If the employee denies having a problem, a letter will be placed in the individual's file regarding his or her behavior and will be considered a warning. If the warning is ignored, the employee may be subject to further disciplinary action, up to and including termination.
 - b) Employees of subcontractors, suppliers, etc., will be confronted by a senior member of project staff accompanied by a representative of the employee's employer and, if applicable, a union representative and asked if he or she has a problem. If the employee volunteers that a problem with the drugs or alcohol exists, the employer will voluntarily withdraw the employee from the project. The employee will then follow that employer's policies on substance abuse. If the employee denies having a problem, a letter will be placed in the employer's file regarding the individual's behavior and will be considered a warning. If the warning is ignored, the employee may be subject to further disciplinary action, up to and including termination. If voluntarily removed from the project, the employer may submit, in writing, a request for the employee's reinstatement on the project which will include supporting evidence as to why VGC should permit his/her return.
 - c) Notwithstanding the stated penalties, VGC reserves the right to terminate an employee or individual at will, with or without cause.

Confidentiality

All substance abuse testing will be performed with concern for each employee's or individual's personal privacy, dignity, and confidentiality. Each individual will be required to sign a consent and chain of custody form, assuring proper documentation and accuracy. VGC Construction employee records shall not be maintained in personnel files. Records may be kept at the project level for that particular project. All actions taken under this policy and program will be confidential and disclosed to only those with a need to know.

SECTION E
APPENDICIES