Site Safety and Health Plan

McMurray Ops Center Renovations
300 Galley Rd, McMurray, PA 15317

MacBracey Corporation

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1. **Safety Policy Statement**

It is the policy of MacBracey Corporation to provide a safe and healthful working environment for our employees and those of other employers working in the area at all times. We believe that safety begins at the top by providing resources, education and a positive example.

MacBracey Corporation understands that for safety to succeed, all employees must understand the hazards associated with work and techniques and resources available to limit those hazards. We encourage an environment of open discussion on any safety item regardless of the complexity of the job or the job function of the employee.

Brooke Hughes oversees the day to day operations on this project. To ensure compliance with applicable safety requirements, MacBracey Corporation contracts with One Stop Safety Consulting, LLC to oversee the safety program. This contract includes site safety as well as classroom instruction and program development.

This policy is of utmost importance to us and we ask for your cooperation in making it effective.

Brooke Hughes

Brooke Hughes
MacBracey Corporation

2. **Responsibilities**

It is the desire of Management to protect employees from accidental injury while performing work for our organization. We consider employees to include those working for our organization as well as those who may be exposed to operations being conducted on our behalf.

Management

1. Sign safety policy and communicate to each employee.
2. Communicate safety expectations as they relate to this project to all employees involved.
3. Provide training as it relates to all planned activities.
4. Enforce MacBracey Corporation safety requirements.
5. Provide necessary Personal Protective Equipment to employees when required.
6. Review accidents and supervise the investigation process to ensure proper corrective actions are taken.
7. Maintain an open line of communication to employees.
8. Attend all project related safety meetings.
9. Notify site safety personnel of any issues observed which could be hazardous whether they affect MacBracey Corporation employees or not.
10. Provide Subcontractor Safety Requirements to all companies conducting work on our behalf.

Employees & Subcontractors

1. Complete OSHA required Training prior to commencement of work.
2. Review and follow all safety rules.
3. Notify management of any hazards identified.
4. Report all accidents immediately regardless of the severity.

3. **Orientation**

Each employee will be provided an orientation specific to the jobsite activities and safety rules. Orientation will include but not be limited to the following:

- Review of the company safety policies and work rules.
- Distribution of Personal Protective Equipment and instruction on proper usage, storage, cleaning and replacement. PPE used includes but may not be limited to:
    - Respirators
    - Hand Protection
    - Eye Protection
    - Body Protection
    - Foot Protection
    - Fall Protection
    - Hearing Protection
- Review of emergency procedures.
- Location of First Aid.
- Review of accident and hazard reporting procedures.
- Housekeeping rules.

Mandatory pre-work safety meetings will be held periodically. Dates and times of meetings will be given to subcontractors by the Superintendent.

4. **Work Rules**

1. All accidents and injuries, regardless of severity are to be reported immediately to management so prompt first aid and corrective actions can be implemented.

2. Safety eyewear is to be worn at all times when using power tools, striking tools or working overhead or working near these activities. All glasses must be ANSI Z87 approved.

3. Hard hats are to be worn by all personnel and visitors when work is being conducted overhead or outside of the building. Hard hats must meet ANSI Z89.1 Class E Requirements for head protection. Hard hat requirements may be waived when working under finished ceilings.

4. NIOSH Approved respirators are to be worn by employees when conditions warrant.

5. Personal Fall Arrest Systems (PFAS) are to be used by all workers who may be exposed to a fall. When exposure exists, employees are to be tied off at all times.

6. All workers are required to sturdy leather work boots. Where the possibility of objects falling onto the feet of workers exists, safety toe boots are required. At no time are tennis shoes permitted on the job site.

7. Hand protection is to be worn by all employees when handling materials with sharp edges, while welding or working with hazardous chemicals.

8. No Smoking is permitted except in designated Smoking Areas approved by the Project Manager.

9. Compressed gas cylinders are to be secured in an upright position at all times.

10. Seat belts are to be worn at all times when in a vehicle.

11. Employees are not to operate any machinery or equipment unless properly trained. Proof of training shall be provided upon request to MacBracey safety or the site Superintendent.

12. All machine guards shall be kept in place while machinery is in use. Tampering or removal of guards is prohibited.

13. Hand tools are to be used only for their intended purpose. Misuse of tools can lead to injury, equipment damage and disciplinary action.

14. Horseplay will not be tolerated under any circumstance while on the job site.

15. Workers are not permitted to possess or be under the influence of alcohol or drugs on property.

16. Any employee observing an unsafe act or condition is to report this to management immediately so corrective action can be taken to remedy the issue.

Workers found to be in violation of these rules are subject to disciplinary action ranging from a written warning up to removal from the site. Any employee found to be flagrantly violating these rules is subject to immediate and permanent removal from the site.

5. **Hazard Communication**

A survey of hazardous materials has been conducted. A list and a corresponding SDS for each item listed is available in Superintendents trailer / office or the foreman's truck. All SDSs are the most recent copies that have been provided by the material supplier.

The location of SDSs for chemicals brought on site by subcontractors is to be provided to the superintendent prior to their use.

Secondary containers are not typically permitted. In the event they would be used, MacBracey Corporation has adopted the HMIS Labeling system to ensure the chemical identity and all appropriate hazard warnings are included on the label.

Employees are prohibited from bringing any chemical into the workplace without prior authorization from management.

6. **Fall Protection**

Work on this project is not expected to include work at heights beyond A-Frame ladders, bakers scaffolding under 10' in height and scissor lifts. In the event conditions change, the following process is to be immediately implemented.

When exposed to fall hazards that cannot be protected with guard rail systems, employees are required to tie off 100% of the time or use positioning devices. Fall hazards can include work on elevated platforms, leading edges, near unprotected sides and on scaffolds. A workspace is considered to be a fall hazard any time work is conducted in excess of six (6) feet above a lower surface or scaffolding is used in excess of ten (ten) feet above a lower surface.

Employees must ensure anchorage points are adequate to support at least 5,000 pounds per person for fall protection or 3,500 pounds for positioning systems. If a worker is unsure of the proper anchorage location, they are required to notify management who will determine a safe anchorage point.

In rare instances, traditional fall protection systems may not be feasible. In these cases, Controlled Access Zones (CAZ) or other Site Specific Fall Protection Plans may be utilized. Prior to the creation of a CAZ, the Superintendent and Safety Consultant must first evaluate the proposed work area to determine if other options are available.

Prior to the commencement of work, all employees who may be required to wear fall protection will receive training on the proper use of PFAS's including:

- Proper donning of equipment
- Care and maintenance
- Limitations of equipment
- Equipment selection

Subcontractors must provide documentation of this training to the Site Superintendent or MacBracey safety upon request.

7. Respiratory Protection

When the potential for harmful airborne substances is present, encountered or created during the scope of work, the preferred control method is to engineer the hazard out of the operation. This could include ventilation, isolation, substitution or elimination.

Silica dust hazards during this project shall be controlled using tools with integral dust collection systems or wet systems. All silica containing debris shall be wetted before being swept.

N95 dust masks shall be made available for voluntary use or to enhance employee comfort while working around general nuisance dust. Should an employee decide they would like to wear an N95 respirator voluntarily, they will be provided with a copy of OSHA's Appendix D of the Respiratory Standard. Employees are prohibited from using respirators brought from home or purchased without company approval.

MacBracey employees are not trained or authorized to wear respirators beyond dust mask respirators. Employees are prohibited from working in hazardous atmospheres. All employees have the authority to immediately stop work if they believe respiratory hazards are being created by coworkers or other trades. MacBracey management and safety shall immediately investigate all reported concerns.

Subcontractors shall provide proof of training and fit testing to the Superintendent if respirator usage is necessary for their workers.

8. Ladders

Work while using ladders can create a serious hazard to employee safety. In addition to falls, employees and the public can be struck by falling objects. This policy is designed to address both types of hazards.

During work, employees may be required to use step ladders, straight ladders and/or extension ladders. It is of great importance that the proper ladder is always used and that it is used as designed.

All ladders used must have a minimum working capacity of at least 250 pounds.

Prior to the commencement of work, employees will be provided training on this policy, the types of ladders that they may need to use and safe practices that they must follow.

Under no circumstance is an employee allowed to utilize a ladder for anything other than its intended purpose. This includes but is not limited to using straight ladders as walkways or planks and using step ladders as straight ladders (unless designed to do so).

Ladders must always be inspected prior to use. If found to be defective, ladders may not be repaired or altered and must be destroyed prior to disposal.

While ascending or descending ladders, employees must always maintain three points of contact and face the ladder. Tools and equipment are not to be carried up a ladder while climbing.

When working from a ladder, employees must always be aware of their body position. To reduce the likelihood of a fall, employees must always keep their belt buckle between the uprights of the ladder. If work cannot be reached, the ladder must be moved.

When using ladders to reach platforms, the ladder top must extend at least three (3) feet above the upper surface. Ladders must also be secured at the top to prevent accidental moving. Ladders shall be positioned at an angle of 4:1.

Defective ladders are to be removed from service immediately and tagged. Employees are not permitted to repair ladders. Job made ladders are not to be used on this project.

9. **Material Handling**

Manual material handling accidents are one of the most common sources of workplace injury. MacBracey Corporation encourages the use of material handling devices whenever feasible. Devices include items such as forklifts, cranes, carts and hoists. In the event a device is not available or feasible, team lifts are encouraged. Employees are not permitted to lift an item over 70 pounds by hand without assistance.

In the event a forklift is used, only operators who have completed forklift training and have a valid training card may operate the vehicle. Operators are never allowed to carry people, lift loads over people or travel with the forks raised.

All suspended loads must be controlled through the use of tag lines. Tag lines may never be knotted or wrapped around any part of a worker.

Workers using Aerial Lifts, operators must have proof of training. All workers must wear fall protection while in the basket. Lanyards must be attached to the provided anchorage points. Anytime workers transfer out of a basket to another work surface they must maintain 100% tie-off.

Daily inspections of all forklifts and aerial lifts must be conducted before their initial use.

10. Hot Work

This policy is applicable to all workers directly involved or assisting in welding, cutting or other hot work operations.

Definitions

Welding / Hot Work Procedures - any activity which results in sparks, fire, molten slag or hot material which has the potential to cause fires or explosions. Examples include Cutting, Brazing, Welding and Grinding.

Hazards - includes, but not limited to the following; fires and explosions, skin burns, welding "blindness", and respiratory hazards from fumes and smoke.

Safe Hot Work Area – an area pre-approved by MacBracey as not requiring a hot work permit.

Responsibilities

The Superintendent is responsible for determining if the property is safe for welding and cutting operations. Safe areas for welding and cutting operations are to be established whenever possible.

Only trained employees shall be authorized to conduct hot work. Work outside of safe hot work areas must be approved by a written permit.

Contractors shall oversee and supervise employees to ensure proper PPE is worn, safe work procedures are followed work is conducted within the scope of the applicable permit.

Contractors shall ensure that at least one 20 lb. ABC fire extinguisher (or 2 – 10 pound extinguishers) is on site prior to any hot work activities.

Employees are required to follow all hot work procedures. They must inspect all work prior to use and notify their immediate supervisor in the event any issues are identified. When work is discovered that would fall outside of the scope of the permit, the foreman must be notified before the work is done.

Procedures

Before cutting or welding is permitted the area shall be inspected and a hot work permit must be completed. All precautions taken are to be documented on this form.

Where practicable, all combustibles shall be relocated at least 50 feet from the work site. Where relocation is impractical, combustibles shall be protected with flameproof covers, shielded with metal, guards, curtains, or wet down the material to help prevent ignition of material.

Cutting or welding shall not be permitted in the following situations:

- In areas not authorized by management.
- In the presence of flammable / combustible gases.
- In areas near the storage of large quantities of exposed, readily ignitable materials.
- On live lines.

Whenever welding or cutting is performed in locations where other than a minor fire might develop; or any of the conditions mentioned above cannot be met, a fire watch shall be provided.

Fire Watch

When hazards cannot be controlled through traditional methods, or is conducted outside of a safe hot work area, a fire watch must be posted. A fire watch must be trained on their duties and comply with all of the following:

- The fire watch may not conduct any other activity or task while working as a fire watch.
- The fire watch shall remain after the completion of the hot work for a period of at least ½ hour.
- Must have training in the use of fire extinguishers and have an appropriate extinguisher readily available.

Personal Protection

In addition to the PPE required on site, employees conducting hot work shall also wear PPE appropriate for the hazards such as:

- Helmets
- Hand protection
- Welding goggles / shields
- Body protection

Eye protection should be ventilated to prevent fogging as much as practicable. All glass for lenses shall be tempered, substantially free from scratches, air bubbles, waves and other flaws. Lenses shall bear some permanent distinctive marking which may readily identify the source and shade.

11. Hand and Power Tools

This policy applies to all employees, temporary labor and contractors performing work on behalf of MacBracey.

The Superintendent will have the primary responsibility for implementing and communicating this program to employees and contractors performing work on behalf of MacBracey.

All MacBracey employees have a responsibility to assist with the oversight of this program.

Workers shall adhere to the requirements of this program and notify MacBracey workers if they observe inadequate, defective or improper equipment being used by other contractors.

General Requirements

- All hand and power tools must be maintained in safe working condition.
- Tools shall be inspected prior to use. Any damaged or defective tools are to be tagged and removed from service immediately.
- Never remove or interfere with the operation of any tool guard or safety features.
- Proper PPE must be worn when working with hand and power tools. At a minimum, eye protection must be worn at all times when power tools or hand tools used for striking are in use.
- Always use tools for their intended purpose and the right tool for the right job.
- Keep tools clean and check their condition prior to using.
- Do not use striking tools if heads become mushroomed or burred.
- If handles of tools are splintered, broken, or loose, have them replaced.
- Tools must always be returned to their proper storage place and not left where they create a hazard.
- Do not carry tools in pockets.
- Do not use excessive pressure or force on any hand tool or use cheaters to apply more force.
- Tools should not be dropped or thrown from place to place or from employee to employee.
- Tools that must be raised or lowered from one elevation to another shall be placed in a tool bucket or firmly attached to hand-line (rope).
- Handmade or job made tools should not be used.

Hand Tools

- Wooden handles of tools, such as hammers, picks, etc. shall not be taped or covered in such a way as to hide damage or defects.
- Cracked or damaged wooden handles of tools, such as hammers, shall be replaced immediately upon discovery of the damage.
- Keep your hand tools in peak condition, sharp, clean, oiled, and not abused.
- Do not use tools for pry bars.
- Do not use two wrenches to increase leverage capacity.

Screwdrivers

- Use the right size and type screwdriver for the job.
- Do not hold screwdriver tips in the palm of the hand.
- Do not use a screwdriver as a pry bar.

Hammers

- Hammers shall have a clear path for back swing and the target area shall be free from obstructions.
- Hammers with mushroomed heads shall never be used.
- Never use your hands to hold any object to be struck with a hammer by another employee. Hold the object with pliers or another tong-type device.
- Wooden handles shall be kept free of splinters or cracks and shall be kept tight in the tool.

Pry Bars

- Be sure bite of bar is secure under load by first applying a slight pressure.
- Check your own balance before exerting full force.
- A cheater bar shall not be used on pry bars.

Wrenches

- Wrenches should be pushed away from the body, if possible, to reduce the chance of the wrench slipping and striking the user in the face or body.
- Adjustable (crescent) and combination wrenches should be snug on bolts and nuts to avoid slipping.
- Never use a cheater on a wrench or "double wrench" a nut.

Power Tools

- Protective guards on power tools shall not be removed. Do not use tools without guards in place.
- Tools shall not be dropped or allowed to strike another object in such a fashion that damage may occur.
- Employees shall avoid loose fitting clothing when operating power tools.
- Electrical tools shall be of the double insulated or be of the three wires grounded type.
- All electrical tools and power cords must be used with a Ground Fault Interrupter to protect against faulty ground.
- Electrical tools shall not be hoisted or carried by their power cords.
- Employees shall not operate electrical tools while standing in water or wet locations.
- Extension cords shall be of the three wires grounded type and be continuous without splice or repair.

Pneumatic Tools

- When gas or diesel compressors furnish the air source, keep them outside or vent them to the outside to prevent carbon monoxide poisoning.
- Air hoses and connections shall be checked prior to each use for defects.
- Air hoses should be protected from sharp objects.
- Disconnect source and "bleed" hose before breaking connection on any air tool.
- Never crimp hoses to stop air.
- Do not let your hoses create tripping hazards. Keep out of traffic areas such as walkways and stairs.
- Always wear eye, face, and ear protection when using air tools.
- Air used for cleaning machines shall be regulated to 30 psi or less.
- Metatarsal and shin guards should be worn for complete foot protection when using ground tampers that leave the ground such as "pogo sticks". This is in addition to other PPE requirements.
- Compressed air is never to be used to clean clothing or parts of the body.
- Air tools shall not be hoisted or carried by their air hoses.

12. **First Aid**

At least one MacBracey employee on each job will be trained in first aid and CPR and carry a valid training certification card. The responsibility of the trained employee is to ensure basic care is immediately available to workers.

If a worker is injured or becomes ill, the person should immediately notify a MacBracey representative. The representative shall:

1. Obtain enough information to provide critical details.
2. Send someone for help if you cannot leave the person.
3. Provide care up to the level of their training.
4. Call 911 if the injury is serious or you cannot quickly reach a person trained in first aid.
5. If 911 have been called, someone shall be posted to watch for their arrival and direct them to the scene of the injury.

First aid supplies will be available in company trucks. First Aid kits are required to be compliant with ANSI Z308 standards. Kits are to be inspected on a monthly basis. Any items found to be missing are to be replaced immediately.

13. **LOTO**

The purpose of this procedure is to specify the actions that will be taken to prevent employee injuries due to the unexpected start-up of machinery and equipment during servicing and/or maintenance, in accordance with guidelines set forth by the Occupational Safety & Health Administration (OSHA).

Employees and contractors are responsible for following the necessary Lockout / Tagout Procedures when servicing or maintaining equipment. All other employees are responsible for observing warning tags and for not attempting to operate any machinery or equipment that is being serviced and is in a lockout condition.

Equipment powered by a single power source and does not have the capacity to store energy shall be locked out using the procedure below. Examples of stored energy include pressurized lines, springs, capacitors, thermal energy, potential energy (gravity) and tension. Any equipment not meeting these criteria shall be De-Energized using a written equipment specific procedure.

De-Energization

1. Notify any Affected Employees that the equipment is to be locked out for service.
2. Shut down the equipment using the normal stopping methods
3. De-activate the energy isolating device(s) so that the machine is isolated from its power source(s).
4. Apply locks/lockout devices to the energy isolating device(s). All authorized employees working on the equipment must apply their own lock, remove the key and keep the key in their possession for the duration of the lockout.
5. Sign and date a warning tag and place one at each point of energy isolation.
6. Verify that the energy source is de-energized by attempting to operate the equipment using the normal operating controls (start button, etc.).
7. After verifying that the machine does not operate, return the operating controls to the "neutral" or "off" position and service the equipment as required.

Re-Energization

1. Once servicing is complete, remove all tools, spare parts, etc. from the equipment.
2. Re-install all machine guards.
3. Make sure all employees are clear of the equipment.
4. Notify all affected employees that the lockout is about to be removed and the equipment is about to be re-energized.
5. All authorized employees remove their own lock(s). No one may remove another employee's lock.
6. The authorized employee(s) re-energize the machine at the main power source(s).

Whenever one authorized employee takes over for another authorized employee during a lockout situation, the person who is taking over the job shall apply his/her lock(s) before the employee who is leaving the job removes his/her lock(s).

Exchanging keys and using the same locks is not an acceptable means to comply with this section.

In the event multiple employees are simultaneously working on a single piece of equipment or system, each shall have their own uniquely identifiable lock placed on the energy isolating device. Multiple locks shall be accommodated using a multi lock hasp. During these situations, the authorized employee who de-energized the equipment shall have primary responsibility for the group and his / her lock is to be removed last.

14. **Emergency Procedures**

This Emergency Action Plan establishes basic procedures to be used during work on remote sites. Conditions which seriously threaten the safety of personnel may require evacuation of the facility or a shelter in place situation to occur. These situations include, but are not limited to the following:

- Fire / Explosion
- Gas leak
- Hazardous material leak or spill
- Natural disaster
- Terrorism

The site Superintendent is responsible for the general administration of the Emergency Action Plan while on site. This includes communication of site-specific emergency procedures established by the host employer.

Workers are responsible for obeying warning alarms and following all rules established by MacBracey.

In the event of an emergency requiring evacuation, warnings shall be communicated verbally to MacBracey employees. All workers shall assemble in the predetermined muster area.

Emergencies requiring shelter in place shall be communicated in the same manner.

Muster areas and shelter in place locations shall be communicated at the start of the job. Employees new to the site shall have this information communicated prior to commencement of work on their first day.

Once personnel have assembled at their designated meeting areas, it is the responsibility of the foreman to determine if all employees are accounted for and have evacuated safely. A final head count will be given to the MacBracey Superintendent.

All personnel shall remain at the designated meeting areas and await further instructions prior to returning to work. No individual shall leave the property during the course of an evacuation unless the MacBracey Superintendent has given specific authority to do so.

Employees at MacBracey have not been trained in firefighting techniques beyond basic fire extinguisher use and principles. Although fire extinguishers are available on site, employees should evacuate unless the employee chooses to act as a Good Samaritan and extinguish the fire under his / her own free will. Under no circumstance is an employee permitted to continue fighting a fire that is not extinguished by a single fire extinguisher unless it is blocking their path to an exit.

15. **Signs, Barricades and Flagging**

Signs, barricades and flagging shall be used to protect employees from hazards such as wall and floor openings and any other situation where employees could be exposed to serious harm or danger.

Barricades and flagging shall not be crossed without first identifying the hazard and asking questions before crossing if the hazard does not seem obvious. Signs such as Danger and Caution shall be used to identify a hazard. Signs, barricades and flagging removed to complete a specific task, such as bringing in material, shall be replaced when task is completed.

The following are types of flagging which are to be used:

- 3 inch "DO NOT ENTER" banner tape. This is a red tape with black letters. This is used to control access to areas where a hazardous condition exists and it is determined necessary to keep all unauthorized personnel out of the affected area. No one other than the personnel that have established the area, may enter or remove the tape.

  "DANGER" signs are to be used with this tape to identify the hazard. Unauthorized persons crossing or removing this barrier will be subject to termination or other disciplinary action.

- 3 inch "CAUTION" tape is a yellow banner with black letters. This is used to identify a potentially hazardous condition. CAUTION signs are used with this tape to identify the potential hazard.

  Personnel may cross this barrier so long as they take the precautions necessary to ensure their safety. Unauthorized persons removing this barrier will be subject to disciplinary action.

NOTE: BARRICADES MAY BE NEEDED IN CONJUNCTION WITH ANY OF THE FLAGGING AND SIGNING NOTED ABOVE.

Barricade tapes and warning signs are a temporary method of protecting and warning personnel of hazardous conditions, but are not a substitute for physical barrier guarding (i.e. 2"x4" lumber, wire rope, etc.) where a hazardous condition presents a potential for serious injury or death.

Do not leave openings, floors, walkways, or catwalks without proper guarding installed. It is the responsibility of the Foreman performing the work to ensure the protection and safety of all personnel affected by the operation.

16. **Lead Metal Exposure Policy**

HEALTH HAZARD DATA

1. Permissible Exposure: The Permissible Exposure Limit (PEL) set by the OSHA standard is 50 micrograms of lead per cubic meter of air (50 $\mu g/m^3$), averaged over an 8-hour workday.
2. Action Level: The established action level is 30 micrograms per cubic meter of air (30 $\mu g/m^3$), time-weighted average, averaged over an 8-hour workday.

Routes of Exposure

1. When absorbed into your body in certain doses, lead is a toxic substance. The objective of the OSHA lead standard is to prevent absorption of harmful quantities of lead. The OSHA standard is intended to protect you not only from the immediate toxic effects of lead but also from the serious toxic effects that may not become apparent until years of exposure have passed.

2. Lead can be absorbed into your body by inhalation (breathing) or by ingestion (eating). Lead (except for certain organic lead compounds not covered by the OSHA standard, such as tetraethyl lead) is not absorbed through the skin. When lead is scattered in the air as a dust or fume, it can be inhaled and absorbed through your lungs and upper respiratory tract. Inhalation of airborne lead is generally the primary source of occupational lead absorption. You can also absorb lead through your digestion system if lead gets into your mouth and is swallowed. If you handle food, cigarettes, chewing tobacco or make up which have lead on them or handle them with hands contaminated with lead, this will contribute to your exposure through ingestion.

3. A significant portion of the lead that you inhale or ingest gets into your blood stream. Once in your blood stream, lead is circulated throughout your body and stored in various organs and body tissues. Some of this lead is quickly filtered out of your body and excreted, but some remains in the blood, bones, and other tissues. As exposure to lead continues, the amount stored in your body will increase if you are absorbing more lead than your body is excreting.

HEALTH PROTECTION GOALS OF MacBracey

1. Prevention of adverse health effects for workers from exposure to lead throughout a working lifetime requires that worker blood lead levels (PbB) be maintained at or below forty micrograms per deciliter of whole blood (40 µg/dl). The blood lead levels of workers (both male and female workers) who intend to have children should be maintained below 30 µg/dl to minimize adverse reproductive health effects to the parents and the developing fetus.

1. The measurement of blood lead levels is the most useful indicator of the amount of lead being absorbed by your body. Blood lead levels (PbB) are most often reported in units of milligrams or micrograms of lead (1 milligram = 1000 micrograms) per 100 milliliters (100ml) or deciliter (dl) of blood.

2. Once the blood lead level climbs above 40 µg/dl, the risk of disease increases. There is a wide variability of individual response to lead thus it is difficult to say that a particular PbB in a given person will cause a particular effect.

REPORTING SIGNS AND SYMPTOMS OF HEALTH PROBLEMS.

MacBracey Project Management must be immediately notified if contract employees develop signs or symptoms associated with lead poisoning or if medical advice is sought.

Permissible Exposure Limit (PEL)

The OSHA standard sets a permissible exposure limit (PEL) of fifty micrograms of lead per cubic meter of air (50 $\mu g/m^3$), averaged over an 8-hour workday. This is the highest level of lead in the air to which you may be permissibly exposed over an 8-hour workday unless you wear a respirator.

Exposure Monitoring

If lead is present in any quantity in our workplace, we shall activate our lead safety plan which includes the following components:

- Respiratory protection
- Employee training
- Control measures
- Housekeeping measures
- Medical surveillance protocols
- Signage