



Amsys Energy, LLC

Employee Handbook

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Safety Policy

Amsys Energy, LLC.

I. Objective

The Safety Policy of Amsys Energy, LLC. is designed to comply with the standards of the Occupational Safety and Health Administration, in an endeavor to maintain a safe and injury/illness free workplace. A copy of the OSHA Safety and Health Standards 1926 and 1910 are available for all employees use and reference. These Standards shall be available in the home office at all times and will be sent to the jobsite on request. Compliance with the following Safety Policy and all items contained therein is mandatory for all employees of the company. The authorization and responsibility for enforcement has been given primarily to the General Manager. The Supervisors and Pushers share in this responsibility as well.

II. Policy

It is company policy that accident prevention be a prime concern of all employees. This includes the safety and well-being of our employees, subcontractors, and customers, as well as the prevention of wasteful, inefficient operations, and damage to property and equipment.

III. Applicability

This Safety Policy applies to all employees of Amsys Energy, LLC., regardless of position within the company. The Safety Rules contained herein apply to all subcontractors and anyone who is on a company project site. Every employee is expected to comply with the Safety Policy, as well as OSHA Health and Safety Standards.

IV. Implementation

This Safety Policy supports six fundamental means of maximum employee involvement:

- A. Management commitment to safety.
- B. Weekly tool box safety meetings at all jobsites.
- C. Effective job safety training for all categories of employees.
- D. Job hazard analysis provided to all employees.
- E. Audio and/or visual safety presentations given at jobsites by supervisor or Pusher.
- F. Various incentive awards for exemplary safety performance.

The Supervisors and Pushers will meet at least once a month to evaluate all areas of safety and make recommendations to the company president.

V. Administration

The Safety Policy will be carried out according to guidelines established and published in this and other related procedures. Specific instructions and assistance will be provided by General Manager as requested. Each supervisor will be responsible for meeting all of the requirements of the Safety Policy, and for maintaining an effective accident prevention effort within his or her area of responsibility. Each supervisor must also ensure that all accidents are thoroughly investigated and reported to General Manager on the same day of the occurrence.

VI. Enforcement of Safety Policy

Safety violation notice(s) shall be issued to any employee, subcontractor, or anyone on the jobsite violating the safety rules or regulations by General Manager.

- A. Any violation of safety rules can result in suspension or immediate termination.
- B. Any employee receiving three (3) written general violations within a six (6) month period shall be terminated.
- C. Issuance of a safety violation notice for failure to use fall protection or for failure to report a job injury (at the time of the injury) may result in immediate termination, in accordance with company policy.

It is understood that Amsys Energy, LLC. is not restricting itself to the above rules and regulations. Additional rules and regulations as dictated by the job will be issued and posted as needed.

General Safety - Health Provision

Amsys Energy, LLC.

Purpose: To establish general safety rules which are considered safe practices.

This section applies to Amsys Energy, LLC., employees and contractors.

1. Use proper Personal Protective Equipment to perform your job safely.
2. Report any unsafe conditions, practices, near misses, or incidents to your Supervisor.
3. Horseplay, practical jokes, or fighting on Amsys Energy, LLC., locations are prohibited.
4. Use or possession of firearms, deadly weapons, or unauthorized explosives on Amsys Energy, LLC., is property is prohibited.
5. Smoking is permitted in designated areas only.
6. Safety devices removed from service or bypassed must be tagged, documented and reported to your Supervisor unless written procedures are in place and approved by local management.
7. Machinery must have all manufactured safe guards in place.
8. Use proper lifting techniques, mechanical lifting devices, or obtain assistance when lifting heavy loads. Amsys Energy, LLC., has a 55-pound single lifting maximum.
9. Practice good housekeeping.
10. Inform your Supervisor of any medical condition or prescription medication you are taking that could affect your safety or that of others.

11. Caution fellow personnel against unsafe work practices and alert them to potential hazards.
12. Medical services or trained personnel shall be available to render first aid and to respond to medical emergencies. Keep emergency contact numbers readily available.
13. All contractors will conduct all work activities in compliance with applicable regulations and industry practices, and under requirements no less than what is set by Amsys Energy, LLC.
14. All job sites, materials and equipment must be inspected daily by a competent person.
15. Only qualified employees through adequate training and observation may operate any company equipment.
16. All company employees will be instructed in the recognition and avoidance of all unsafe conditions.

Foreword

The purpose of this Manual is to advise and serve as a reference source of Company policy for use by the Pusher and Operator in order to follow Company procedures and policy and to aid in the prevention of accidents.

It is recognized that this Manual cannot possibly cover all the problems which may arise in the operation of oil well servicing equipment. We should all be constantly alert to unforeseen hazards and realize that changing conditions will present new exposure which must be met with appropriate precautions. This Manual should, however, assist supervisor and each individual worker to improve his work methods and reduce accidents.

The policies outlined in this Manual should be used only when applicable and with modifications as necessary due to operating conditions, type of equipment, etc. Nothing herein shall be deemed to replace Local, State, or Federal Regulations.

Company Policies & Procedures

It is the policy of Amsys Energy, LLC. to:

1. Provide equal employment opportunity for all persons without regard to race, color, religion, age, sex, or national origin.
2. Provide a safe and harmonious environment in which to work.
3. Be number one in service by giving the customer a top quality job.
4. Achieve and maintain success for all.
5. To maintain reasonable safety rules and practices with firm and fair enforcement. To effectively communicate these rules, practices and procedures to all employees.
6. To promote good safety and health attitudes, by enlisting the efforts of all employees and by providing appropriate recognition for superior safe work performance.
7. To maintain leadership in safety and accident prevention by constantly improving safety performance, with the objective of reducing accidents to a minimum.

Sexual Harassment Policy

Amsys Energy, LLC. has a Zero-Tolerance Policy when it comes to tolerating any form of sexual behavior, if a harasser has been found guilty or plead guilty to the offense either through the interview process or if there is physical/visual evidence entered.

Definition

The EEOC (Equal Employment Opportunity Commission) has defined sexual harassment as any unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature when:

- Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment
- Submission to or rejection of such conduct by an individual is used as a basis for employment decisions affecting such individual
- Such conduct has the purpose or effect of unreasonably interfering with an individual's work performance or creating an intimidating, hostile, or offensive working environment.

Standard

Amsys Energy, LLC. employees are not to demean themselves by wearing any type of revealing clothing that would provoke sexual harassment, nor should they have any personal belongings displayed that coworkers might deem offensive.

Types of Sexual Harassment

Two types of sexual harassment are generally recognized: quid pro quo and hostile work environment.

- a) **Quid pro quo** – This is the more obvious and easier to identify form of sexual harassment. The term quid pro quo basically means “something for something.” This type of sexual harassment occurs mainly between a supervisor/manager and a subordinate. A supervisor is anyone with the authority to:
 - Undertake or recommend tangible employment actions. Tangible employment actions include things such as hiring, firing, promoting, demoting, and reassigning.
 - Direct employee’s daily work activities. Directing an employee’s daily work allows for a supervisor to increase or decrease an employee’s workload or to assign tasks that are demeaning and undesirable or favorable and desirable.
 - With quid pro quo, sexual conduct becomes the grounds for employment decisions. The supervisor/manager tells an employee, “Spend the night with me and I’ll give you a pay raise” The reverse would be “Don’t spend the night with me and you will be fired.”
- b) **Hostile Work Environment** – This type of sexual harassment is more difficult to define but the majority of sexual harassment cases fall under this category. Comments or conduct based on sex, sexually orientated material, or other offensive material is considered harassment when they unreasonably interfere with an employee’s work and are unwelcome, severe or pervasive. The comments or conduct are also considered harassment if they create a work environment that is intimidating, hostile, or offensive.
 - Single or isolated incidents of sexual misconduct generally do not create an environment that is considered hostile. A hostile environment claim usually requires proof of a pattern of offensive conduct. The more severe the harassment though, the less need to show a repetitive a pattern. To be considered “unwelcome, severe or pervasive” enough to constitute sexual harassment, the

activity must also be serious enough that a “reasonable person” would find it offensive.”

Company Assurance

When allegations of sexual harassment are made, a prompt response is essential. Amsys Energy, LLC. should determine if a fact-finding investigation is necessary. For instance, if the alleged harasser does not deny the accusations, then an investigation would not be necessary and corrective action (e.g. termination) could be immediately taken. If a fact-finding investigation is necessary it should be launched immediately. The amount of time needed to complete the investigation will depend upon the particular circumstances of the case. Intermediate corrective measures to stop the unwelcome actions should be taken and the wellbeing of the alleged victim must be secured at the very start. Steps such as scheduling changes, transfers and placing alleged harasser on non-disciplinary leave with pay are some possible intermediate measures. The complainant should not be involuntarily transferred or burdened.

The main steps of a fact-finding investigation are:

1. Choosing an impartial investigator
2. Conduct interviews for both harasser and victim
3. Determine credibility of interviews
4. Gather any additional information
5. Make determination of harassment case
6. Apply appropriate corrective and disciplinary measures
7. Maintain records of investigation.

Amsys Energy, LLC. must ensure that the investigator in a sexual harassment investigation is objective and trained to properly gather all necessary and crucial facts. The alleged victim and harasser should not have supervisory authority or any direct or indirect control over the investigator. The investigator must also possess skills necessary to evaluate credibility and to interview all parties involved. While each investigation should be adjusted for that particular case, it is still necessary to conduct interviews.

Appropriate Actions To Report

Amsys Energy, LLC. Employees who have been sexually harassed or feel that they have been sexually harassed should follow the immediate chain of command in reporting (e.g. employees → supervisors → human resources → owners/partners).

Employee Confidentiality

Employees of those who have reported sexual harassment (and their files) will be kept strictly confidential in prevention of retaliation by harasser. Should retaliation be provoked by harasser after said sexual harassment has occurred, employee should report incident immediately.

Unwelcome Behavior is the critical word. Unwelcome does not mean "involuntary." A victim may consent or agree to certain conduct and actively participate in it even though it is offensive and objectionable. Therefore, sexual conduct is unwelcome whenever the person subjected to it considers it unwelcome. Whether the person in fact welcomed a request for a date, sex-oriented comment, or joke depends on all the circumstances.

Sexual harassment includes many things...

- Actual or attempted rape or sexual assault.
- Unwanted pressure for sexual favors.
- Unwanted deliberate touching, leaning over, cornering, or pinching.
- Unwanted sexual looks or gestures.
- Unwanted letters, telephone calls, or materials of a sexual nature.
- Unwanted pressure for dates.
- Unwanted sexual teasing, jokes, remarks, or questions.
- Referring to an adult as a girl, hunk, doll, babe, or honey.
- Whistling at someone.
- Cat calls.
- Sexual comments.
- Turning work discussions to sexual topics.
- Sexual innuendos or stories.
- Asking about sexual fantasies, preferences, or history.
- Personal questions about social or sexual life.
- Sexual comments about a person's clothing, anatomy, or looks.
- Kissing sounds, howling, and smacking lips.
- Telling lies or spreading rumors about a person's personal sex life.
- Neck massage.
- Touching an employee's clothing, hair, or body.
- Giving personal gifts.
- Hanging around a person.
- Hugging, kissing, patting, or stroking.
- Touching or rubbing oneself sexually around another person.
- Standing close or brushing up against a person.
- Looking a person up and down (elevator eyes).
- Staring at someone.
- Sexually suggestive signals.
- Facial expressions, winking, throwing kisses, or licking lips.
- Making sexual gestures with hands or through body movements.

Verbal

- Referring to an adult as a girl, hunk, doll, babe, or honey
- Whistling at someone, cat calls
- Making sexual comments about a person's body, sexual comments or innuendos
- Turning work discussions to sexual topics
- Telling sexual jokes or stories

- Asking about sexual fantasies, preferences, or history
- Asking personal questions about social or sexual life
- Making kissing sounds, howling, and smacking lips
- Making sexual comments about a person's clothing, anatomy, or looks
- Repeatedly asking out a person who is not interested
- Telling lies or spreading rumors about a person's personal sex life

Non-Verbal

- Looking a person up and down (Elevator eyes)
- Staring at someone
- Blocking a person's path
- Following the person
- Giving personal gifts
- Displaying sexually suggestive visuals
- Making sexual gestures with hands or through body movements
- Making facial expressions such as winking, throwing kisses, or licking lips

Physical

- Giving a massage around the neck or shoulders
- Touching the person's clothing, hair, or body
- Hugging, kissing, patting, or stroking
- Touching or rubbing oneself sexually around another person
- Standing close or brushing up against another person

Sexism - is an attitude. It is an attitude of a person of one sex that he or she is superior to a person of the other sex.

Sex Discrimination - is a behavior. It occurs when employment decisions are based on an employees sex or when an employee is treated differently because of his or her sex.

Subtle Sexual Harassment - is a behavior but not a legal term. It is unwelcome behavior of a sexual nature that if allowed to continue could create a Quid Pro Quo and/or a Hostile Work Environment for the recipient.

Quid Pro Quo Harassment - is when employment and/or employment decisions for an employee are based on that employees' acceptance or rejection of unwelcome sexual behavior.

Hostile Work Environment - is a work environment created by unwelcome sexual behavior or behavior directed at an employee because of that employee's sex that is offensive, hostile and/or intimidating and that adversely affects that employee's ability to do his or her job.

Hiring Procedures

Before Hiring: All employees

1. Prospective employees will ask about a specific job position.
2. A copy of the applicant instruction sheet, the information sheet and the authorization for release of employment records will be given to the applicant.

3. Show the specific job description to the applicant and ask the applicant if he/she would be able to perform the job duties and responsibilities for that position. They will then sign on the information form a yes or no.
4. The applicant will then be told his information will be verified and screening of applicants will be conducted and they will be informed of the results.
5. A conditional job offer will be filled out by the applicant who explains the hiring requirements. These include filling out the job application completely, verifying the information, passing the company drug test, passing the company back stress test and completing the safety training as required.
6. Further information will be presented to the applicant covering the company policies, safety requirements, training and other relevant employment information.

After Hiring:

1. Employee is advised of his position, duties, pay scale and employee benefits and employee signing up for group insurance (if he desires to do so, after 90 days). Employee will sign “Basic Safety Rules Notification” and issued company employee manual.
2. All pushers and operators need to be advised of the “paper process” of his position-tickets, time, etc.
3. Any employee issued a company vehicle, credit card, etc. must have explained to them, company policy regarding the use of these items. The employee must sign “Use of Company Vehicle” form stating the rules and regulations regarding use of vehicle.
4. All pushers and operators need to have the basic safety program explained to them. Items that must be included in this explanation are as follows:
 - Amsys Energy, LLC. intent to adhere to all company and federal policies.
 - Reporting accident procedures.
 - The supervisor’s role in Safety Program – (Review Responsibility and Authority sections of Safety Manual)
 - Amsys Energy, LLC. office must advise the Safety Department of the new employees.
 - All pushers and operators should have individual conferences with the Safety Coordinator. (Preferably, **before**, performing a job.) At this time, a copy of the Safety Manual will be given to him and reviewed by the Safety Coordinator.
 - Follow-up inspection needs to be made (2) two weeks later to determine if new pusher or operator understands Company Policy, (when possible).
 - Employee handbook Manual Documentation Sign Off Sheet to be signed by employee stating he/she has read and understands all safety material and will comply.

Pre-Employment Drug, Alcohol & Inhalant Abuse Consent

Amsys Energy, LLC. prohibits the illegal use, possession, transport, promotion, or sale of drugs, drug paraphernalia or simulated drugs and the unauthorized use of alcoholic

beverages, inhalants, firearms, or explosives during working hours. Company employees must not report for duty **under the influence of any drug**, alcoholic beverage, intoxicant or other substance, including legally prescribed drugs and medicines, which will in any way, affect work ability, alertness, coordination, response, or risk the safety of others.

During the course of your employment, you may be subject to inspection for the possession or use of unauthorized materials such as alcohol, drugs, or firearms as required by our policies or those of companies with which we do business. Your entry into or presence on company controlled or provided work sites, vehicles or owned property is conditioned to the company's right to search any employee's property, including lockers, lunch boxes, baggage, quarters and private vehicles, (including trucks, glove compartments, etc.) by entering into or being present on company controlled or provided work sites, vehicles or owned property, any person is deemed to have consented to such searches which may include periodic and unannounced searches of anyone while on, entering or leaving such facilities. This is a condition of employment.

These searches may include the use of electric or electronic detection devices, scent-trained animals, or the taking of blood or urine samples for testing to determine the presence of substances prohibited by the policy. The company will pay for the full cost of any tests and transportation to and from such tests.

Pre-Employment Drug Testing Sign Off

I, _____, understand and consent to the requirements that all applicants for employment with Amsys Energy, LLC. are required to submit to a urinalysis drug screen test prior to employment. I also understand that continued employment with Amsys Energy, LLC. is dependent on the results of the pre-

employment urine drug screen test and any future drug screen or searches conducted by or for Amsys Energy, LLC.

Applicant Signature

Date

To Our New Employee
Amsys Energy, LLC.

You are now part of a team working together to achieve success for all of us. We want you to feel proud to be a member of this team. Your loyalty, dedication, interest and cooperation are our greatest assets.

Our company has progressed because of our people, and we hope that we continue to grow in this manner. In all cases, we attempt to match the efforts and loyalty of our people by providing higher earnings, advancement incentives and security.

This booklet has been prepared to acquaint you with our company. Please review this information and do not hesitate to ask questions. All of our management people, including myself, will be happy to answer any questions you might have.

Statement of Company Safety Policy and Objectives

Amsys Energy, LLC. considers no phase of our company operations or management responsibility of higher importance than safety and accident prevention.

The policy of Amsys Energy, LLC. is to provide and maintain safe and healthful conditions free of recognized hazards. Safety is a profitable priority because accidents result in paid and lost time from work as well as resulting in job delays, additional company waste, personnel problems and poor public and customer relations.

A truly effective accident prevention program begins with management. Managers and Supervisors are required to be committed to a Safety Program and Policies. Each Job Superintendent and Foreman is expected to have regular orientations of all newly hired, as well as newly transferred employees to your job site location. You are expected to have regular orientation of all transferred employees to your job site. You are required to have regular, frequent and effective “safety meetings” with our employees and temporary help in your job site or location, are expected to have on-the-job safety discipline, and to set a good example for employees, temporary help, and sub-contractors to follow.

A large part of safety is attitude and the attitude of Amsys Energy, LLC. is that Manage Supervisory Personnel and employees are all pulling together in a cooperative effort continuously to maintain a good safety record. This manual of Amsys Energy, LLC. Safety Program is intended to help minimize the accident potential and to bring everyone into our safety efforts. The information contained concerns the minimum duties and responsibilities toward accident prevention. Since it is impossible to provide for all situations, contingencies or emergencies which can arise it is expected that each of you use common sense and intelligence in selecting methods and practices in performing the job at hand. Amsys Energy, LLC. Safety Program, its policies and objectives, and its rules and regulations are mandatory and must be strictly adhered to by all employees and contractors.

Zero accidents is our goal - this goal can be achieved with the combined efforts of all our employees.

The New Employee on the Job

After you have been assigned to a crew, the operator will:

1. Introduce you to the other members.
2. Review the information you received at the time of hire.

3. Explain in detail the reasons for safety and operating rules, and stress compliance with them.
4. Stress the need for top-quality work at all times to assure customer satisfaction.
5. Advise you that questions are welcomed and will be answered.
6. Begin instructions of your duties.

Training Program

Safety and General Operating Orders are included at the back of this booklet and should be followed to the best of your ability. A trainee will be under the direction of the operator, through the pusher.

Safety Program & Policy

It is our policy to prevent injury to a person, property damage and to protect the interests of our people, company and customers from the results of accidents and fires.

It is the responsibility of every employee to act in the interest of safety for others and for the protection of the company's property from loss or damage. We ask for your full cooperation in bringing to our attention any unsafe condition or practice.

Short Service Employee Policy

Amsys Energy, LLC.

Purpose:	The purpose of this program is to ensure that all Short Service Employee (SSE) are properly inducted, correctly identified, adequately trained and supervised in policy /
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	procedures and continuously monitored prior to assuming full job responsibilities.
Objective:	The objective is to prevent incidents and injuries to themselves or others, and to protect the environment and company property from damage.
Definition:	The SSE is an employee that has worked for Amsys Energy, LLC. for less than six months.
Company Restrictions:	An SSE will not be allowed to work alone. No more than one SSE will be allowed on a job site.
Identification:	SSE employees shall be identified with a distinctive colored hard hat
Team Mentoring Process:	A team mentor can only be assigned one SSE per team and the mentor must be onsite with the SSE to be able to monitor the SSE.
High Risk:	No SSE's are allowed to work in areas deemed "High Risk" for any company that Amsys Energy, LLC. renders services to.
Monitoring:	The Company will monitor its employees including SSE personnel, for HES awareness. At the end of six-month period if the SSE has worked safely and adhered to HES policies, the company will remove the employee from the SSE status.
Responsibility:	Amsys Energy, LLC. will communicate the SSE policy to the appropriate representatives that the company services. Amsys Energy, LLC. representative will validate the team makeup and experience level. Prior to starting work, the contractor shall notify the host facility (project coordinator, contractor contact, and/or on-site supervisor) if Short Service Employees are present on work crews.
Frequency:	Continuous monitoring of SSE, forms must be submitted prior to commencing work on location of customers.
Subcontractors:	Subcontractors must manage their Short Service Employees in accordance with the requirements of the Short Service Employee program.

SSE Notification Form

Amsys Energy, LLC.

1. Contact Company Information

Contractor Company Name:	Date:
Location where work will be performed:	

List of proposed Amsys Energy, LLC. team

Date Employed	Employee Name	Job Title	SSE (yes / no)

SSE identified by distinctive hard hat: YES / NO
If no please explain:

2. SSE Team Composition Required

Single person team – Not an SSE
2-4 Person team with no more than one SSE
5 or more person crew with not more than 2 SSE on team
Team will exceed the minimal SSE crew requirements (Variance Required)

3. Review and Approval

Company: _____ Date: _____
 Supervisor: _____

Short Service Employee (SSE) Program Completion Record Amsys Energy, LLC.

Employee Name: _____

Assigned Trainer: _____

Starting Date SSE Program: _____

Acknowledgement of Successful SSE Program Completion

Employee: _____

The employee has acquired and demonstrated a good working knowledge of Amsys Energy, LLC. policies / procedures, has adhered to all policies, and has completed six calendar months of services without a recordable incident.

The employee has successfully completed the Amsys Energy, LLC. ' SSE Program.

Signed: _____
Supervisor

Date: _____

Appearance

As a safety precaution, we require all employees to be clean shaven, with closely trimmed mustaches and hair styles. Oil soaked clothes are not to be worn and should be eliminated or cleaned before re-using. Please keep in mind that these requirements are for your own safety and well-being, as well as an impression of neatness given to our customers.

Facial Hair Policy

To provide maximum protection for employees who may have to wear respiratory protection equipment, facial hair that passes between the face and the sealing surface of the equipment is not permitted. Facial hair is defined as beard, mustache, sideburns, and stubbles of greater than 24 hours growth, low hairline, or bangs. Additionally, any growth of facial hair must not be of such length as to interfere with the functioning of the respirator. This policy applies to tight-fitting face pieces that operate in either positive or negative pressure modes.

Statement of Understanding

Amsys Energy, LLC.

The employees of Amsys Energy, LLC. are considered to be the company's most valuable asset. Any success that our company is to enjoy will be the result of the efforts of all our employees. The welfare of all Amsys Energy, LLC. Employees is of the utmost concern.

It is our desire to provide a safe working environment, utilizing the safest equipment available. Injury, illness, or death to an employee is an event that we all want to avoid.

Amsys Energy, LLC. therefore, will adhere to the following declaration of policy:

1. That safety of the employees, company operations and the public is paramount.
2. Safety will take precedence over expediency and short cuts. Production and safety must operate together.
3. That every attempt will be made to reduce the possibility of accident occurrence.
4. That the company intends to comply with the Federal, State, and other regulatory laws.

In any safety program, it is a prerequisite that all concerned must work as a unit to a common goal which is the prevention of accidents. To this end, top level management lends its full support.

Let us all join in our Safety Program and share equally in the rewards of well-being.

Job Responsibilities

Manager

1. Each manager is responsible for implementing, monitoring and enforcing the Safety Program within his jurisdiction.
2. He will provide the leadership necessary to stress the importance of accident prevention as a matter of employee welfare and as a necessary part of efficient operation.
3. He will delegate to the supervisors in his authorities for implementing and enforcement of the Safety Program to promote safe working practices at all times.

Pushers & Operators

1. Set the proper example.
2. Must accept responsibility for the application and enforcement of safety and loss control measures in the realm of their operations as per Amsys Energy, LLC. Safety program and provide the leadership necessary to stress the importance of safety on the job.
3. Must insure that all employees are aware of the exposures of their job and to provide the training to enable the employees to perform his/her duties in a safe manner.
4. Note and discuss with all employees all unsafe conditions or unsafe acts observed that may result in accidents and remove or correct these conditions.
5. Report all accidents and damage claims as per company policy.

Employee

1. Must adhere to company policies and rules.
2. Use the safety devices provided.
3. Report unsafe conditions to his supervisors.
4. Report all injuries, regardless of how slight, to his supervisor.
5. Work with a team effort attitude toward his co-workers to ensure their safety as well as their own.

Safety Coordinator

1. Coordinate the safety activities in the company.
2. Formulate, initiate, educate, and monitor the Safety Policies for Amsys Energy, LLC.
3. Monitor all reported accidents, accident investigations and keep proper records.
4. Prepare accident analysis to determine problem areas, etc. and to evaluate effectiveness of a Safety Program.
5. Keep abreast of OSHA, State and Local Regulations and Revisions of existing regulations.
6. Develop training programs to train all employees of the hazards associated with the well servicing industries.

7. Maintain a line of communication with management and to keep management informed of all activities relative to accident prevention.
8. Make physical surveys of all operations that present an exposure to our people, our equipment and to any 3rd party.
9. Coordinate the safety services provided by the insurance carrier to coincide with Amsys Energy, LLC. training programs-namely; Supervisory training, First Aid training and H2S training.
10. Discuss Amsys Energy, LLC. Safety Policies and Programs with all new pushers and operators.

Behavior-Based Safety Policy

Amsys Energy, LLC.

Behavior-based safety refers to the process of using a proactive approach to safety and health management. Behavior-based safety either focuses on at-risk behaviors that can lead to an injury, or on safe behaviors that can contribute to injury prevention. In other words, behavior-based safety is an injury prevention process. Workplace injury prevention is a continuing, evolving process. To reduce work-related injuries, and keep reducing them, an employer needs to involve employees in daily activities.

Employee attitude

It is the attitudes of the employees that is at the core of how successful a behavior-based safety program will be. Some of the most important aspects include:

- Developing clear safety-related goals and objectives at the corporate level;
- Communicating these goals and objectives to all levels of the organization;
- Enabling each area of the organization to attain its own specific safety goals;
- Encouraging individual participation by all members of the organization;
- Empowering employees to set and achieve their own safety goals; and
- Fostering mutual respect and consideration at all levels of the organization.

Motivational influences

There are various motivation influences in the workplace that can have dramatic effects on an employee's productivity, and may ultimately determine whether an employee works in a safe manner or an unsafe manner. Some examples of motivational influences that can take precedence over safety can include:

- An individual's level of self-worth;
- A secure working environment;
- A desire for achievement;
- A desire for recognition; and
- How employees feel about their jobs in general

Efforts to address these factors can have a significant effect on employee motivation and a significant impact on workplace safety. Behavior-based safety and employees motivation begins with effective communication. In order to foster good communication, an employer should:

- Provide employees with the information they need to do their jobs;
- Let them know their work has value;
- Provide regular feedback;
- Listen to complaints;
- Criticize behavior, not people;
- Establish easy-to-use channels of communication; and
- Personally congratulate employees for a job well done.

Overview

There are many different views of behavior-based safety. However your organization looks at it, behavior-based safety is the process of focusing on behaviors to prevent or reduce occupational injuries.

Why behavior-based safety?

- Statistics reveal that as much as 95% of workplace incidents are caused by at-risk behavior.
- The frequency of injuries can be reduced.
- The entire workforce can become active and involved in the process.

- Safety teams make significant safety improvements.

What must I do?

As an employee in a facility with a behavior-based safety program, you should fully participate in the company safety program, follow all posted safety rules, and use all supplied personal protection equipment & cooperate with the safety manager or safety committee if they observe you at your workplace, or if they request information on how you do your job.

What must my employer do?

Your employer should seek to engage you in the safety process by:

- Illustrating how behavior can affect safety.
- Explaining how the employee can participate in the safety process.
- Explaining how unsafe behavior affects medical and other costs, and how these costs are passed on to employees.
- Pointing out the benefits to employees and the employer, from using a behavior-based safety process.

Your employer will also train you on the specifics of:

- Safety procedures for your specific job.
- The need for, use, and care of any PPE required for your specific job.
- How and to whom to report any safety concerns.

Data Collection and Trend Analysis:

- Individual departments, as well as the company as a whole, will compare these measurements and track these results by an acceptable method so that numerical and statistical comparisons can be made over time.
- Evaluate unsafe behaviors from trend analysis and prioritize
- Develop action plan for unsafe behaviors based on comments and feedback from data sheets
- Designate responsible parties and timeframes within the action plan
- Define who is responsible for action planning
- Ensure management support

Delegation of Duties & Responsibilities of Management, Supervisors and Employees

Management

The management of Amsys Energy, LLC. will exercise every means in protecting against mishaps. They will study and interpret the Company's policy and will actively support it as an example to those responsible to them. Compliance with this policy and the daily application of same will be insisted upon for each truck and its crew. Each and every accident summary report will be thoroughly reviewed and every effort will be made to

identify the cause of the accident and to ensure that this error will be prevented, if at all possible, from happening again.

Employees

Upon receiving the Health, Safety & Environmental Handbook, each employee will be expected to read and understand the policies set forth and to enforce them at all time. Disregard for or violation of safety rules will not be tolerated. Employees not following these safety rules will be subject to disciplinary action or termination. Prompt and fair consideration shall be given to employee suggestions for protective equipment and other measures to reduce hazards. Please feel free to give any sincere suggestions that you may have regarding the safe operation of this company to your immediate supervisor. We are aware that "Experience is a good teacher" and we may all learn a valuable lesson from something you have observed or can share with the rest of us. All injuries, no matter how slight, that occur on the job, shall be reported to your immediate supervisor within 8 hours. Failure to report an injury can subject employee to disciplinary action. Each employee has a responsibility for his own safety to himself, his fellow workers, his employer and his family. Therefore, he shall be expected to observe and practice rules of safety, as well as instructions relating to the effective performance of his work. The ideal in safe and efficient industrial operation is reached only when all employees are safety-conscious and keenly alert both mentally and physically.

Safety Conscious Employees will:

- A. Comply with instruction of supervisors.
- B. Read and comply with all company signs that are posted on leases, as well as all manufacturers' warnings.
- C. Report all accidents and injuries immediately.
- D. Submit recommendations for safety and efficiency.
- E. Report or correct all unsafe conditions.

Superintendents and Managers

The success of the Health, Safety & Environmental Program depends on the sincere, constant and cooperative effort of all superintendents and managers, on their active participation and support in the following matters:

- A. Providing complete safety instructions to employees prior to assignment of duties.
- B. Enforcement of all safety regulations in effect, mainly through example.
- C. Continuous inspection for unsafe practices and conditions, and prompt corrective action to eliminate causes of accidents.
- D. Proper investigation of all accidents and prompt and complete recording of the same.
- E. The development and administration of an effective program of "Good Housekeeping", and personal and operational cleanliness throughout the operations.
- F. Proper maintenance of equipment and the accurate issuance of instructions for the reduction and elimination of fire and other general hazards.
- G. Discussion with the pushers, of all personal injuries and equipment damage incidents.

Pushers

Most of what is established and planned through the Company Safety Program must reach the employee on the job by the way of the pusher, who is in frequent and close association with employees. The pusher, in discharging his responsibility for safety, has among his principal duties the following:

- A.** Never allow condition, which he believes to be hazardous to life or limb, to exist without remedying it or reporting it to his immediate supervisor.
- B.** Make certain each employee clearly understands the circumstances of the job to be performed and the safe practice necessary to perform it without accident or injury.
- C.** To explain to each employee the understanding that violation of established safety rules will not be tolerated.
- D.** To take prompt corrective action whenever unsafe conditions and/or unsafe actions are noted.
- E.** To teach employees that accidents are caused and they can be prevented.
- F.** To investigate and find the cause of all accidents, even those which result in minor injuries.
- G.** To see that all injuries are reported promptly on the “Supervisors Accident Investigation Report” from which is included in the manual.
- H.** To give full support to all safety activities and safety procedures.
- I.** Make injury report available to the secretary who is responsible for keeping the Safety Log and Safety Bulletin Board.

Disciplinary Policy Program

Amsys Energy, LLC.

Amsys Energy, LLC. has developed a disciplinary policy that applies to the safety and health program of this company. The disciplinary policy will be a to ensure enforcement of the rules and procedures established by this Accident Prevention Plan to promote a safe and healthful working environment. The Disciplinary policy applies to all employees of this company.

Verbal Warnings

Management or supervisors may issue verbal warnings to employees that commit minor infractions or violations of the safety rules or safe work practices. Continued violations or verbal warnings can lead to more stringent action.

Written Warnings

Management or supervisors may issue written warnings for the following:

- Repeated violation of minor safety rules or procedures;
- Single serious violations of a rule or procedures that could have potentially resulted in injury to themselves, another employee and/or could have caused property damage; or
- Activities that could potentially result in injury and/or property damage.

Disciplinary Leave

Supervisors may recommend, and management may institute, disciplinary leave for the above reasons and the following:

- A single serious violation of a rule or procedure that results in injury to an employee and/or property damage; or
- Repeated violations and/or nonconformance to safety rules or procedures.

Termination

Supervisors may recommend and management may concur in the termination of any employee for repeated serious violations of the above circumstances.

Documentation

Violations of company or safety rules, regulations, or procedures will be documented by filling out a report on the employee. The report will state the type of violation and corrective action taken. The employee must read and sign the report acknowledging that they understand the seriousness of the violation.

Driving Safety Policy

Amsys Energy, LLC.

1. Only authorized Amsys Energy, LLC. employees will drive a motor vehicle in the course and scope of work or operate a company- owned vehicle.

2. Amsys Energy, LLC. drivers should be appropriately assessed, licensed, and trained to operate the vehicle.
3. Amsys Energy, LLC. drivers are prohibited from operating a motor vehicle while under the influence of alcohol, illegal drugs, or prescription or over-the counter medications that might impair their driving skills.
4. Authorized drivers will report any collision or traffic violation while driving on company duties to the appropriate personnel.
5. Loads shall be secure and shall not exceed the manufacturer's specifications and legal limits for the vehicle.
6. Amsys Energy, LLC. company vehicles shall be used and must be an equivalent size for its job purpose.
7. The vehicles shall be maintained in safe working order.
8. Seatbelts shall be worn by all occupants at all times whenever a vehicle is in motion.
9. Authorized drivers will follow safe driving practices. Safe driver behaviors must be practiced when driving a company vehicle. Road rage is strictly prohibited. Cell phone use is prohibited while driving. Manipulating radios or other equipment which may cause distraction is prohibited. Exceeding the posted speed limit is prohibited and drivers must maintain a safe distance between other vehicles!

Fatigue Management

Amsys Energy, LLC.

Fatigue has a significant influence on health and safety both at work and at home. This Fatigue Management Program was developed to help all employees increase awareness for the issue of fatigue, manage the risk factors and hazards, and prevent related injury and

illness. Initial and annual training should be provided on how to recognize fatigue, control fatigue through appropriate work and personal habits, and reporting of fatigue to supervision. The employer will set work hour limitations and will control job rotation schedules to control fatigue, allow for enough sleep, and increase mental fitness to control employee turnover and absence. Employees must not use over-the-counter or prescription drugs to increase mental alertness. Workers are expected to be fit for duty. In the event fatigue or tiredness prevents a worker from performing safely, it should be reported to the supervisor immediately.

Ergonomic equipment will be used to improve workstation conditions such as anti-fatigue mats for standing, lift assist devices for repetitive lifting, proper lighting and control of temperature, and other ergonomic devices as believed appropriate. Chairs will be provided for workers to sit periodically and periodic rest breaks will be available for personnel. Work tasks to control fatigue must be analyzed and evaluated intermittently.

This program addresses the roles and responsibilities of employees in safety critical positions to report fatigue/tiredness and lack of mental acuity to supervision; as well as supervisory personnel to make safety critical decisions and take appropriate actions to prevent loss. The Fatigue Management program should undergo periodic assessments of its effectiveness and a continuous improvement plan created to close any gaps.

Journey Management Policy
Amsys Energy, LLC.

A Journey Management Plan should be reviewed with road travelers before they perform any driving on company business. A copy of the plan must be readily available at the workplace. Amsys Energy, LLC. road travelers should carry a copy of the plan.

Before leaving on a trip, all Amsys Energy, LLC. drivers must ensure that weather conditions are safe for driving. Ensure the vehicle being used is adequate for the weather conditions. Make sure emergency supplies are in the vehicle, and the driver has a cell phone in case of emergency. In particularly harsh conditions, consider canceling or rescheduling the trip.

Road journeys should only be taken when necessary. Try to complete multiple tasks in single trips to reduce the amount of driving for improved safety and efficiency. If the trip is being taken to meet with someone, determine if the meeting can be done over the phone instead. Consider safer methods of travel (air, train, etc) where practicable. Driving should be done during daylight hours rather than after dark whenever possible. Reduce speed when driving at night. Be aware of the potential for wildlife to be on the road, especially when driving at dusk or dawn.

When Amsys Energy, LLC. employees must drive long distances, sufficient breaks should be taken to prevent fatigue. If employees are driving alone and having trouble staying awake, Amsys Energy, LLC. employees are allowed to pull off to the side of the road and get out of the vehicle for fresh air, or take a power nap. If driving late at night, consider getting a hotel room and starting fresh the next day. If two licensed drivers are in the vehicle, take turns driving. Get plenty of rest before beginning your journey.

Before taking a trip to an unfamiliar location ensure that you have printed driving directions available. Do not plan to read directions from a smartphone while driving. A GPS device may be used, but printed directions should be kept as a back-up.

Amsys Energy, LLC. employees should notify their supervisor or another individual who is not traveling with them of their travel plans. This includes where they are going, when they should be getting there, and when they plan to return.

Amsys Energy, LLC. drivers should always carry a cell phone, especially when traveling in rural areas. Consider subscribing to a in-vehicle communication/ remote diagnostic service (e.g. On-Star) if your vehicle is equipped with one.

Roadside emergency kits should be kept in all vehicles used for highway travel. These kits shall include equipment to assist in a roadside emergency such as water, booster cables, first aid supplies, warning triangles, flashlights, etc. If there is a potential for snow and ice, carry sandbags and a shovel.

Use of a Company Vehicle

The only person authorized by Amsys Energy, LLC. to operate company vehicles are: Operators or Persons the vehicle is assigned to. The operator or person the vehicle is

assigned to does not have the authorization to give permission to let anyone drive his vehicle except in a case of emergency, during rig moves, or to and from work, and will be held responsible for allowing anyone to drive a company vehicle without proper authorization. Any person driving a company vehicle without proper authorization is subject to dismissal and possible legal action for theft. All drivers of company vehicles must have a valid driver's license in their possession while operating the vehicle. Company vehicles are to be used in the course and scope of a person(s) business activity. The company vehicles should not be used for personal use without permission from the District Manager. Alcohol, drugs (of a narcotic or illegal nature), and firearms are not permitted in company vehicles – on or off the job. Employees who are assigned a company vehicle must follow this policy. If the vehicle is being used without proper authorization or in violation of the above policy, the driver will be responsible for all damages to Amsys Energy, LLC. vehicle and will be subject to termination.

Use of a Company Vehicle

Due to the failure of some employees to follow use of company vehicle policy, Amsys Energy, LLC. has added the following to their use of company vehicle policy. Effective January 1, 2009, employee(s) will be required to sign a use of company vehicle policy at

the beginning of each year. Any employee(s) in violation of use of company vehicle policy will be subject to one of the following actions:

First Offense:

1. 3 month yard restriction of employee(s) vehicle. Employee(s) will not be allowed to take vehicle home or pickup or distribute other employee(s).
2. Termination.

Second Offense:

1. Permanent yard restriction of employee(s) vehicle. Employee will not be allowed to take vehicle home or pickup or distribute other employee(s).
2. Termination.

Employee Driver: _____

1. The above named employee-driver shall comply with all motor vehicle laws and regulations of the state or states in which he travels while driving a company vehicle, including laws and regulations covering driver's license.
2. The above named employee-driver shall not loan, or allow any other person to drive, the company owned vehicle.
3. Personal use of a company owned vehicle shall be limited to driving on a direct route, to and from the company work site and the employee driver's home. "After hours" use of the company vehicle is not permitted.
4. The company owned vehicle shall not be driven by anyone who has consumed any alcoholic beverage or drink, drugs of any type, or any other intoxicating substance.
5. This agreement may be terminated by the company at anytime.

I have read, or had read to me, understand, and agree to comply with above conditions authorizing me to drive a company owned vehicle.

Driver's License #: _____

State: _____

Class License: _____

Expiration Date: _____

Employee Signature

Date

Vehicle Safety Practices

- 1.** Only Amsys Energy, LLC. employees are authorized to drive company vehicles.
- 2.** Passengers in company vehicles must ride in the cab; no passengers are permitted to ride outside of the cab. Never allow passengers to ride in or on the bed of a truck.

- 3.** No personal vehicles are allowed on company or lease locations at any time. If you have a problem, call the office.
- 4.** Glass and mirrors should be clean, unbroken, and firmly attached.
- 5.** Road equipment should be checked thoroughly for lights, turn signals, brakes, horn, tires and reflectors to see if functional. These need to work correctly at all times.
- 6.** The cab windows should be clear; loose items should be removed and no flammables stored in the cab.
- 7.** Condition of tires and wheels should be checked for wear, tread, apparent rubbing or breaks.
- 8.** Fuel tanks should be labeled as to their contents. "NO SMOKING" signs should be in place.
- 9.** Windshield wipers should be functional-do not take these things for granted or assume they are working properly-know that your equipment is in safe operating condition at all times.
- 10.** No loose materials which might hinder foot controls shall be kept in the cab, nor should flammable materials such as starting fluid.
- 11.** Use proper storage cans for flammable liquids. They should be checked for labeling, leakage, flash arrestors and spring loaded caps.
- 12.** Be alert at all times when driving any type of vehicle.
- 13.** Employees must not drink any alcoholic beverages or misuse any drug (prescribed or otherwise) while operating a company vehicle or equipment.
- 14.** Do not jump from a vehicle while it is in motion.
- 15.** Care should be taken when filling truck with fuel. Shut engine off. Do not let fuel escape toward hot muffler or exhaust pipe.
- 16.** Tools, equipment, hard hats, boxes and the like should not be carried loose in the driving compartments of cars and trucks. Carry them in the car trunk or separate compartment on a pickup or truck.
- 17.** Do not get under a car or truck supported only by a tire jack. Use cribbing or jack stands which are designed for the purpose.
- 18.** Car or truck engines shall not run in closed garages unless the exhaust is vented directly to the outside of the building.
- 19.** Drivers should know and obey all city and state rules and regulations and must recognize and obey all warning signs, signals and road markers.
- 20.** Every driver must realize that "Too Fast for Conditions" is often well below the speed limit, under adverse conditions.
- 21.** If it takes glasses or a hearing aid to make you a normal driver, wear them and protect yourself and the lives of others.
- 22.** Before backing any vehicle, it is the driver's responsibility to be definitely sure that the route over which he intends to drive is clear.
- 23.** When entering a street or highway from a garage, driveway, alley or lease road, the vehicle should be brought to a complete stop and not moved until the way is known to be clear.
- 24.** Before pulling away from a curb or road shoulder, use your turn signal to indicate your intentions and be sure you do not interfere with other traffic.
- 25.** Whenever in doubt, the driver should "Play it Safe". Drive defensively and take nothing for granted.

26. Pedestrians always have the right-of-way in vehicle traffic. Give them plenty of room.
27. In any area where children are present, drive slowly, with extreme caution and be alert to the unexpected.
28. When a school bus is stopped on any street or highway, vehicles approaching from all directions must come to a complete stop.
29. When passing other vehicles, be sure you have ample room in all directions. Do not pass on a hill, curve, in a school zone or when approaching intersections or side roads. Never ignore “No Passing” signs or road stripes.
30. When a driver behind signals his intention to pass, give him all the room you can and do not speed up.
31. Always signal your intention to turning, stopping or change of lanes.
32. When coming to a “Blind” intersection, always assume that another car is approaching from the side direction and come to a full stop if necessary.
33. When making left turns, make them as square as possible, do not “Cut Corners”.
34. Do not assume or contest the right-of-way. You may make a big mistake.
35. Under today’s driving conditions, “U” turns should not be made. Pull off the road to turn around, or go around the block. You may avoid being trapped in an accident.
36. Your horn is a warning signal only. It should not be used for any other purpose.
37. Many accidents are the result of drivers going to sleep. If you feel sleepy while driving, pull off the road, stop and get rested---you may save your own life.
38. Driving requires the undivided attention of the driver. Maps, orders, notes, directions, etc. should not be looked at by the driver while the vehicle is in motion.
39. In the event of a stalled vehicle, first try a pair of battery “jumper” cables whenever the engine won’t start on its own; they should be used properly. Care should be taken when pushing or pulling a vehicle.
40. When it is necessary to tow a vehicle from one place to another, drive slowly, work out some signals with the following driver and use every precaution.
41. A car, pickup or truck with a radio transmitter must not be parked within 300’ of blasting, shooting or perforating operations unless the transmitter is shut off and secured so it will not unthinkingly be turned on.
42. Before leaving a parked vehicle, the following steps should be taken by the driver:
 - A. Turn the wheels into the curb or shoulder of the street or road.
EXCEPTION: when parking on an upgrade of a curbed street, wheels should be turned away from the curb with rear of front wheels resting against curb.
 - B. With the brake pedal depressed, set the parking brake.
 - C. If vehicle is equipped with an automatic transmission, put the shift lever in “Park” position. For standard transmissions, place vehicle in low gear if on an upgrade, reverse gear if on a down-grade.
 - D. Shut off engine.

Gasoline Handling and Use

1. Gasoline is manufactured for use only as a fuel to explode and burn.
2. Gasoline shall never be used of cleaning purposes.
3. Gasoline should not be transported in other than approved containers and these containers should not be hauled inside of cars or truck cabs.

4. Gasoline shall not be poured or handled around open or unprotected flames, electrical equipment in motion, nor in areas where sparks or static electricity may be present, nor in unventilated places.
5. Gasoline shall not be stored in open or glass containers; in unventilated places; near sources of fire; near electrical equipment in motion, or near combustible materials, such as textiles, cardboard boxes, paper, etc.
6. Gasoline should not be siphoned by mouth from tanks or containers.

Asbestos

Proper management of asbestos helps assure protection of workers and appropriate abatement and disposal of the material. The primary health exposure route of asbestos fibers is from inhalation of airborne dust particles. When asbestos is friable (can be crumbled with hand pressure, it presents the greatest risk during abatement and disposal.)

General Procedures

Your safety and environmental representatives must be contacted prior to performing any asbestos abatement (demolition, renovation work) to get guidance regarding the issues listed below.

- An asbestos survey should be performed first, to identify absence or presence of asbestos.
- Asbestos material must be disposed of according to appropriate regulatory requirements. It may be considered a hazardous waste.
- Waste manifest procedures must be followed.
- Asbestos must be hauled in containers or in a closed vehicle with appropriate caution stickers / placards by qualified transporters.
- Company approved waste haulers and disposal sites must be used.

Vehicle Maintenance

1. The wheels of trucks should be checked at least once a week to see that all lug bolts are tight. Tires should have outside inspection at least once a week.
2. When inflating truck tires, employees should stand with as much of the body in the clear as is possible in order to avoid or reduce the possibility of injury if retaining rings or rims should spring out of place.
3. Where tire inflation service is maintained by Company, a suitable guard should be provided for this purpose.
4. A tire mount on a retaining-ring type rim should not be pounded, when inflated.

5. Cars and trucks should be thoroughly inspected at least once a month and spot checked each day with particular emphasis on lights, horn, brakes, windshield wipers and steering assembly. Needed repairs should be made promptly, as noted.
6. Trucks shall be equipped with suitable flares in accordance with state regulations. Such flares should be used as warning signals when it is necessary to stop the truck on highway after dark, in accordance with applicable state laws.
7. The driver of a winch truck should be responsible for the condition of the winch line; however, the supervisor, under whose jurisdiction the truck is used, should also periodically check the line.
8. Drivers should know and obey all city and state driving regulations and should note and obey all signs, signals and road markers.
9. Employees should not work under cars or trucks which are not adequately supported. Cribbing or jacks so designed to eliminate the possibility of collapse should be used in such cases.

Severe Weather Conditions

Winter Hazards

Winter hazards are still with us and will continue for a few more months reaching out to grab the unwary when least expected. Let's all take a close look and thoroughly "winterize" our safety habits.

Keep a close check on all gas lines for possible leaks – they've had some pretty rough usage the past several months and may spring a leak when least expected. The

recommended procedure for testing any gas line is to apply a solution of soap suds to all connections and any tight bends or other suspected source of leaks. Under no circumstances shall you check leaks with a lighted match or fire. Making a constant check for leaks is necessary to eliminate the possibility of an explosion. Remember that Liquefied Petroleum Gases (Butane and Propane) flow like water and seek the lowest level-cellar, pits, etc.

Stoves should be checked to eliminate the possibility of carbon monoxide gas, and where necessary they should be repaired without delay. Be sure that all stoves and heaters are well vented and that all vents are in good condition. Remember that carbon monoxide does not give any warning – has no odor – and will claim its victims before they can realize what is happening. This deadly gas is present in the exhaust for all gas engines and may be generated by stoves and heaters not correctly regulated. Also, make a thorough check of your automobile exhaust system and replace any exhaust pipe or muffler which may have even a small hole burned or rusted through. While driving keep at least one window “cracked” even if it is the coldest weather to help avoid a possible concentration of this gas.

Every year several crewmen get burned while lighting doghouse stoves due either to an accumulation of gas in the heater or through improper lighting. Just remember to make sure that the stove is clear of all gas, and keep your body from in front of the stove until you know the gas is lighted.

Another place where hazards are encountered this time of year is the thawing of frozen lines. When you start to thaw out a frozen line, begin at one end where the pressure generated by the expanding liquid, and possible steam, can escape into a drip tank or the atmosphere. If you start thawing in the middle of a frozen line you may generate enough pressure to burst the line.

Regardless of where you are, low temperature will increase the hazards of the job considerable, and so you should take particular pains to do everything possible to reduce these hazards.

Tornados

There is no universal protection against tornadoes except caves or underground excavations. When a tornado is impending and time permits, go to a tornado cellar, cave, or underground excavation which should have an air outlet to help equalize the air pressure. It should be kept fit for use, free from water, gas, or debris, and preferably equipped with pick and shovel. If you are in the open country, move at right angles to the tornado's path. Tornados usually move ahead at about 25 to 40 miles per hour. If there is no time to escape, lie flat in the nearest depression such as a ditch or ravine. In a city or town, seek inside shelter preferable in a steel reinforced building. Stay away from

windows! In homes, the southwest corner of the lowest floor or in the basement offers greatest safety. If time permits, electricity and fuel lines should be shut off. Windows and doors on the north and east sides of the house should be opened to help reduce damage to the building. Standing against the inside wall on a lower floor of an office building offers some protection.

Lightning storms / High Winds

Operators will have the decision on lightning being too close for a safe operation. He may shut Rig down if lightning gets too close to wind guy (guy wires) and also if wind gets too high (swing blocks in an unsafe condition). Also, in winter ice storms, operator will make the decision on ice falling out of derrick.

Cold Weather Safety / Cold Stress

Jobs which may cause heat or cold stress should make evaluation using accepted procedures, such as work rest cycles, should be employed in areas which exceed acceptable levels. When it comes to working in these conditions, no employee should work alone. Temperatures can rise or drop in an instant.

When the body temperature drops below normal (98.6° F) hypothermia may begin to set in. Hypothermia occurs when body heat is lost faster than it can be replaced. Employee(s) may begin to experience symptoms such as slurred speech, and or may lose coordination. The skin will be pale and cold to the touch.

Frostbite occurs when the skin freezes and loses water. In severe cases, amputation may occur on the area that has frostbite. Frostbite will typically affect the hands and feet. The affected part will be cold and can have a tingling or stinging sensation followed by numbness. The skin will be cold to the touch and may turn colors such as red, purple, and white.

Trench Foot is caused when a person's foot has been immersed in cold water at temperatures that are above freezing for long, periods of time. It is similar to frostbite; however, it is not as severe. Symptoms of trench foot include a tingling, itching, or burning sensation.

Employees who will be exposed to cold weather conditions will receive annual and initial training regarding how to keep themselves safe during these severe weather conditions, recognizing and understanding the symptoms, administering first aid treatment if needed, and keeping themselves hydrated. Employees will also be informed of the capable dangers that may come with these weather conditions such as snow buildup, sharp icicles, etc. and should make sure all walkways and travel ways be plowed and or cleared of snow and or ice.

Employees will also be advised as to what protective clothing should be worn and what PPE may be required. Regular inspection is required on all cold weather supplies to ensure that it is safe for the employee to use. If Amsys Energy, LLC. should provide cold

weather supplies, employer must ensure that supplies should always be in stock and accessible for the employee.

Heat Illness Prevention Policy

Amsys Energy, LLC. employees will have access to potable drinking water. If employees are working in areas where water is not able to be plumbed or otherwise continuously supplied, bottles of water and other forms of hydration shall be provided in plentiful amounts throughout the work shift. Amsys Energy, LLC. employees who may encounter a heat illness or believe a recovery period is needed to avoid a heat illness, shall be removed from the heat and provided access to an area with shade that is either open to the air or provided with ventilation or cooling. Readily access to shade shall be available at all times.

Any and all of Amsys Energy, LLC. supervisors must receive training in the prevention of heat related illnesses and how to handle heat related illness prior to supervising employees who work in heat conditions.

Supervisors should be trained and familiarize themselves with Amsys Energy, LLC. 's heat illness procedures to prevent heat illnesses and how to handle situations where an employee exhibits symptoms consistent with possible heat illness, including emergency response procedures.

Employees are allowed and permitted to take breaks in order to rehydrate themselves, and areas with shade and where employees can fan themselves off are accessible to aid the effects environmental factors (e.g. air temperature, humidity, radiant heat sources and air circulation) may have on employees that can contribute to heat related illness. Physical factors that contribute to heat related illness will be logged on JSAs & JSEAs and be taken into consideration before performing any tasks. Most common physical factors that will be looked at are those which can contribute to heat related illnesses such as: type of work, level of physical activity and duration, and clothing color, weight and breathability.

Supervisors must warrant personal factors that contribute to heat related illness and take them into consideration before assigning tasks where there is a possibility of a heat-related illness occurring. The most common personal factors that should be taken into place are those which contribute to heat related illness such as age, weight/fitness, drug/alcohol use, prior heat-related illness, etc.

Cell Phone Use:

Beginning January 3, 2012, drivers of commercial motor vehicles (CMVs) will not be able to hold, dial, or reach for a hand-held cell phone, including those with push-to-talk capabilities, while driving. This will also include the occasions when the driver is temporarily stopped in traffic due to delays or waiting for traffic signals to change. No longer will a driver be allowed to drive and hold a cell phone, or as many have done or seen, squeeze the cell phone with their shoulder and ear while motoring anywhere on the highways. Once the driver has moved the vehicle to the side of, or off, a highway and has sufficiently parked in a safe location, the use of a hand-held cell phone is allowed.

Section 392.82, describing this ban on cell phones while driving, was recently added to the FMCSRs (Federal Motor Carrier Safety Regulations) and clearly states that motor carriers cannot allow or require drivers to use a hand-held mobile device while driving a CMV. Companies who allow their drivers to use hand-held cell phones while driving will face a maximum penalty of \$11,000.00. Drivers who violate this rule will face federal fines of up to \$2,750.00 for each offense and will face disqualification of their driving privileges for multiple offenses. Table 2 in §383.51 lists these disqualification penalties.

What is allowable under §392.82 is a mobile cell phone with hands-free capabilities and dialing or answering the mobile phone by pushing one single button. The FMCSA feels that this type of activity keeps both hands of the driver free and their attention fixed on the road ahead. Also, the one button activation of the hands-free cell phone only requires minimal distraction much the same as a driver would change the station on the radio, or adjust the heat in the cabin. The only exception to this new rule is the emergency exception. Using a hand-held mobile telephone is permissible by drivers of a CMV when necessary to communicate with law enforcement officials or other emergency services. Drivers will be allowed to use CB radios and two-way radios while driving.

Amsys Energy, LLC. will not be responsible for anyone who breaks this law. Drivers are to pay individual and company fines assessed due to this federal civil penalty.

Cell Phone Usage – Sign Off Agreement

I agree to and acknowledge the responsibilities and fines responsible for the Cell Phone usage policy set forth. Amsys Energy, LLC. will not be held liable for the fines assessed under my name if I were to be caught using a cell phone while driving.

Print Name

Signature

Date

Safety Meetings

By Safety Department Personnel:

- 1.** Every attempt will be made to conduct a Safety meeting with all equipment personnel when on location.
- 2.** Shop, Welders, etc. (where applicable) – Safety Meetings need to be held every month.
- 3.** Pushers and Supervisory Personnel need to be met with on a periodic basis to discuss procedure, policies, problems, etc.

4. All meetings must be properly documented and all persons attending the meeting sign the appropriate form. Copies of this form, along with a cover letter need to be sent to the District Manager, Regional Manager, and the Safety Director.

OSHA Summary:

1. Report must be posted in an area conspicuous to all employees by February 1st of the current year and remain in place until March 1st of the current year at every location that has record keeping facilities.
2. After March 1st, remove report from bulletin board and file.
3. This is a yearly report from summarizing the accidents of the year.

Safety Meetings are mandatory. If an employee cannot make it to a Safety Meeting, it will be up to the employee to make it up. If employee misses too many Safety Meetings, he/she can be automatically terminated.

OSHA Inspection by Compliance Officer:

Any time an individual presents himself on your location stating he is with OSHA and wants to inspect your equipment; the following procedures must be followed:

1. Ask him to show you his credentials. If he refuses, ask him to leave the location. (OSHA law states that a representative from OSHA must show you his credentials.)
2. Advise the Compliance Officer that you have been instructed not to permit an on the job inspection without Management Representation (specifically, the Safety Department). We Have This Right.
3. Advise the District Office of the Compliance Officer's "wants" and the Safety Coordinator needs to be contacted.
4. The Compliance Officer is obligated to wait for a reasonable period of time for proper Management Representation to reach the location.
5. If Management Representative cannot reach the location within a "reasonable" length of time (2-3 hours), permit the Compliance Officer to begin his investigation while Management Representative is on his way to the location or District Office.

Procedure for reporting a fatality or catastrophe event to OSHA:

If an on-the-job accident occurs which results in the death of an employee or in the hospitalization of five (5) or more employees, the employer must report the accident, in detail to the nearest OSHA office within 12 Hours (by Phone).

1. The Manager must be contacted immediately.
2. The Manager must contact the Safety Department so the Safety Department can report the event to the nearest OSHA Office.
3. Information that must be available for the Safety Department so the information can be passed on to the OSHA people is as follows:
 - A. Details regarding accident.

B. Person to contact at job site and directions to job site.

C. Size of Company (Small 1-19); (Medium 20-449) (Large 500+)

D. Have you ever had any prior OSHA contact?

- 4.** In the event the Safety Director cannot be reached, the Regional Manager must report the accident to OSHA himself.

(If you are not certain where the nearest OSHA Office is located, call the Regional Office for your territory and they can tell you where you need to report the accident.)

Basic Safety Rules

- 1.** There should be no horseplay. Practical jokes, wrestling, etc. while on duty. Running on the jobsite is allowed only in extreme emergencies.
- 2.** Drinking intoxicants or consumption of narcotics on the job or to and from the job is strictly prohibited. Violation of this rule is grounds for possible termination.
- 3.** Proper clothing should be worn at all times. Avoid loose sleeves, baggy trouser cuffs.
- 4.** Proper protective equipment must be worn at all times; specifically, proper head protection, safety toed shoes, gloves. Other types of protective equipment may be necessary to contend with various exposures; eye protection, respiratory protection, etc.
- 5.** Good housekeeping must be maintained at all times.

- 6.** Report all damage or unsafe conditions to your supervisor immediately.
- 7.** Report all injuries, no matter how small, to your supervisor.
- 8.** Hair of such length that it might become entangled in moving or rotating machinery must be contained in a suitable manner.
- 9.** Un-authorized personnel should not be permitted at the rig site.
- 10.** Smoking or Fires are not permitted except at areas designated as safe by Operator or Pusher. No smoking will be permitted on rig floor or near well.
- 11.** Full body harness safety belts should be worn at all times when working 6” above the ground.
- 12.** Unsafe or defective tools are not to be used. Report to the supervisor any that may need repair or replacement. Tools and equipment should only be used for the use they were designed for.
- 13.** Firearms, of any type are not to be carried in Company Vehicles or on location.
- 14.** All Company Vehicles must be kept clean and in good mechanical condition. Loose containers, etc. should not be permitted inside vehicle. Do not carry gasoline except in approved containers.
- 15.** Do not carry hand tools up the ladders – tools should be tied off so both hands will be free for climbing ladders.
- 16.** Hand tools should not be thrown from person to person; rather, they should be handed or passed. All unnecessary tools should be put away when their use is completed.
- 17.** All vehicles must be parked out of the fall lane of the derrick and must be positioned for emergency use should the need arise.
- 18.** Only company personnel are permitted to ride in Company Crew Trucks, except in cases of emergency – Do Not Pick-Up Hitchhikers.
- 19.** Never use gasoline or any solvent with low flash point for cleaning purposes.
- 20.** All Company Vehicles will be driven at the posted legal speed limits.
- 21.** Location needs to be kept clean and free from debris – during the operation and before leaving the location.
- 22.** Payment of Medical Treatment, under Workman’s Compensation Insurance, will not be authorized by Amsys Energy, LLC. is reported immediately and properly to the Supervisor(s) in charge.
- 23.** Drinking water containers are to be used for drinking water and ice only. Tampering with or placing items such as drinks in the water cooler will result in immediate termination. The “common drinking cup” is not allowed. Only disposable cups will be used.
- 24.** Glass containers or bottles of any kind are not permitted on jobsites or in company vehicles.
- 25.** The jobsite speed limit is 10 MPH. No employee is permitted to ride in the bed of a truck standing up or sit on the outside edges of a truck. Employees must be sitting down inside the truck or truck bed when the vehicle is in motion. Riding as a passenger on equipment is prohibited unless the equipment has the safe capacity for transporting personnel.
- 26.** Adequate precautions must be taken to protect employees and equipment from hot work such as welding or burning. Fire extinguishing shall be no further than 50 feet away from all hot work. Used fire extinguishers must be returned to Supervisors to be recharged immediately.

27. All scaffolding and work platforms must be built and maintained in accordance with OSHA specifications. All ladders must be in safe condition without broken rungs or split side rails. Damaged ladders shall be removed from service. Ladders shall be secured at the top and bottom and extend three (3) feet past the working surface. Metal ladders around electrical work are prohibited. A step ladder shall never be used as an extension ladder. A step ladder must only be used when fully opened with braces locked.
28. Crowfoot connections on air hoses shall be wired to prevent accidental disconnection. Compressed air shall not be used to dust off hands, face or clothing.
29. Report all unsafe conditions and near accidents to Supervisor or Pusher so corrective action can be taken.
30. All floor openings or excavations shall be barricaded on all sides to ensure employees are aware of the hazards. Floor holes shall be covered, with the covers secured and clearly marked.
31. Warning signs, barricades, and tags will be used to fullest extent and shall be obeyed.

Enforcement of Safety Policy

Safety violation notice(s) shall be issued to any employee, subcontractor, or anyone on the jobsite violating the safety rules or regulations by General Manager.

- A. Any violation of safety rules can result in suspension or immediate termination.
- B. Any employee receiving three (3) written general violations within a six (6) month period shall be terminated.
- C. Issuance of a safety violation notice for failure to use fall protection or for failure to report a job injury (at the time of the injury) may result in immediate termination, in accordance with company policy.

It is understood that Amsys Energy, LLC. is not restricting itself to the above rules and regulations. Additional rules and regulations as dictated by the job will be issued and posted as needed.

Job Safety Checklist

The following Job Safety Checklist has been condensed and edited from the Occupational Safety and Health Act, Part 1926, Construction Safety and Health Regulations.

A. Safety Rules

- Hard hats and safety glasses worn.
- Shirts with sleeves worn.
- Work shoes worn.
- Subcontractors' personnel hold safety meetings as indicated by project by project requirements in accordance with OSHA Safety Standards.
- Work areas safe and clean.

- Safety mono-goggles/face shields worn when circumstances warrant.
- Electrical cords and equipment properly grounded with GFCI's in place and checked by a competent person.
- No use of alcoholic beverages or controlled substances.
- Subcontractors provide fall protection for their employees in accordance with OSHA Safety Standards.
- All scaffolds built to specifications as establish by OSHA.
- Excavation/trenches sloped or shored as established by OSHA.
- Drug testing of employees involved in accident(s) resulting in personal injury or property damage.

B. Recordkeeping

- OSHA poster “Safety and Health Protection on the Job” posted.
- OSHA Log 300 or Occupational Injuries and Illnesses posted during the month of February only.
- Hard hat sign posted in a conspicuous manner.
- Weekly safety meeting sign-in logs maintained in a folder with a copy forwarded to the main office weekly.

C. Housekeeping and Sanitation

- General neatness.
- Regular disposal of trash.
- Passageways, driveways, and walkways clear.
- Adequate lighting.
- Oil and grease removed.
- Waste containers provided and used.
- Adequate supply of drinking water.

Rules of Conduct

1. Employees stealing from the Company or fellow employees will be subject to immediate discharge regardless of value of items stolen.
2. Company credit cards assigned to employees are for use on company business or vehicles only. Employee assigned credit cards must surrender those cards immediately upon termination from the Company.
3. Employees who are assigned a company vehicle must follow “Use of Company Vehicle Policy” and will be responsible for all physical damage to the vehicle while being used for unauthorized use and will be subject to termination.
4. All employees are expected to adhere to these Basic Safety Rules. Violations of any of the above Safety Rules will be grounds for termination.

Drug and Alcohol Use and Testing Governing Policy Amsys Energy, LLC.

1. Introduction and Interview

- 1.1.** Required by Amsys Energy, LLC. drug and alcohol company policy

Amsys Energy, LLC. has in place a drug and alcohol company policy which requires the conduct of mandatory drug and alcohol testing of employees at the times and under the conditions described in this Policy effective February 28, 2011.

- 1.2.** It is Amsys Energy, LLC. intention to comply fully with the governing of this policy on drug/alcohol use and testing. In the event Amsys Energy, LLC. is required to amend this Policy and the applicable terms, condition(s) and/or requirements of this Policy, it shall be deemed to have been amended automatically

at that time, without the need for redrafting. In such case Amsys Energy, LLC. reserves the right to apply the amended requirements immediately and without giving prior notice to employees' and/or applicants, unless applicable law requires such notice. It is also Amsys Energy, LLC. intention to comply with any applicable state requirements governing drug and/or alcohol testing. Amsys Energy, LLC. intends to comply with the applicable requirements of the Drug-Free Workplace Act of 1988, The Americans with Disabilities Act and the Family and Medical Leave Act.

- 1.3.** Under the Company Policy, drug and alcohol testing will be conducted on any current employee and/or prospective applicant. All applicants for positions with Amsys Energy, LLC. will be notified of the Company's drug and alcohol use and testing policy at the time they apply for a position with the Company.
- 1.4.** All employees will be provided a notice of the drug and alcohol testing policy, prior to the scheduled implementation date. Date of implementation: February 28, 2011.
- 1.5.** Amsys Energy, LLC. has spent a great deal of time and effort in developing and implementing the terms, conditions and requirements of this Policy. These terms, conditions and requirements must be complied with. In addition, Amsys Energy, LLC. reserves the right to search all vehicles, individuals and personal effects while on company property. Amsys Energy, LLC. reserves the right to conduct drug and/or alcohol tests as deemed necessary.

2. Definitions of Terms used in this policy

- 2.1.** For purposes of this Policy and Amsys Energy, LLC. drug and alcohol testing program, "Safety Sensitive Functions" means any of the following, (1) Driving, (2) the time spent waiting to work, or the time spent at facility or other property, unless the employee has been relieved from duty; (3) inspecting, servicing or condition equipment, (4) loading or unloading, including supervising or assisting in loading or unloading, attending to a patient or facility property, remaining in readiness to operate equipment or assist a patient and/or facility equipment, (5) securing tools, equipment, company vehicles and taking all of the safety precautionary measures required by this company policy (6) assistance or attending to a disabled patients.
- 2.2.** For purposes of the Policy and Amsys Energy, LLC. drug and alcohol testing program, "Company Business" includes but is not limited to, work performed on Company vehicles and property, or any facility property with which Amsys Energy, LLC. does business. Work performed on vehicles, equipment and work performed on or in a non-company vehicle or property being used for conducting Company business.
- 2.3.** For purposes of the Policy and Amsys Energy, LLC. drug and alcohol testing program, "Refusing to be Tested" means any of the following; (1) failing to provide an adequate urine specimen for a drug test without a valid medical

explanation, (2) failing to provide an adequate breath for an alcohol test without a valid medical explanation; (3) failing to submit to a test as directed; or (4) engaging in any conduct which clearly obstructs the testing process (5) failure to report to or remain at the drug and alcohol testing area.

- 2.4.** For purposes of this Policy and Amsys Energy, LLC. alcohol testing program, an alcohol test will be considered “Positive” when the alcohol concentration level registers 0.02 or greater.

3. Prohibited Drug and Alcohol Use and Activities

- 3.1.** The goals of Amsys Energy, LLC. Policy and the testing of employees is to insure a drug and alcohol free work environment, and to reduce and help eliminate drug and alcohol related accidents, injuries, fatalities and damage to Amsys Energy, LLC. property.

- 3.2.** In furtherance of this company’s goals, the conduct specified in Section 3.3. of this Policy is prohibited whenever an employee is on duty, whenever a employee is performing or just about to perform, a safety sensitive function (as defined in Section 2.1 of this Policy), whenever work is performed, or just about to perform a safety-related activity, whenever an employee is otherwise engaged in company business (as defined in Section 2.2 of this (Policy), or at the items otherwise specified in this Policy.

- 3.3.** The following conduct is strictly prohibited: (1) employees are prohibited from using, being under the influence of, or possessing illegal drugs; (2) employees are prohibited from using or being under the influence of legal drugs whose use can adversely affect the ability of the employee to perform his/her job safely; (3) employees are prohibited from selling, buying, soliciting to buy or sell, transporting or possessing illegal drugs while on Company time or on Company property; (4) employees are prohibited from using alcohol within four (4) hours of work or performing any other safety-sensitive function; (5) employees’ are prohibited from possessing any amount of alcohol (including possessing medication which contains alcohol) while on duty, (6) testing positive for drugs and/or alcohol; (7) refusing to be tested for drugs and/or alcohol (as defined in section 2.3 of this Policy; (8) failing to submit to a drug and/or alcohol test as directed by the Company (9) failing to stay in contact with the Company and its medical review officer while awaiting the results of a drug test (10) violating any applicable federal and/or state requirement governing the use of drugs or alcohol; (11) doing anything to obstruct COMPANY goals with respect to drugs and alcohol.

4. Tests Required

- 4.1.** In general: Amsys Energy, LLC. will conduct tests under the following conditions or times; (1) before a employee-applicant is hired, (2) on a random basis (3) following certain accidents (post-accident testing), (4) for reasonable cause, (5) return to duty and follow-up.

5. Pre-Employment / Pre-Duty Testing

- 5.1.** This test is required before any applicant will be hired. Amsys Energy, LLC. policy concerning pre-employment/pre-duty testing requirements of applicants and existing workers who are applying for a safety/sensitive position are collectively referred to in Section 4.1 of “Applicants”.
- 5.2.** Prior to taking a pre-employment/pre-duty drug and/or alcohol test, the applicant may be given a form notifying the applicant to report for a drug and/or alcohol test, which may include instruction and an explanation of the collection procedures for each test.
- 5.3.** All offers by Amsys Energy, LLC. to hire an applicant for, or to assign or transfer an applicant to a safety/sensitive position, are conditioned upon the applicant (1) executing the Company general acknowledgment drugs and alcohol policy (2) taking a drug and alcohol test as directed by the Company and passing both tests, (3) executing Amsys Energy, LLC. authorization to obtain past drug and alcohol test results form (which authorized the Company to obtain past drug and alcohol test results, including any refusals to test, from each Company for whom the employee either worked, or took or refused to take a pre-employment/pre-duty test during the previous two years and the results of those tests including any refusals), (4) passing the physical exam if required for employee positions; (5) complying with any other conditions or requirements of which the company, advises the applicant at the time of the offer.
- 5.4.** Any applicant who refuses or fails to execute Amsys Energy, LLC. drug & alcohol acknowledgment form, who refuses or fails to execute the Company authorization to obtain past drug and alcohol test result form, who refuses or fails to submit to a pre-employment/pre-duty drug and alcohol test as directed, or whose results is positive for either test, will not be considered eligible to work for Amsys Energy, LLC. Existing workers who test positive will not be considered qualified for the position for which they are applying and will also be subject to Amsys Energy, LLC. ’s discipline action up to and including discharge.

6. Post-Accident Drug Testing

- 6.1.** All employees who are performing a safety-sensitive function must submit to a post-accident drug and a post-accident alcohol test as soon as possible after the occurrence of an accident.
- 6.2.** An employee must always submit to a post-accident test as soon as possible after an accident which involves the death of a human being.
- 6.3.** An employee must submit to a post-accident test as soon as possible after an accident, whenever the employee receives a citation for a moving violation involving the accident and either; (1) a person is injured because of the accident and the injuries require immediate medical treatment to the person away from the accident scene; or (2) one or more motor vehicles involved in the accident incur disable damage and must be transported away from the accident scene by a tow truck or another vehicle.

- 6.4. It is possible that an employee will be directed to submit to a drug and/or alcohol test at the accident scene by federal, state, or local law enforcement officer. For a test that is conducted by a law enforcement officer, the employee is required to contact the employee's supervisor or another Company Official immediately to report this and to provide the Company with the name, badge number and telephone number of the law enforcement agency.
- 6.5. Whenever employee are involved in an accident and are not tested for drugs and alcohol by a law enforcement official, the employee is required to immediately report to the Company DER for further instructions or testing.
- 6.6. An employee who is required to take a post-accident drug and/or alcohol test will, at Amsys Energy, LLC. discretion, either be assigned to a non-safety-sensitive function, or placed on non-disciplinary suspension without pay, while awaiting the post-accident test results.
- 6.7. In addition to the penalties (discussed in section 14.3, 15.4 and 16.3 this Policy) an employee who tests positive for drugs and/or alcohol, who refuses or fails to submit to a post-accident drug and alcohol test as required, who unnecessarily delays reporting to the test site following an accident, or who otherwise fails to comply with the Company's post-accident testing procedures, will be subject to disciplinary action, up to and including discharge.

7. Random Testing

- 7.1. Amsys Energy, LLC. will test employees on a random basis and all such tests will be unannounced ahead of time.
- 7.2. Under the company random selection process, every employee will have an equal chance of being selected each and every time the selection is conducted. Appropriate safeguards are also present to ensure that the identity of an individual employee cannot be determined prior to or at the time of their selection.
- 7.3. Whenever an employee is randomly selected to be tested, he/she will be notified of this orally or in writing and instructed to report to the collection site immediately.
- 7.4. An employee who tests positive or who refuses to submit to a test is unqualified to work and/or perform other safety-sensitive function.
- 7.5. In addition to the penalties (discussed in section 14.3, 15.4 and 16.3 of this Policy), an employee, who refuses to submit to a random test, who fails to report for tests as directed, or who tests positive, will be subject to disciplinary action, up to and including discharge.

8. Reasonable Suspicion Testing

8.1. Each employee is required to submit to a drug and/or alcohol test whenever Amsys Energy, LLC. has reasonable suspicion to believe that the employee has used drugs and/or alcohol in violation of this policy.

8.2. Reasonable suspicion will exist when employees' appearance, behavior, speech or body odors indicate drug or alcohol use, or the chronic and withdrawal effects of drugs. Such observations must be personally observed and hand documented by at least one Company Official who has received training covering the physical, behavioral, speech and performance indicators of probable drug and alcohol use.

8.3. Whenever an employee is notified that there is reasonable suspicion to be tested, the employee will be taken to the test site immediately by a supervisor.

8.4. Employees who are required to submit to a reasonable suspicion test will be escorted by an agent of the company to the appropriate test site.

8.5. Amsys Energy, LLC. will attempt to contact the employee's spouse, another member of the family or another person designated by the employee, in order to make arrangements for transporting the employee to his/her home if the test is positive. In the event that the Company is unable to contact the employee's spouse, family member or another designated person; Amsys Energy, LLC. will make arrangements for transporting the employee home by other substitute means.

8.6. If the employee rejects the Company's efforts in this regard and instead insists on driving his/her personal vehicle, the company reserves the right to take whatever means are appropriate to prevent this including contacting appropriate law enforcement personnel and imposing disciplinary action, up to and including discharge.

8.7. An employee, who is required to take a reasonable suspicion test, will be considered by this company as unqualified to work and be placed on immediate suspension, without pay, pending the results of his/her test. An employee, whose test results are positive, will not be reimbursed for the time of the suspension.

8.8. In addition to the penalties (discussed in section 6.6, 15.4 and 16.3 of the Policy) an employee whose reasonable suspicion test, is positive, or who fails or refused to submit to a reasonable suspicion test when directed to do so by the company, will be subject to disciplinary action up to and including discharge.

9. Return-To-Duty Testing

9.1. Amsys Energy, LLC. will ensure that before an employee returns to duty requiring the performance of a Safety-sensitive function, after engaging in conduct prohibited by this policy, shall undergo a return to duty alcohol test with the results indicating an alcohol concentration of less than 0.02.

9.2. The employer shall ensure that before an employee returns to duty requiring the performance of a safety function, after engaging in conduct prohibited by this policy, shall undergo a return-to-duty controlled substances test with a result indicating a verified negative result for controlled substance.

10. Follow-Up - Testing

10.1. After returning to duty, the company shall ensure that the employee is subject to unannounced follow-up alcohol and or controlled substances testing as directed by a substance abuse professional. These tests must be conducted just before, during, or just after performance of a safety sensitive function.

11. Testing Methodology and Integrity

11.1. To ensure the integrity and accuracy of each test, all specimen collection, analysis and laboratory procedures shall be conducted in accordance with procedural protocols and safeguards. This includes, among other things: (1) procedures to ensure the correct identity of each employee at the time of testing: (2) a strict chain-of-custody procedures to ensure that the employee’s specimen is not tampered with by the Company: (3) the use of a trained breath alcohol technician (BAT) and approved testing devices for conducting alcohol tests: (4) the use of a laboratory that has been certified by the National Institute for Drug Abuse (NIDA): (5) the confirmation of an initial positive drug screen by a second analysis using Gas Chromatography/Mass Spectrometry (GCMS): (6) The company’s appointment of a qualified Medical Review Officer (MRO) to review drug test results before they are reported to Amsys Energy, LLC. designated employee representative D.E.R.

11.2. Cut off levels for drugs being tested for:

<u>DRUG</u>	<u>RESULT</u>	<u>SCREEN CUTOFF</u>	<u>GC/MS CUTOFF</u>
THC	Negative	50 n g / ml	15 n g / ml
Amphetamines	Negative	1000 n g / ml	500 n g / ml
Cocaine Metabolites	Negative	300 n g / ml	150 n g / ml
Opiates	Negative	2000 n g / ml	2000 n g / ml
Phencyclidine	Negative	25 n g / ml	25 n g / ml
Barbiturates	Negative	300 n g / ml	
Benzodiazepines	Negative	300 n g / ml	
Methadone	Negative	300 n g / ml	
Methamphetamines	Negative	1000 n g / ml	
Morphine	Negative	300 n g / ml	
Tricyclic Antidepressant	Negative	1000 n g / ml	

11.3. To further facilitate the integrity and accuracy of each test, Amsys Company, LLC. or site collectors/testers will provide employees with written and/or oral instruction regarding the conduct of the specific test before each testing event. The company considers all such instruction to be a part of this Policy. An employee who refuse or otherwise fail to comply with all instructions will be subject to disciplinary action, up to and including discharge.

12. For All Drug Tests

12.1. All drug tests conducted under this Policy requires that the employee must provide a specified specimen of his/her urine.

12.2. A minimum urine specimen will be analyzed for the presence of the following drugs: (1) marijuana, (2) cocaine, (3) opiates, (4) amphetamines, and (5) phencyclidine. Specimens will also be analyzed for other substances as the labs expands the list of drugs for which testing is or may be required. This company reserves the right to begin testing immediately for those drugs without prior notice to employees' or applicants, unless notice is required by state law.

12.3. In general, employees will be permitted to give a urine specimen in privacy and without being observed by collection site personnel. However, an employee forfeits this right whenever there is reason believe that he/she may alter or substitute a specimen.

12.4. All drug tests will be administered using the split sample methodology. Under this methodology, the employee must provide at least 45 milliliters (ml) in a specimen container. The collector will divide the specimen into two specimen bottles. Thirty (30) (ml) will be poured into one bottle and fifteen (15) (ml) into a second bottle. Both bottles will be sealed and sent to the laboratory. The bottle containing 30 (ml) will be analyzed as the employee primary specimen. The second bottle is held by the laboratory, for shipment to another lab at the employee's request in the event that the primary specimen is verified as positive. In the event the primary specimen is verified as positive, the employee will be notified by the company's MRO of the positive test and given the option to have the second bottle sent to a different laboratory for analysis. To exercise this option, the employee must advise the Company's MRO within 72 hours of being told that the primary specimen was positive. Payment of the second specimen is at the expense of the employee.

12.5. Except for the use of methadone and medications containing alcohol, nothing in this Policy prohibits an employee's use of a medication legally prescribed by a licensed physician: (1) who is familiar with the employee's medical history and specific safety-sensitive duties, and (2) who has advised the employee that the prescribed medication will not adversely affect the employee ability to work safety. Medication prescribed for someone other than the employee, will not be considered lawful use, when taken by the employee under any circumstances.

12.6. After being tested for drugs, employees will be given an opportunity to list, on their copy of the chain-of-custody form any prescription or non-prescription medication being lawfully used by the employee. A “Positive” drug test may be declared “Negative” by the Company’s MRO, if the employee can prove with clear and convincing evidence that the drug which was used was prescribed by a licensed physician who is familiar with the employee medical history and specific duties. This determination will be made by, Amsys Energy, LLC. medical review officer.

12.7. The company reserves the right to utilize rapid drug testing kits in lieu of the use of a laboratory test that has been certified by the National Institute for Drug Abuse (NIDA), confirmation of an initial positive drug screen by a second analysis using Gas Chromatography/Mass Spectrometry (GCMS) and the company’s appointment of and use of a qualified Medical Review Officer (MRO) services. With use of rapid drug testing kits, drug test results will be immediately reported to WRC designated employee representative D.E.R.

13. For All Alcohol Tests

13.1. All alcohol tests conducted under this Policy requires the employee to provide a breath sample for any test conducted or on behalf of the Company. In the case of an alcohol test be a federal, state or local law enforcement officer following an accident, the employee must provide either a breath or blood sample, as directed by enforcement official.

13.2. Alcohol tests will be administered using a breath sample, taken by a breath alcohol technician (BAT) using an approved breath-testing device (EBT), except in cases of on scene post-accident testing conducted by federal, state or local officials.

13.3. Before being tested, each employee will be required to (1) present his/her personal identification and (2) execute a “Breath Alcohol Test Form” provided by the BAT. An employee who refuses to provide his/her identification, provides a false ID, refuses to execute the “Breath Alcohol Test Form: or who otherwise refuses or fails to cooperate, will be treated as though he/she tested positive and be subject to disciplinary action, up to and including discharge.

13.4. Prior to each alcohol breath test conducted by the company, the BAT will instruct the employee on how the test will be performed. To protect each employee, the BAT will open and attach a sealed mouthpiece in the employees’ view. The employee will then be directed to blow forcefully into the EBT device until an adequate amount of breath has been obtained.

13.5. In the event that an employee is unable to provide an adequate amount of breath for the initial or confirmatory test after several attempts, the employee will be required to submit to an evaluation by a licensed medical physician to determine whether a valid medical condition exists. If the physician determines that a valid medical condition does exist, the test result will be reported to the company as “Negative”. If the physician determines that a valid medical condition does not exist,

the test result will be reported to Amsys Energy, LLC. , D.E.R. as a “Confirmed Positive”.

14. Drug Test Results

- 14.1.** For all drug tests, in the event that the test result of employee’s primary specimen is positive, the employee will be notified by the MRO and advised that he/she has 72 hours to request that the MRO send his/her secondary specimen to a second approved laboratory for analysis. Pending the outcome of this additional analysis, the employee will continue being considered unqualified to work.
- 14.2.** Before an employees’ test result is confirmed positive for drugs, the employee is given the opportunity to speak with the Company’s MRO. If there’s a legitimate medical explanation for the positive test result, and the MRO determines that a Amsys Energy, LLC. D.E.R. as “Negative”. When the MRO determines that a legitimate medical reason does not exist, the test result will be reported to Amsys Energy, LLC. , as “Confirmed Positive.”
- 14.3.** Except as provided in Section 5.0 of this Policy (concerning pre-employment and pre-duty tests), a employee whose test results is confirmed positive for drugs will be considered unqualified to perform or continue performing his/her functions safely and may be immediately discharged. In addition, an employee whose test results are confirmed positive for drugs may be subject to civil and criminal penalties.

15. Alcohol Test Results

- 15.1.** In the event that the employee provides an adequate breath sample and the initial test registers an alcohol concentration level is less than 0.02, the test result will be reported as a “Negative” and no additional test will be required.
- 15.2.** In the event that the employee provides an adequate breath specimen and the initial test registers an alcohol Concentration level of 0.02 or greater, a confirmatory test will be performed not sooner then 15 minutes and no later then 30 minutes. In the event that the employee provides an adequate breath specimen and the confirmatory test registers less than 0.02, the result will be reported “Negative”.
- 15.3.** When an employee confirmatory test registers 0.02 or greater, but less than 0.04, the employee can not perform any safety-sensitive function until the employees’ next regularly scheduled duty period, but for not less than 24 hours. Except as provided in Section 4.24 of this Policy (concerning pre-employment tests) a employee who after providing an adequate breath specimen, has a confirmatory test which registers 0.02 or more but less than 0.04 will at a minimum be suspended without pay until his/her next regular-scheduled duty period, but for no less than 24 hours and may be subject to additional disciplinary action by the company, up to and including discharge.

15.4. An employee after providing an adequate breath sample has a confirmatory test which registers 0.04 or greater will be suspended without pay and will be required to see a SAP, (substance abuse professional) or will be subject to additional disciplinary action by Amsys Energy, LLC. , up to and including discharge.

16. Drug And Alcohol Information

16.1. Amsys Energy, LLC. will provide training and educational materials for all employees', explaining the requirements and this company's policies and procedures to meet those requirements. In addition to this Policy, the Company will provide employees' with training and information concerning: (1) the effects of drugs and alcohol on an individual's health, work and personal life: (2) the signs and symptoms of drug or alcohol problem and (3) the available methods of intervention when a problem does exist.

16.2. Each employee is required to certify that he/she has read or been given a copy of this Policy and other drug and alcohol information by the Company, in accordance with paragraph 17.1 of this Policy. In accordance with paragraph 5.0 of this Policy, applicants are required to execute the certification as a condition of being hired. An applicant who refuses to sign the certificate will not be considered for employment.

16.3. Any existing employee who engaged in any conduct prohibited under this Policy will be provided with information concerning the resources available to evaluate and resolve a drug or alcohol problem and the names, address and telephone numbers of substance abuse professionals, counseling and treatment programs.

16.4. All questions concerning the educational material provided by Amsys Energy, LLC. or about this policy are directed to the company "D.E.R.", designated employer representative.

17. Payment Of Tests

17.1. At its discretion, Amsys Energy, LLC. shall pay the costs for all tests which the company requires. Amsys Energy, LLC. reserves the right to withhold cost of pre-employment tests when employment is terminated prior to 30 days of employment.

17.2. Employees' are responsible for paying the costs for any test or tests conducted which Amsys Energy, LLC. does not require, unless otherwise prohibited by the applicable state law.

17.3. Employees' are responsible for paying the costs of the analysis of any secondary urine specimen which they request under Section 12.4 Policy, except as otherwise required by applicable state law before analysis of second sample.

18. Confidentiality

- 18.1. The results of all individual drug and alcohol tests will be kept in a secure location with controlled access.
- 18.2. All individual test results will be considered confidential. Only upon written authorization of the individual, will the individual results will be released, or as required by applicable state or federal law.

Illegal Drugs, Alcohol Beverages, Firearms, & Weapons

To: Amsys Energy, LLC. Employees

It is the policy of Amsys Energy, LLC. to maintain a work environment that is safe for all employees and to operate in compliance with Federal and State Laws and regulations, regarding the use of drugs and alcohol. As part of this policy, no illegal drugs, intoxicating beverages, firearms, or weapons are allowed on any of Amsys Energy, LLC. equipment, offices, vehicles or other work locations of the Company. Illegal drugs include marijuana and all other drugs not prescribed by a licensed physician for use by the person possessing them.

As a further precaution, entry into or upon any vehicle, aircraft, equipment, office, or other work location of the Company is conditioned upon the Company's right to search any person and their personal effects for illegal drugs, intoxicating beverages, firearms, or weapons.

From time to time and without prior warning such searches by authorized Company representatives may be made and these searches may be made of Amsys Energy, LLC. employees as well as all other persons or employees of a subcontractor who is working under the Company's direction or control. This search may also include lockers, Company vehicles, lunch boxes, personal automobiles and personal effects on Company property or work locations.

When appropriate, such items discovered through these Company searches may be taken into custody and may be turned over to the proper law enforcement authorities.

Violation of the above policy or refusal to submit to a search will be cause for disciplinary action up to and including immediate discharge.

Drugs, Narcotics, Alcohol, Firearms and Stolen Property

Notice to all:

In accordance with Amsys Energy, LLC. policy, this is to notify all employees that illegal and unauthorized drugs, narcotics, alcohol, firearms and stolen property, found on any person during regular business hours and on the job locations poses a serious threat to the safety of Amsys Energy, LLC. Employees and operators will not be tolerated.

Anyone found to be in possession of the above mentioned articles whether using or distributing will be considered in violation of Amsys Energy, LLC. drug and firearm policy and in violation of the policies made clear by our customers, who are major oil and gas producers and whose policies we fully support. Amsys Energy, LLC. reserves the right at all times and without prior warning to search the person and or location of work for the prohibited items listed. Amsys Energy, LLC. not only has the right by an obligation to conduct these searches and inspections to insure both a safe and healthy working environment.

Prohibited articles include:

Illegal and unauthorized drugs
Alcoholic Beverages
Firearms or other weapons
Stolen property

Illegal drugs include:

Marijuana
Narcotics
All prescription drugs that were prescribed for someone other than the person possessing them.

Unauthorized drugs include:

Excessive quantities of prescribed drugs, the use of which may adversely influence the person's performance or behavior.

Amsys Energy, LLC. employees who refuse to submit to a search or are found in possession of any illegal or unauthorized items will be subject to disciplinary action up to and including immediate discharge.

Firearms – shall not be carried in or on company equipment or property.

Theft– of any property, supplies, tools, or equipment from Amsys Energy, LLC. or any other company will not be tolerated and any employee caught stealing or in possession of stolen property will be dismissed immediately.

Falsifying – employees shall not falsify any report or give any false information whether written or verbal.

Personal vehicles – employees shall not take personal vehicles on leases or use personal vehicles for company business.

Vehicle Agreement – to be signed by assigned driver to be returned to Main Office.

Medical Records & Exposure Policy

Amsys Energy, LLC.

An "Employee medical record" is a record concerning /containing the health status of an employee which is made or maintained by a physician, nurse, or other health care personnel, or technician.

Amsys Energy, LLC. will retain employee medical / exposure records for the duration of employment plus 30 years.

Employee Medical Records are to contain the following as well:

- * Environmental (workplace) monitoring or measuring of a toxic substance or harmful physical agent, including personal, area, grab, wipe, or other form of sampling, as well as related collection and analytical methodologies, calculations, and other background data relevant to interpretation of the results obtained;
- * Biological monitoring results which directly assess the absorption of a toxic substance or harmful physical agent by body systems (e.g., the level of a chemical in the blood, urine, breath, hair, fingernails, etc.) but not including results which assess the biological effect of a substance or agent or which assess an employee's use of alcohol or drugs;

Access to records must be provided in a reasonable time, place, and manner. If access to records cannot reasonably be provided within fifteen (15) working days, Amsys Energy, LLC. shall within the fifteen (15) working days apprise the employee or designated representative requesting the record of the reason for the delay and the earliest date when the record can be made available.

Whenever access is requested to an analysis which reports the contents of employee medical records by either direct identifier (name, address, social security number, payroll number, etc.) or by information which could reasonably be used under the circumstances indirectly to identify specific employees (exact age, height, weight, race, sex, date of initial employment, job title, etc.), personal identifiers must be removed before access is provided. Whenever a Amsys Energy, LLC. employee or designated representative requests a copy of a record, that record must be provided at no cost.

Upon an employee's first entering into employment, and at least annually thereafter, information must be given to current employees of the existence, location, availability and the person responsible for maintaining and providing access to records and each employee's rights of access to these records.

Whenever Amsys Energy, LLC. is ceasing to do business, Amsys Energy, LLC. shall transfer all records subject to this section to the successor employer. Whenever Amsys Energy, LLC. either is ceasing to do business and there is no successor employer to receive and maintain the records, or intends to dispose of any records required to be preserved for at least thirty (30) years, Amsys Energy, LLC. shall notify affected current employees of their rights of access to records at least three (3) months prior to the cessation of the employer's business.

Accident Prevention Policy

Statement of Policy:

A successful safety program does not begin or end at the management or supervisory level. It must spread throughout the entire organization and every employee. We must

become interested in our own personal safety, and when each employee believes in the importance of Active Participation in the accident prevention program, a reduction in accidents and their accompanying injuries will occur.

Job safety comes from man's mastery of his work environment and from self-discipline. It is won by individual effort and group cooperation. It can be achieved only by informed, alert, skillful people who respect themselves and have a regard for the welfare of others.

This is your company and the policies set forth in this manual are for your protection and well-being. Please strive to make safe work practices a habit for you and your crew.

Accident Investigation

- 1.** This report form can be used by the Supervisor for any accident that he feels needs to be investigated.
- 2.** The Supervisor will be advised when an investigation of an accident is needed. This request will come from the Safety Department.

3. When request is made for an investigation of an accident all questions need to be answered and investigator needs to report all facts.
4. The report form can be very valuable in determining the cause of an accident; to initiate corrective action to prevent a reoccurrence; and to make record of witnesses to the event.
5. Originals need to be kept at the District Office and copies sent to the Safety Department. The file copy needs to be attached to the “Employer’s First Report of Injury” form for future reference.

Accident Investigation Sample Form

Date of this report:_____ Completed by:_____

Name of injured:_____ Job classification:_____

First Name M.I. Last Name

Immediate supervisor: _____ District Off: _____ Dept./Rig No. _____

Work being done for: _____

Date of accident: _____

What time of day did accident occur: __AM__PM

Exact location where accident occurred: _____

Describe injury:

Lost time: _____ Total days lost: _____ No lost time: _____

Describe fully how accident occurred:

State in your own words how this accident could have been prevented: _____

Corrective action taken to prevent a recurrence:

Witnesses: (Important)

1. Name: _____ Address: _____

2. Name: _____ Address: _____

3. Name: _____ Address: _____

4. Name: _____ Address: _____

Investigating an Accident

Investigating an accident is one of the tasks that face each Supervisor whenever one of his employees is injured. Some of the information that would guide the Supervisor's action to prevent any recurrence would include:

1. What was the injured employee doing just prior to and at the time of the accident?
2. Was this in the course of his regular job?
3. Was he doing the job in accordance with safe operating instructions or existing rules?
4. Does the injured employee differ physically or mentally from others doing the same work; eyesight; hearing; hernia; organic weakness?
5. Was the injured employee in good health when reporting for work on the day of the accident?
6. Did the action of the injured employee or the action of some other employee contribute to the occurrence of the accident?
7. How is the same type of work done by other employees?
8. Is there is a safer way in which this work could be done?
9. Was the equipment or machinery being used in good condition?
10. Was it suited for the job for which it was used?
11. Was it effectively guarded?
12. Were the housekeeping conditions at fault? Was there insufficient room?
13. Was there a lack of personal protective equipment?
14. Did the injured fail to wear personal protective equipment?

This is not intended to be a complete check list for each accident investigation. The answers to these questions will, however, provide each Supervisor with some vital information and should help prevent the same accident from happening again.

Accident Reporting (Employee)

Once an accident has taken place, every effort must be made to take care of the injured employee.

1. Proper first aid must be given immediately and the injured employee taken to the nearest medical facility-if employee can be moved and if further medical treatment is needed. (NOTE: If there is any question in your mind, take the injured employee to the doctor.) The pusher makes the decision whether or not the employee goes to the doctor-not the employee.
2. Notify the main office, immediately, after the injured employee's condition has been stabilized or attended to.
3. If the employee cannot be moved, call an ambulance. Each office will have a list of doctors, ambulance, hospital, etc. for the area you are working in. The office can make the call for you.
4. If the injured was taken to the hospital, supervisor needs to stay with injured until he talks with the doctor. Supervisor needs to call the office and report the doctor's findings.
5. Once an accident is reported to the office, the office will immediately call the Safety Department and regional office to report the accident.
6. Safety Department or office will then advise main office of further action to be taken and then notify the claims office. (Lost time accidents only.)
7. It is the manager's responsibility to make sure the pusher or operator obtains the information needed to complete all report forms for formal reporting to our insurance carrier.
8. Safety Department will complete all necessary forms to properly report the accident to all concerned parties.
9. Accident must be reported the same day of occurrence.

Accident Reporting (Vehicle)

1. The driver of the vehicle is responsible for reporting the accident to the local law enforcement officials, if necessary, and to the office.
2. At the scene of the accident, the driver of the vehicle must do the following:
 - A. Do not admit anything.
 - B. Obtain the name of the other driver, home address, phone number, and insurance carrier.

- C. Call the office as soon as possible.
3. Office reports accident to the Safety Department.
4. Safety Department or main office will notify Claims Department.
5. Office is responsible for getting all written reports and needed information from the driver and to the Safety Department. This must be done as soon as possible.
6. All liability concerns must be reported to insurance carrier and proper forms completed.
7. Safety Department will send accident reports to the insurance company and initiate any necessary follow-up procedures, accident investigations, etc.

Accident Reporting (Rig or Equipment)

1. pusher or operator reports event to office as soon as possible.
2. Office reports event to Safety Department and main office immediately.
3. Safety Department will notify main office and Claims Department.
4. Investigation will be conducted immediately.
5. Safety Department must be present at all insurance investigations. (Claim Adjusters, etc.) Contact must be made with the Claims Department before insurance company investigations. All Amsys Energy, LLC. Employees are to answer questions relative to the event but not to offer any opinions as to the cause of the accident. Cause will be determined and reported to the Safety Department, Claims Department.
6. Any liability concern must be reported to insurance carrier and proper forms completed.
7. All insurance forms will be completed by the Safety Department.

Incident Investigation and Reporting Policy

Amsys Energy, LLC.

Before investigating, all emergency response needs must be completed, and the incident site must be safe and secure for entry and investigation. While all incidents should be investigated, the extent of such investigation shall reflect the seriousness of the incident utilizing a root cause analysis process or other similar method.

Required incidents must be verbally reported to applicable regulatory agency(s) within 8 hours of their discovery. Incidents must also be reported to the client as soon as possible, or in a timely manner (within 24 hours of incident).

Individual responsibilities for reporting and investigation must be pre-determined and assigned prior to incidents. Amsys Energy, LLC. personnel must be trained in their roles and responsibilities for incident response and incident investigation techniques. Training requirements relative to incident investigation and reporting (Awareness, First Responder, Investigation, and training frequency) should be identified in the program.

Equipment may include some or all of the following items; writing equipment such as pens/paper, measurement equipment such as tape measures and rulers, cameras, small tools, audio recorder, PPE, marking devices such as flags, equipment manuals, etc.

Initial identification of evidence immediately following the incident might include a listing of people, equipment, and materials involved and a recording of environmental factors such as weather, illumination, temperature, noise, ventilation, and physical factors such as fatigue, age, and medical conditions.

Evidence such as people, positions of equipment, parts, and papers must be preserved, secured, and collected through notes, photographs, witness statements, flagging, and impoundment of documents and equipment. Witness interviews and statements must be collected. Locating witnesses, ensuring unbiased testimony, obtaining appropriate interview locations, and use of trained interviewers should be detailed. The need for follow-up interviews should also be addressed.

Written incident reports should be prepared and include an incident report form and a detailed narrative statement concerning the events. The format of the narrative report may include an introduction, methodology, summary of the incident, investigation board member names, narrative of the event, findings and recommendations. Photographs, witness statements, drawings, etc. should be included.

Incident investigations should result in corrective actions. Lessons learned should be reviewed and communicated. Changes to processes must be placed into effect to prevent reoccurrence or similar events.

Injury / Illness Recordkeeping

Amsys Energy, LLC. is required to keep records of fatalities, injuries, and illnesses. Amsys Energy, LLC. must also record each fatality, injury and illness that:

- (a) Is work-related; and
- (b) Is a new case; and
- (c) Meets one or more of the general recording criteria.

Each recordable injury / illness must be entered on the OSHA 300 Log coinciding for that year and 301 Incident Report, or other equivalent form, within seven calendar days of receiving information that a recordable injury or illness has occurred.

OSHA Log 300s

- Amsys Energy, LLC. Executive must certify that he or she has examined the OSHA 300 Log and that he or she reasonably believes, based on his or her knowledge of the process by which the information was recorded, that the annual summary is correct and complete.
- A copy of the annual summary must be posted in each establishment in a conspicuous place or places where notices to employees are customarily posted. You must ensure that the posted annual summary is not altered, defaced or covered by other material.
- The annual summary must be posted no later than February 1st of the year following the year covered by the records and the posting kept in place until April 30th.
- The OSHA 300 Log, the privacy case list (if one exists), the annual summary, and the OSHA 301 Incident Report forms must be retained for five (5) years following the end of the calendar year that these records cover.

Hazard Identification / Risk Assessment Policy

Amsys Energy, LLC. contractors and employees must follow the established procedures put in places to identify existing and potential workplace hazards and be able to assess the risk of associated workers injury and illness. Risk assessments should be performed before work begins to formally identify and assess hazards. JSA's, JHA's, facility

wide or area specific analysis/inspections are all processes in which employees and contractors can identify potential hazards.

Employees and/or sub-contractors of Amsys Energy, LLC. are encouraged to actively participate and be involved in the process of identifying any potential hazards while on the workplace or performing specific jobs. Hazard identification processes and hazards are reviewed with all employees. Mechanisms to involve workers and elected representatives in the development of the worker safety and health program goals, objectives, and performance measures and in the identification and control of hazards in the workplace include JSA's, JHA's, Stop Work Authority and any site-specific Hazard Identification / Risk Assessment Policies.

The hierarchy of controls should be used to mitigate hazards. When a hazard is identified, first attempt to eliminate the hazard. If elimination is not practicable, use engineering controls. If engineering controls are not practicable, implement administrative controls. If the hazard cannot be adequately controlled using engineering and/or administrative controls, employees must use Personal Protective Equipment. A combination of engineering controls, administrative controls, and Personal Protective Equipment is usually best.

Hazard identification processes are required and implemented by Amsys Energy, LLC. employees for routine activities, non-routine activities, and also new processes, changes in operation, products or services as applicable.

Amsys Energy, LLC. employees must classify and prioritize any hazards that were identified and address them according to the risk associated with the task. A risk analysis matrix outlining severity and probability is encouraged for these procedures. Employees must demonstrate how identified hazards are addressed and mitigated either thru dedicated assignment, appropriate documentation of completion, or implemented controls.

Amsys Energy, LLC. employees will be trained in the hazard identification process including the use and care of proper PPE, before initial assignment.

Emergency Action Plan

Amsys Energy, LLC.

An emergency action plan must be in writing, kept in the workplace, and available to employees for review. However, companies with 10 or fewer employees may communicate the plan orally to employees. The names and / or job title of every employee who may be contacted by employees who need more information about the plan or an explanation of their duties under the plan.

An emergency action plan must include at a minimum:

- Procedures for reporting a fire or other emergency.
- Procedures for emergency evacuation, including type of evacuation and exit route assignments.
- Procedures to account for all employees after evacuation.

An alarm system must be in place to alert any and all employees and shall be distinctive and recognizable as a signal to evacuate the work area or perform actions designated under the emergency action plan. For workplaces with 10 or fewer Amsys Energy, LLC. employees, direct voice communication is an acceptable procedure for sounding the alarm provided all employees can hear the alarm.

Reviewing the emergency action plan is mandatory when:

- 1.** When the plan is developed or the employee is assigned initially to a job.
- 2.** When the employee's responsibilities under the plan change.
- 3.** When the plan is changed.

Stop Work Authority Policy

Amsys Energy, LLC.

It is mandatory that all Amsys Energy, LLC. employees must receive Stop Work Authority training before initial assignments. Trainings must be documented including Amsys Energy, LLC. employees name, the dates of training and subject.

All Amsys Energy, LLC. company representatives have the authority and obligation to stop any task or operation where concerns or questions regarding the control of HSE risks exist. Amsys Energy, LLC. employees are responsible for initiating a Stop Work Intervention when warranted and management is responsible to create a culture where Stop Work Authority is exercised freely. When an unsafe condition is recognized, the Stop Work Intervention will be initiated, coordinated through the supervisor, originated in a positive manner, inform all affected personnel and supervision of the stop work issue, correct the issue, and resume work when safe to do so.

No work will resume until all stop work issues and concerns have been adequately addressed by Amsys Energy, LLC.

Any method of retribution or intimidation directed at any individual or company for exercising their right to issue a stop work authority will not be tolerated and will be considered workplace violence.

All Stop Work Interventions must and will be documented as lessons learned and corrective measures to be put into place.

Stop Work reports shall be reviewed by a supervisor or manager in order to measure participation, determine quality of interventions and follow-up, trend common issues, identify opportunities for improvement, and facilitate sharing of learnings.

It is the desired outcome of any Stop Work Intervention that the identified safety concern or concerns have been addressed to the upmost satisfaction of all involved persons prior to the continuation of work. Most issues can be adequately resolved in a timely manner at the job site, occasionally additional investigation and corrective actions may be required to identify and address root causes.

First Aid Injuries

Amsys Energy, LLC.

General

Every injury or illness shall be immediately reported to the yard manager or supervisor. The manager or supervisor will make any necessary medical treatment and will report to necessary company safety personnel.

An accident report will be prepared as soon as possible to record incident surrounding the injury.

The cause of the injury shall be determined to prevent future accidents.

Medical

Telephone numbers, locations, and other information, pertaining to availability of medical personnel and medical facilities shall be posted at maintenance shop.

Provisions shall be made prior to commencement of work in area for prompt medical attention in case of serious injury.

First Aid / CPR Policy

Amsys Energy, LLC.

In the absence of an infirmary, clinic, hospital, or physician, that is reasonably accessible in terms of time and distance to the worksite, which is available for the treatment of injured employees, a person who has a valid certificate in first aid shall be available at the worksite to render first aid. It may be necessary for you to administer first aid if a person is injured or suddenly becomes ill. This section provides some basic instruction in first aid.

Do not attempt to give aid beyond the level of training that you have received

Become familiar with the locations of first aid kits, blood-borne pathogen kits and eye wash stations. First aid kits shall consist of appropriate items which will be adequate for the environment in which they are used. For construction operations, items shall be stored in a weather proof container with individual sealed packages of each type of item.

Check the scene first and always look out for your own safety. Do not panic.

Check the victim for life-threatening emergencies (i.e., loss of consciousness, stopped breathing, lack of pulse or severe bleeding).

Inform required emergency responders (rig site medics, 911, Emergency Services, etc.)

Provide necessary first aid procedures as trained until professionals arrive. Always use protective barriers, such as gloves, when dealing with body fluids.

- ABC evaluation: Airway, Breathing and Circulation.
- Rescue breathing: If the victim is not breathing, give two full breaths, then one breath every five seconds, check pulse and continue as required.
- CPR: Give two full breaths, check pulse, give 30 compressions and continue as required.
- Severe bleeding: Apply pressure directly over wound and elevate, if possible. If severe, apply pressure at a pressure point. Check frequently for feeling, warmth and color.
- Choking: Stand behind victim, wrap arms around his or her waist, place fist just above victim's navel, and press abdomen with quick upward thrust. If that doesn't work, give the victim 5 back blows. (Repeat abdominal thrust and back blows.)
- Exposure to toxic materials: Refer to SDS for emergency response (ER) procedures.

First Aid and CPR Training

The following are first aid and CPR training requirements:

- Classes in CPR and first aid must be scheduled by the manager in each district. Each supervisor and operator must maintain a current certification in first aid.
- Each location must have a first aid kit and a bloodborne pathogen kit approved by the district office. Keep the first aid kit in a readily accessible area at all times.

- Inspect the first aid kit and bloodborne pathogen kit frequently. Obtain any necessary replacement items from the district office.
- Post emergency numbers as well as telephone numbers of the physicians, hospitals, or ambulances at each job site.
- Proper equipment for prompt transportation of the injured person to a physician or hospital or a communication system for contacting necessary ambulance service shall be provided.

Emergency First Aid

- The first objective in first aid is to save lives. The person providing first aid must strive to:
 - Maintain breathing and circulation.
 - Prevent heavy loss of blood.
 - Prevent further shock.
 - If possible, without causing further complications, transport patient to a physician, the emergency room, or a hospital.
- There are two “hurry” cases in first aid:
 - Breathing – A person will die within 4 to 6 minutes if breathing is not restored.
 - Bleeding – If a large vessel is cut, blood loss may be sufficient to cause death within less than a minute. Follow Amsys Energy, LLC. ’s Bloodborne pathogen procedure.
- Unconscious Victim:
 - Check for breathing and pulse; administer mouth-to-mouth resuscitation and/or CPR, if necessary, according to the guidelines set up by American Red Cross, Medic First Aid, The American Heart Association and Amsys Energy, LLC. ’s Bloodborne Pathogen Exposure Control Plan.
 - If the victim is breathing, check for bleeding and control as needed (direct pressure, elevation, pressure point).
 - Check for other injuries.
 - Do not move an injured person unless their position poses an immediate danger.
- Conscious Victim:
 - Talk to the patient.
 - Make sure the patient is breathing.
 - Check and control bleeding.
 - Find out where the patient hurts, and reassure and comfort the patient.
 - Do not move the patient unless it is absolutely necessary.
- Be sure to treat for shock.
 - Keep the patient calm and reassured.
 - Keep the patient lying down (legs elevated, unless fractures or suspected head or back injury).
 - Cover with blanket to retain body heat; however, do not let the victim become overheated.
 - Get patient to a doctor; call an ambulance.
- Exposure to injurious corrosive materials:

- Where the eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities shall be provided within the work area.
- Specific procedures may include drenching or flushing of the eyes or body.
- Refer to your SDS binder to follow through procedures.

A trained and certified person in first aid training must be obtained from the U.S. Bureau of Mines, the American Red Cross, or equivalent training that can be verified by documentary evidence must be available at worksites to render first aid if needed.

Blood Borne Pathogen Policy

Amsys Energy, LLC.

OSHA's bloodborne pathogens (BBP) standard, § 1910.1030, prescribes safeguards to protect workers against the health hazards from exposure to blood and certain body fluids that may contain bloodborne pathogens and to reduce their exposure risk.

1. Purpose and Policy

The purpose of these guidelines is to reduce the risk of the employee's exposure to blood borne pathogens such as, but not limited to, Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), and the Human Immunodeficiency Virus (HIV).

2. Prevention of Blood Borne Pathogen Exposure

Education and Training in Standard Precautions and Procedures:

Employees will be required to participate yearly in Blood Borne Pathogen Exposure classes. Employees are required to carry a Blood Borne Pathogen Kit in all vehicles, and required to keep them clean and supplied. Office and lab employees are required to have a Blood Borne Pathogen Kit available in their locations. Training shall be provided at the time of initial assignment & within 1 year of their previous training. Training records shall be maintained for 3 years from the date of training.

Hepatitis B Vaccine:

Employees will be offered free of charge by the company the Hepatitis B vaccine series, or have a signed refusal paper declining the vaccine in the employee file.

Procedures for Wounds Incurred

If you receive an open wound, you should clean it with a suitable antiseptic and cover it securely with a leak proof dressing and report the accident to the executive staff.

Procedure for Contact with Another's Blood

If you come in contact with the blood of another, make an immediate attempt to locate and alert the individual who is the source of the bleeding. The individual should immediately stop the bleeding and handle the problem. If the injured person needs assistance with the treatment, or stopping the bleeding, the other employee should wear a pair of later (or hypoallergenic non-latex) gloves. All used gloves and bloody cloths or dressing will be placed in a leak proof plastic bag and disposed of carefully. Hands shall be washed with soap and water immediately after gloves are removed. Minor blood

stains will be treated with a disinfectant solution and disposed of properly. If provision of handwashing facilities are not feasible, then an appropriate antiseptic hand cleanser in conjunction with cloth/paper towels or antiseptic towelettes must be provided by the company.

Employee Responsibility

There are diseases and illnesses other than those known to be transmitted through blood and body fluids. You are reminded that you are responsible for not only your own health and safety, but the health and safety of others. If you know or suspect that you have any illness which might affect or infect others, or which might impair your ability to work, you have the obligation to refrain from exposing others at work until you are not a risk to others.

Exposure Control Plan

The plan includes the identification of job classifications in which there are tasks and procedures that increase the risk of exposure to blood and other potentially infectious materials. Under circumstances in which differential between body fluids is difficult or impossible, all body fluids will be considered potentially infectious. Also in the plan are site-specific methods used to reduce the risk of occupational exposure:

- Engineering and work practice controls
- Personal protective equipment
- Housekeeping
- Containment and labeling of potentially infectious materials

Another key part of the plan includes listing the site-specific means by which the facility will reduce employee risk. These methods include appropriate training, the communication of hazards, hepatitis B vaccinations for any employee who has occupational risk of exposure, methods for post-exposure evaluation and follow-up, and proper recordkeeping. The final part of the plan describes the procedure for the investigation and evaluation of circumstances surrounding exposure incidents in order to quickly provide effective follow-up care to exposed employees. This investigation will also help each site team learn from accidents and establish measures to prevent them from happening again. The written Exposure Control Plan is accessible to all employees. It is reviewed and updated at least annually or when alterations in procedures create the possibility of new occupational exposure. All equipment or environmental surfaces shall be cleaned & decontaminated after contact with blood or other infectious materials.

When the possibility of occupational exposure is present, PPE is to be provided at no cost to the employee such as gloves, gowns, etc. PPE shall be used unless employees temporarily declined to use under rare circumstances. PPE shall be repaired & replaced as needed to maintain its effectiveness.

Training will be provided to those employees who could have occupational exposure to blood and other potentially infectious material.

Safety Equipment – General Practice

1. Fire extinguishers – each rig shall be equipped with a clean, filled extinguisher that is in good working order. Fire extinguishers shall be kept in accessible position.
2. Fresh air trailer and masks – fresh air equipment should be kept clean and in good working order at all times. Air bottle supply shall be kept up and air masks should be cleaned and sanitized after each use.
3. The following personal protective equipment should be used as listed below:
 - A. Clothing – full clothed, not oil-soaked or loose fitting
 - B. Gloves – those having elastic wrist bands preferred gauntlet type not desirable.
 - C. Hard hat-plastic (non-electric conductive) is preferred; cold liners for winter use. Hard hats must be worn on any and every job. New employees will be issued a hard hat and the cost will be deducted from their first pay check.
 - D. Goggles and Safety glasses – use whenever there is inherent danger to the eyes. Be smart, not sorry!
 - E. Hard toe shoes – strongly recommended when working with heavy objects. Never wear tennis shoes or other athletic shoes while at work.
 - F. Slicker suits – as weather condition dictate.
 - G. Operator will check to make sure all employees on his unit have a current H₂S card and First Aid card (if not report to supervisor).
 - H. New employees shall have I-9 and employment sheets filled out as soon as possible.
 - I. Anyone driving a company vehicle must have a valid Texas driver's license.

Manual Lifting Policy

Amsys Energy, LLC.

Training for Manual Lifting should include general principles of ergonomics, recognition of hazards and injuries, procedures for reporting hazardous conditions, and methods and procedures for early reporting of injuries before any type of Manual Lifting job is to be performed for Amsys Energy, LLC. Additionally, job specific training should be given on safe lifting and work practices, hazards, and controls.

Amsys Energy, LLC. Supervisors must periodically evaluate work areas and employees' work techniques to assess the potential for and prevention of injuries. New operations should be evaluated to engineer out hazards before work processes are implemented.

Before manual lifting is performed, a hazard assessment must be completed by Amsys Energy, LLC. employees. The assessment must consider size:

- bulk, and weight of the object or objects
- if mechanical lifting equipment is required
- if two-man lift is required
- whether vision is obscured while carrying
- the walking surface and path where the object is to be carried
- Where use of lifting equipment is impractical or not possible, two man lifts must be used.
- Use of provided manual lifting equipment by employees is mandatory when a manual lifting job is to be performed by any and all Amsys Energy, LLC. employees.

Musculoskeletal injuries caused by improper lifting must be investigated and documented. Integration of investigation findings into work procedures must be proficient to prevent future injuries.

Manual lifting equipment such as dollies, hand trucks, lift-assist devices, jacks, carts, hoists is provided when necessary for Amsys Energy, LLC. employees. Other engineering controls such as conveyors, lift tables, and work station design should be considered.

Crane Operations Policy

Amsys Energy, LLC.

Crane Operations

- Only personnel who have been trained and certified to operate cranes may do so, and the crane operation must be in accordance with appropriate manuals and training.
- Do not operate cranes beyond the rated capacity.
- Use only certified wire rope slings with manufactured swedges. The rated maximum load capacity must be stamped on the swedge by the manufacturer.
- Never work under suspended loads and keep clear of them at all times.
- Never stand on or near the catwalk when pipe is being hoisted to the rig floor.
- Do not leave loads unattended at any time. Attach tag lines of sufficient length to control all lifts.
- Tag lines must be free of knots.
- No one shall ride on loads or hooks suspended from a crane.
- Horseplay in or with the crane is prohibited.

Critical Lifts

A lift that involves risk to the safety of personnel or integrity of equipment is referred to as a critical lift. A lift should be considered a critical lift if it meets any of these three criteria:

- Size of lift – As you approach the limit of the weight capacity and the reach of the crane, risk increases.
- Complexity of the lift – Multiple cranes make the lift move difficult. Also, the number and difficulty of maneuvers and confinements due to location, surrounding equipment, etc., increases the complexity of the lift. Weather conditions also are a factor in determining complexity.
- Consequences of failure – If a load is dropped on operating equipment, the result may be fire, explosion, equipment damage and severe injury to employees.

Critical lifts should be planned by qualified personnel. Refer to HSE Standards and Guidelines on Lifting and Hoisting Equipment.

Heavy Complex Lifts Must Be Engineered!!

Crane and Hoist Signals

- The movements of cranes must always be governed by a standard set of signals that are transmitted to the crane operator by a signal person.

- Hand signals are normally the preferred means of providing direction to the crane operator.
- The crane operator designates a qualified signal person who gives all signals.
- A simple code of one-hand signals, such as those created by the American National Standards Institute (ANSI) in their B30 series standards, is an appropriate means of communicating for overhead cranes or bridge cranes.

Cable / Hoist Sling / Rigging Safety Policy

Amsys Energy, LLC.

Rigging equipment shall be inspected to ensure it is safe. Rigging equipment for material handling shall be inspected prior to use on each shift and as necessary during its use to ensure that it is safe. Prior to every use, ensure the integrity of cables, hooks, slings, hoists and various devices used in conjunction with these components for lifting are in order.

Inspection Process

1. All metal cables, non-metal slings (nylon, polypropylene, etc.), hooks, and various components must be visually inspected and documented monthly and visually inspected before each use. Frayed or damaged nylon slings shall be cut and discarded.
2. All lifting cables and their components will be included on the company's annual hoist inspection report.
3. Qualified personnel or competent, trained personnel shall make inspections. Test results and supporting documentation shall be maintained on file.
 - Cables, hooks and other devices that do not meet the inspection criteria shall immediately be removed from service.

Rigging Practices

- Do not damage machines and any soft surfaces of the load with the lifting apparatus.
- Avoid sharp bends in slings and protect slings from sharp edges and abrasions.
- Set loads down on proper blocking – never directly on a sling.
- Do not side load.
- Maintain an angle between the sling and the horizontal greater than forty-five (45) degrees to reduce stress on the sling.
- Attach cable clips properly by making sure the nuts are torque to manufacturing specifications. The saddle should be on the load cable, the U-bolt on the dead end. Remember: “You can't put a saddle on a dead horse.”
- Do not stand or walk under suspended loads.
- Do not leave loads unattended at any time. Use tag lines of sufficient length to control the lift.

Rigging Equipment

- Know the safe carrying capacity of sling chains, wire rope, hoists, and other lifting apparatus and do not overload them.

- Immediately discard defective lifting equipment.
- Inspect all rigging equipment before each use.
- Do not tie knots in sling chains, rope, slings, or wire cables to shorten them.
- Do not place bolts or other material between links of chain to shorten or splice it.
- Do not use rope for rigging or lifting loads except where it is impractical to use other methods.
- Modify lifting equipment only after engineering approval.
- Do not lift or hoist any object of unknown weight.
- Hooks on overhaul ball assemblies, lower load blocks, or other attachment assemblies shall be of a type that can be closed and locked, eliminating the hook throat opening. Alternatively, an alloy anchor type shackle with a bolt, nut and retaining pin may be used.
- When not in use, immediately remove rigging equipment from work area for immediate precautions.

Aerial Lift Policy

Amsys Energy, LLC.

- Aerial Lifts are to only be operated by authorized personnel.
- An approved fall restraint system shall be worn when working from an aerial lift.
- An approved fall restraint system shall be attached to the boom or basket when working from an aerial lift and is not permitted to be attached to adjacent poles or structures.
- Aerial lifts may be "field modified" for uses other than those intended by the manufacturer provided the modification has been certified in writing by the manufacturer or by any equivalent entity.
- Lift controls shall be tested each day prior to use to determine that such controls are in safe working condition. Tests shall be made at the beginning of each shift during which the equipment is to be used to determine that the brakes and operating systems are in proper working condition.
- Boom and basket loads are not to be exceeded beyond the limit set by the manufacturer.
- Company vehicles are to have a reverse signal alarm audible above the surrounding noise level or the vehicle shall be backed up only when an observer signals that it is safe to do so.
- Employees shall always stand firmly on the floor of the basket, and shall not sit or climb on the edge of the basket or use planks, ladders, or other devices for a work position.

Abrasive Blasting Policy

Amsys Energy, LLC.

To all Amsys Energy, LLC. Employees:

Abrasives and the surface coatings on the materials blasted are shattered and pulverized during blasting operations and the dust formed will contain particles of respirable size. The composition and toxicity of the dust from these sources shall be considered in making an evaluation of the potential health hazards. The blast nozzle shall be bonded and grounded to prevent the build-up of static charges. The blast cleaning nozzles shall be equipped with an operating valve which must be held open manually. A support shall be provided on which the nozzle may be mounted when it is not in use.

Whenever hazardous substances such as dusts, fumes, mists, vapors, or gases exist or are produced in the course of construction work, their concentrations shall not exceed the limits specified in the "Threshold Limit Values of Airborne Contaminants - 1970" of the American Conference of Governmental Industrial Hygienists.

Compressed air shall not be used for cleaning purposes except where the pressure is reduced to less than 30 p.s.i.

PPE

A respiratory protection program as described earlier in your handbook shall be established wherever it is necessary to use respiratory protective equipment including worksite-specific procedures and elements for required respirator use. Equipment for protection of the eyes, face and body shall be supplied to the operator when the respirator design does not provide such protection. Equipment for protection of the eyes and face shall be supplied to any other personnel working in the vicinity of abrasive blasting operations.

Respirators

Abrasive blasting respirators shall be worn by all abrasive blasting operators under certain conditions. Air for abrasive-blasting respirators must be free of harmful quantities of dusts, mists, or noxious gases.

Forklift and Bobcat Safety Policy

Amsys Energy, LLC.

As a forklift operator for Amsys Energy, LLC. you have the responsibility for operating in a safe manner, and also to operate in such a manner, as not to damage the products and equipment you are moving. If operated correctly and safely, the forklift can save much time and money for our customers and protect the customers' freight, but if operated improperly can be a very dangerous piece of equipment.

The following rules will be followed without exception:

- 1.** Because of the noise of the motor and the quick turning radius of the forklifts, the operator must be extra alert at all times while the forklift is in operation.
- 2.** Equipment shall be examined before being placed in service. Such examination shall be made at least daily. Where industrial trucks are used on a round-the-clock basis, they shall be examined after each shift. Defects when found shall be immediately reported and corrected.
- 3.** All employees are required to be trained and certified prior to operating each specific type of equipment.
- 4.** Training includes content on the load capacity, instructions, distances, refueling, ramps, visibility and balancer and counterbalances.
- 5.** Formal instruction includes lecture, discussion, interactive computer learning, videos, and written materials. Practical training involves instructor demonstrations and trainee exercises. Operator evaluation - critiques required.
- 6.** All trainers must have the knowledge and ability to teach and evaluate operators.
- 7.** Mandatory refresher training shall be provided when unsafe operations are observed, after an accident, if operation a different vehicle type, changes in conditions, etc.
- 8.** Loads are never secured on the blades of a forklift while loading or unloading, so the operator must know the type of material being moved and use extreme caution at all times.
- 9.** The forks on the forklift must be lowered to bottom level, engine turned off and transmission placed in lowest forward gear any time operator parks and leaves the equipment.
- 10.** Set the brakes on truck and trailer hauling forklift before loading or unloading forklift to prevent movement of haul unit.
- 11.** Forklifts shall be equipped with back-up alarms to provide warning to personnel

12. Carry all loads low with forks just above the ground and tilted back.
13. Do not allow any person to stand or walk under forks (loaded or empty).
14. Do not use forklift to raise people without approved platform.
15. No passengers or riders are allowed on forklifts.
16. Trailers must be chocked and secured.
17. Do not exceed the capacity of your forklift.
18. Operators are required to be re-evaluated every three (3) years.
19. No operator shall operate mobile equipment without the protection of an enclosed cab or approved eye protection.

Personal Protective Equipment Program

Amsys Energy, LLC.

General Company Requirements for Personal Protective Equipment (PPE)

General Policy

All personnel who may need to wear PPE will need to be properly trained before using it. Any changes that shall be made in use of specific PPE will require mandatory retraining. Personal Protective Equipment Training/Certification must include employee name, the dates of training, and the certification subject.

Personal Protective Equipment (PPE) is vital to safety at any work location. PPE will be used where needed by all employees of Amsys Energy, LLC. to comply with 29 CFR 1910.132 and 29 CFR 1910.134. All work areas are to be evaluated to determine if hazards are present or likely to be present through a workplace hazard assessment. The PPE required to protect the employees will then be selected. The employees affected will then be told of the selection decision and properly fitted with the equipment. A certification that the workplace hazard assessment was performed will be made and placed in the Health and Safety Program.

PPE is used to protect breathing, hearing, eyesight and all body limbs from injury. The equipment will be properly cleaned and inspected after use then stored in clearly marked and properly designated areas. If there is any doubt of the proper protective equipment needed either to wear, or for use in an operation, contact your supervisor. Contract personnel will contact their Company representative concerning questions on PPE.

Personal Protective Equipment (PPE) Guidelines

Amsys Energy, LLC. has set forth the following guidelines for providing PPE in order to ensure individual safety.

- Amsys Energy, LLC. will provide the following PPE to its employees where applicable:

1. Safety glasses/goggles including impact goggles, dust proof goggles, splash proof goggles, cover-glass goggles.
 2. Ear plugs/ear muffs.
 3. Protective gloves, specific types as needed.
 4. Hard hats.
 5. First aid kits for each Field Office, dog houses, vehicles and equipment.
 6. Fire extinguishers for each Field Office, dog house vehicles and equipment.
 7. H₂S detection equipment as needed
 8. Safety boots.
- Employees are not allowed to use their personal tools/equipment.
 - Defective and damaged equipment shall never be used.

Eye and Face Protection

Eyeglasses, face shields or other eye protective equipment appropriate for the work being done shall be worn by employees when doing any work in which there is a reasonable probability of injury to the eyes from flying objects, chemicals, injurious light or heat rays or other hazards.

Supervisors shall identify those areas and job assignments where protective eye and face equipment are required. All protective equipment shall meet the specifications of ANSI 287.1: Practice for Occupational and Educational Eye and Face Protection.

Protective Footwear

Safety shoes, safety boots or toe guards should be worn by employees normally assigned to the work area. Safety-toe footwear should meet the requirements of ANSI Z41.1: Men's Safety Toe Footwear.

Hand Protection

Protective gloves or other protective hand equipment should be worn by employees when doing any work involving a reasonable probability of injury to the hands from tools, chemicals or other hazards. Your supervisor will identify those work areas and job assignment which require the use of protective hand equipment. Supervisors will also identify work areas and job assignments which require the use of protective hand equipment. Supervisors will also identify work areas and job assignments in which there are potential hazards, and will determine the proper hand covering to be used.

Proper Clothing

Do not wear loose, poorly fitting or torn clothing. You are discouraged from wearing jewelry such as rings and chain bracelets, which cause accidents, and from wearing clothing made of synthetic materials (such as polyester) which will contribute to the severity of burns received from fires. Clothing made from certain fabrics, such as 100% cotton, can provide additional burn protection in flash fires; synthetic materials do not.

Hearing Protection Policy:

Ear plugs or muffs provided as hearing protection by Amsys Energy, LLC. will be available for all personnel in areas where signs are posted warning of excessive noise

levels. Hearing protection should also be worn in unposted areas that are suspected of temporary excessive noise, such as where high-pressure gases are released or areas where large motors or compressor units are running. Contractors are expected to provide hearing protection for their employees.

Protective Devices:

Ear plugs or muffs will be made available for hearing protection to all workers exposed to an 8-hour time weighted average noise level of 85 DB. Hearing protection will be re-examined for effectiveness if workplace noise levels increase and the current level of hearing protection is not adequate.

Eye Protection Policy:

Suitable eye protectors will be worn where there is a potential for eye injury from machines, flying objects, glare, liquids, injurious radiation or a combination of these. They shall be worn when handling acids, chemicals or other hazardous liquids that may blow or splash into the eyes or face. In accordance with 29 CFR 1910.133(a)(6), all employees and visitors shall wear ANSI Z87.1 approved safety glasses when the potential for eye injury exists, except when special-purpose eye protection is needed. This eye protection will be furnished by Amsys Energy, LLC. for all employees and visitors. Contractors are responsible for safety glasses for their employees.

Program Requirements

1. Eye protectors will meet the following minimum requirements:
 - Provide adequate protection against the particular hazards for which they are designed;
 - Be reasonably comfortable when worn under the designated conditions;
 - Fit snugly without interfering with the movements or vision of the wearer;
 - Be durable, easily cleaned and capable of being disinfected;
 - Be kept clean and in good repair.
2. When contact lenses are worn, goggles or special safety glasses with side shields will be worn for additional protection where eye protection is required. Contact lenses will not be worn in field operations where there is a risk of chemical spray, unless appropriate protective goggles are worn.
3. Wearers of contact lenses will inform their supervisors and co-workers that they wear the lenses so that proper emergency treatment can be given if necessary.
4. Impact-type goggles will be worn when engaging in any activity that involves hazards to the unprotected eye from chipped or flying particles. Some examples are chipping, scraping, buffing, grinding, etc.
5. Dust-proof goggles will be worn when dust hazards exist and when using any type of pneumatic .
6. Splash-proof goggles will be worn when handling hazardous chemical liquids, powders or vapors. Goggles will also be worn by individuals when they are in the immediate vicinity of these chemicals.

7. An approved cover-glass, impact-type safety goggle for use over corrective glasses may be worn by employees who are only occasionally exposed to eye hazards.
8. A person near other persons who are doing work that require the use of safety goggles will also wear such goggles.
9. Goggles with number 5 or 6 shade lenses will be worn by personnel when material is cut with acetylene gas. Helpers engaged in such work should wear goggles with number 4 shade lenses.
10. Electric-arc welding requires the use of welding helmets or hand shields fitted with number 10 or darker shade lenses. Helpers in electric welding will wear number 6 or darker shade lenses.
11. Welding will not be directly watched without proper eye protection.

Protective Footwear Policy:

Safety toe shoes/boots meeting ANSI Z41.1 specifications shall be worn by all personnel at all field locations and other designated areas which require the use of such footwear. Other types of special protective footwear, such as rubber boots, foot protectors and metatarsal guards shall be worn when required, based on conditions, and Amsys Energy, LLC. policy.

Hand Protection Policy:

Appropriate protective gloves will be worn by personnel handling rough or hot materials or hazardous and irritating substances, such as solvents or acids. Latex or other approved gloves will be used in administering first-aid in which bloodborne pathogens (i.e. Hepatitis B, HIV) may be encountered. These gloves will be properly disposed of after use.

Program Requirements

1. Wearing gloves prevents many minor injuries resulting from rough materials or irritating substances (solvents, acids, etc.). Wear gloves whenever possible. Gloves made of non-porous materials which are capable of preventing substance contact to the skin through absorption should be used when handling hazardous and irritating substances. Leather or leather-palm gloves should be worn when wire rope is being handled. Cloth gloves afford adequate protection when pipe is handled and for general lease operation.
2. Approved rubber gloves for electrical work are necessary in certain electrical work.
3. Insulated or heat-resistant gloves will be worn when regular work gloves cannot adequately protect against burns.
4. Gloves are necessary to protect the hands, however, extreme caution should be exercised if it is necessary to wear these gloves around moving machinery.

Head and Face Protection Policy

Company-supplied hard hats meeting ANSI Z89.1 requirements will be worn by employees and visitors in the field, or any location where head injury hazards exist. Contractors will be required to provide hard hats for their personnel.

Program Requirements

1. Hair long enough to constitute a hazard while a person is working near moving machinery or rotating tools and equipment will be secured by a net or tied back. Hair styles that make it impossible for a person to properly wear a hard hat are not permitted.
2. Beards that constitute a hazard while a person is near moving machinery or rotating tools are not permitted.

Clothing Policy

Clothing suited to the job, the weather and the environment in which the employee works will be worn. Generally speaking, clothing of a material with good resistance to abrasion and not easily ignited by heat or flame should be worn. Oily and greasy clothing create a fire hazard and may cause skin irritation. Clothing made of cotton material is best for oil field work unless fire resistant clothing is used. The cotton fiber has fewer tendencies to permit a static electricity buildup than do most other materials. In case a person makes contact with fire, the resulting burns will probably be less with cotton clothing than with most synthetic fibers. Clothing should fit well and pants cuffs should be sewn down. Loose cuffs or baggy clothing should be avoided.

Program Requirements

1. The wearing of jewelry such as a ring, watchband, or neck chain in certain work areas (i.e., around moving machinery, rotating tools, etc.) is discouraged because it can cause or contribute to accidents and injury.
2. A person working around moving machinery will not wear neckties or neck chains, gauntlet gloves or gloves that fasten around the wrists or baggy, loose or ragged clothing. Never tie or otherwise attach a rag or handkerchief to your person in such a manner that it cannot be removed with one quick, easy pull.
3. If clothing becomes saturated with oil, gasoline or chemicals, the employee should immediately change clothes to prevent skin irritation. The employee should also wash the exposed skin area with soap and water. Avoid all sources of fire, including cigarettes, pipes or cigars, before changing clothes and washing the affected skin with soap and water. A doctor should be consulted if a skin rash develops.

Benzene Awareness Safety Policy

Amsys Energy, LLC.

Benzene is a clear, colorless liquid with a pleasant, sweet odor. The odor of benzene does not provide adequate warning of its hazard. Benzene is a component of products derived from coal and petroleum and is found in gasoline and other fuels. Benzene is used in the manufacture of plastics, detergents, pesticides, and other chemicals. Research has shown benzene to be a carcinogen (cancer-causing). With exposures from less than five years to more than 30 years, individuals have developed, and died from, leukemia. Long-term exposure may affect bone marrow and blood production. Short-term exposure to high levels of benzene can cause drowsiness, dizziness, unconsciousness, and death. Benzene is addressed in specific standards for the general industry, shipyard employment, and the construction industry. Employees will be made aware of owners' contingency plans and provisions. Employees will also be informed where benzene is used in the host facility and aware of additional plant safety rules.

Effects of overexposure

Short-term (acute) overexposure: If you are overexposed to high concentrations of benzene, well above the levels where its odor is first recognizable, you may feel breathless, irritable, euphoric, or giddy; you may experience irritation in eyes, nose, and respiratory tract. You may develop a headache, feel dizzy, nauseated, or intoxicated. Severe exposures may lead to convulsions and loss of consciousness.

Personal Protective Equipment

- A.** Respirators. Respirators are required for those operations in which engineering controls or work practice controls are not feasible to reduce exposure to the permissible level. However, where employers can document that benzene is present in the workplace less than 30 days a year, respirators may be used in lieu of engineering controls. If respirators are worn, they must have joint Mine Safety and Health Administration and the National Institute for Occupational Safety and Health (NIOSH) seal of approval, and cartridge or canisters must be replaced before the end of their service life, or the end of the shift, whichever occurs first.
- B.** Protective Clothing. You must wear appropriate protective clothing (such as boots,

gloves, sleeves, aprons, etc.) over any parts of your body that could be exposed to liquid benzene.

- C. Eye and Face Protection. You must wear splash-proof safety goggles if it is possible that benzene may get into your eyes. In addition, you must wear a face shield if your face could be splashed with benzene liquid

Precautions for Safe Use, Handling and Storage

Benzene liquid is highly flammable. It should be stored in tightly closed containers in a cool, well ventilated area. Benzene vapor may form explosive mixtures in air. All sources of ignition must be controlled. Use nonsparking tools when opening or closing benzene containers. Fire extinguishers, where provided, must be readily available. Know where they are located and how to operate them. Smoking is prohibited in areas where benzene is used or stored. Ask your supervisor where benzene is used in your area and for additional plant safety rules.

Hearing Conservation / Noise Awareness Program

Amsys Energy, LLC.

Company Procedure, Policy and Program Requirements

Company Procedure for Hearing Conservation

Persons who enter or work in high noise areas should wear approved hearing protection equipment complying with OSHA standards and which reduce noise exposure to levels at or below 90 DB. Your supervisor will identify work areas and job assignments requiring the use of hearing protection equipment.

Policy

Amsys Energy, LLC. will conduct Noise Level Surveys on all operations that may indicate a Noise Level in excess of 85 DB. Amsys Energy, LLC. will, when practical, make every effort to correct or reduce noise to less than 85 DB as outlined in 29 CFR 1910.95. Audiometric testing has been established and will be maintained by making audiometric testing available to all employees whose exposures equal or exceed an 8-hr. time-weighted avg. 85 decibels. Noise Awareness training for employees must be conducted before the initial assignment. A training program shall be provided for all employees who are exposed to a noise action level or work in high noise areas. The training shall be repeated annually for each employee. In accordance with 29 CFR 1910.95, all employees and visitors shall wear approved ear plugs or muffs when the potential for injury from noise exists. Hearing protection for employees and visitors will be furnished by Amsys Energy, LLC. , for hearing protection. Employees shall be given the opportunity to select their hearing protectors from a variety of suitable hearing protectors provided by the employer. Contractors are responsible for the hearing protection for their employees. Hearing protectors are available to all employees exposed to an 8-hr. time-weighted average of 85 decibels at no cost to the employee. Hearing protection shall be replaced as necessary. Amsys Energy, LLC. ensures that hearing protectors are worn when deemed necessary. Employees will and shall be properly trained in the use, care & fitting of protectors. A Hearing Conservation Program will be instituted in those areas where noise

levels exceed 85 DB for an 8-hour period out of a 24 hour period (time-weighted average). Details of this noise level determination are described in 29 CFR 1910.95(c). The training will be repeated annually for each employee. Training will be updated and consistent to changes in PPE and work processes and include the proper techniques of wearing hearing protection.

Program

1. Noise areas including, but not limited to, compression equipment and areas where flow from well will exceed 85 DB for an 8-hour time-weighted average, will be identified and appropriate warning signs posted.
2. Ear plugs or muffs will be made available to all exposed employees when working in noise areas exceeding 85 DB from an 8-hour time-weighted average.
3. A training program will be conducted annually for covered employees to assure understanding of the consequences of noise induced hearing losses.
4. Employees will be provided with ear plugs or muffs in noise areas which exceed the noise and time limits noted in the following table.
5. Within 6 months of an employee's first exposure at or above the action level, a valid baseline audiogram shall be established against which future audiograms can be compared. When a mobile van is used, the baseline shall be established within 1 yr.
6. Testing to establish a baseline audiogram shall be preceded by at least 14 hours without exposure to workplace noise. Hearing protection may be used to meet the requirement. Employees shall also be notified to avoid high levels of noise.
7. At least annually after obtaining the baseline audiogram, the employer shall obtain a new audiogram for each employee exposed at or above an 8-hour time-weighted average of 85 decibels. Each employee's annual audiogram shall be compared to that employee's baseline audiogram to determine if the audiogram is valid and if a standard threshold shift has occurred. If a comparison of the annual audiogram to the baseline audiogram indicates a standard threshold shift, the employee shall be informed of this fact in writing, within 21 days of the determination.
8. If a threshold shift has occurred, use of hearing protection shall be re-evaluated and/or refitted and if necessary a medical evaluation may be required.
9. Hearing protection shall be replaced as necessary. This is done at no cost to employee(s). Employers shall ensure that hearing protectors are worn. Employees shall be properly trained in the use, care & fitting of protectors.
10. Amsys Energy, LLC. shall evaluate hearing protection for the specific noise environments in which the protector will be used.
11. Accurate records of all employee exposure and audiometric measurements shall be maintained as required by the regulation.

**Permissible Noise Exposures
(Without use of Ear Plugs or Muffs)
(29 CFR 1910.95)**

Duration Per Day in Hours

Sound Level, DB

8	90
6	92
4	95
3	97
2	100
1 – 1/2	102
1	105
1/2	110
1/4 or less	115

Note: When the daily noise exposure is composed of two or more periods of noise exposure of different levels, their combined effect should be considered, rather than the individual effect of each.

Common Noise Reference Points (in DB)

Residential / Office Areas	45
Loud Speech	75
Road Traffic	80-85
Workshop Machinery / Generators	80-180
Threshold of Comfort	125
Threshold of Pain	130

Training

Annual training is required for employees who are exposed to noise at or above an 8 hour time-weighted average of 85 decibels.

Hand and Power Tool Inspection

Amsys Energy, LLC.

Company Procedure for Hand Tools

Oilfield production operations call for the frequent use of hand tools. Tools must be properly used and maintained to prevent accidents. Most hand tool injuries are caused by misuse, or by the use of a defective tool. Disabling accidents from the use of hand tools include the loss of eyes and vision; puncture wounds; severed fingers, tendons and arteries; broken bones; and contusions.

In order to avoid these type injuries, employees should follow these procedures:

- 1.** Select the proper tool for the job. Injuries and property damage can result from the misuse of tools, such as using pliers instead of a wrench, adjustable wrenches, or a wrench instead of a hammer. Using the right tool for the job will help you to avoid injury.
- 2.** Use tools correctly. Do not pull a wrench toward your chin while tightening a nut of a bolt; do not use a screwdriver on an object held in your hand; and do not pull a knife towards you.
- 3.** Maintain tools in good operating condition. A hand tool that is not in good operating condition cannot perform the job in a safe manner. Wrenches with worn jaws, hammers with loose heads, chisels with “mushroomed” heads, and screwdrivers

with broken points are all examples of unsafe hand tools that could easily lead to an accident.

4. Employees using hand and power tools and exposed to the hazard of falling, flying, abrasive, and splashing objects, or exposed to harmful dust, fumes, mists vapors, or gases shall be provided with particular PPE necessary to protect them from the hazard.

All defective tools should be removed from service and reported to your supervisor.

Company Hand Tool Policy

1. Amsys Energy, LLC. intends that the tools and equipment used by employees, including tools and equipment which may be furnished by employees, are to be in a safe condition. Equipment should be inspected prior to use and any unsafe conditions should be reported immediately to the supervisor.
2. This section includes, but is not limited to, OSHA Regulations 1910.232 through 242.

Before Using Power Tools

- Never use a tool unless trained to do so.
- Inspect it before each use and replace or repair if parts are worn or damaged. Repair tools only if you are trained to do so.
- Make sure the cord will not become caught or tangled. The cord should be flexible, but not easy to know. Inspect the grounding connections.
- Use a ground fault circuit interrupter when working with power tools.
- Do not use faulty or damaged extension cords.
- Use the correct tools for the job. Do not use a tool or attachment for something it was not designed to do. Select the correct bit, cutter or grinding wheel for the material with which you are working.
- Leave all the guards in place. OSHA requires guards for tools like circular saws and belt sanders.
- Use appropriate safety equipment, such as goggles, earplugs and dust masks. Do not wear gloves when working with most tools. Avoid loose-fitting clothes that might become entangled in a power tool. Remove rings and other jewelry.

Remember to:

Always turn off and unplug a power tool before:

- Adjusting, oiling, cleaning or repairing it;
- Attaching an accessory;
- Changing bits, blades or grinding wheels
- Talking to another co-worker. Never look away from your work when operating a power tool.

Fall Protection Policy

Amsys Energy, LLC.

Fall Protection

Safety harnesses must have a safety certification by A.N.S.I. or by the manufacturing company that makes the safety harness. This certification shall state the load rating that the equipment is designed to meet. The fall protection plan shall be prepared by a qualified person and developed specifically for the site where the leading edge work, precast concrete work, or residential construction work is being performed and the plan must be maintained up to date.

Any person climbing or working at an elevation 6 feet or more above ground level will be protected from falling by an adequately protected work platform/area (i.e., handrails, toe boards) or by at least one of the following means at all times:

- A full-body harness with a shock-absorbing lanyard attached to a stationary support. The lanyard will be attached in a manner that will prevent a free fall of more than 6 feet.
- A retractable lifeline (inertia reel) attached to a full-body harness.
- A cable grabbing device attached to a properly strung cable.
- A ladder cage.

- Inspect harnesses and lanyard before each use and replace if necessary. All hook latches on lanyards must be locking-type latches.

Keep full-body harnesses and lanyards clean. Place fall-protection equipment in a proper storage area when not in use. Never put down harnesses or lanyards in drilling mud, water, dirt, etc.

- Replace fall-protection equipment that has been involved in a fall.
- Use full-body harness when riding an air hoist.
- Never use catheads or catlines for lifting personnel.
- Free-wheeling hoists are prohibited. Use air or hydraulic power to operate the hoist in either direction
- Never ride an air hoist line or a winch line that is being used to move a load.
- Do not engage rotating equipment while a person is riding the air hoist.
- Make sure that visual contact is maintained between the operator of the hoist and the person riding the hoist at all times.
- Make sure that the operator of the air/hydraulic hoist remains at the controls at all times while someone is suspended by the hoist.
- The employer shall provide for prompt rescue of employees in the event of a fall or shall assure the employees are able to rescue themselves.
- Accident investigations shall be conducted to evaluate the fall protection plan for potential updates to practices, procedures or training in order to prevent reoccurrence.

Training

A training program shall be provided for each employee who might be exposed to fall hazards. Training shall enable each employee to recognize the hazards of falling & shall train each employee in the procedures to follow to minimize these hazards. Re-training shall be provided when the following are noted:

1. Deficiencies in training.
2. Work place changes.
3. Fall protection systems or equipment changes that render previous training obsolete.

Written certification records must be maintained showing the following:

1. Who was trained, when, dates of training
2. Signature of person providing training & date employer determined training was deemed adequate.

Ladder Safety Policy

Ladders

Choose the correct type of ladder for your task, taking into consideration the proper length and weight rating. Ladders shall not be loaded beyond the maximum intended load for which they were built, nor beyond the manufacturer's rated capacity. Maintain ladders in good condition and inspect them prior to each use. Remove defective ladders, and tag them to be repaired or replaced. Do not use a ladder as a scaffold member or for any purpose other than for which it is intended.

- All ladders shall be inspected prior to use.
- Both hands shall be kept free for climbing.
- Only one person at a time shall be on the ladder.
- Portable ladders should be rated OSHA 1-A, industrial heavy duty.
- Portable ladders shall be equipped with anti-slip safety feet and secured at the top when in use.
- When working on electrical equipment, wooden ladders or ladders with fiberglass rails shall be used.

- Ladders shall be inspected by a competent person for visible defects on a periodic basis and after any occurrence that could affect their safe use.

When climbing ladders, observe the following precautions:

- When climbing ladders with a height greater than 20 feet without a rest platform, cage a stationary ladder or use a means of continuous fall protection, such as a retractable lifeline or a cable grabbing device.
- When climbing a portable ladder, secure the ladder in order to prevent the ladder from shifting. Use the 4:1 rule. Place the base of the ladder one foot out from the top support for every four feet of working length (of ladder). Extend the ladder a minimum of three feet beyond the top support.
- When climbing a ladder, make sure your hands are free for the task. Do not carry hand tools, or other devices in your hand. Maintain 3-point contact at all times.
- Do not lean out to the side where your belt buckle would extend beyond the side of ladder.
- Use nonmetal ladders when working in areas with exposure to electrical hazards.
- When using a portable ladder, a helper must always foot the ladder and stay alert for potential hazards.

Portable and fixed ladders with structural defects, such as, but not limited to, broken or missing rungs, cleats, or steps, broken or split rails, corroded components, or other faulty or defective components, shall either be immediately marked in a manner that readily identifies them as defective, or be tagged with "Do Not Use" or similar language, and shall be withdrawn from service until repaired.

Putting it all together – Scaffold Safety

A scaffold has to be able to support its own weight & the person or persons on top. There are three times as much differences to be selected when building a scaffold. Adjust the height of your working platform or where you will be working. Like anything else – make an assessment of the area where you are going to be working. Have a base plate – soil can be dangerous because earth will shift – the reason for learning about scaffolding is because you have men that work 10 feet or higher (aluminum, steel, timber, (wood) (used to make a scaffold)). Like other things, make sure everything is ok, not corroded, bent, etc. Need to provide fall protection: guard rails, full body harness, etc. Scaffold on wheels has to be well locked in.

Never drop scaffold material from above – those working on top have to be careful of those down from them.

Even when building our own home made scaffold, you still have to follow all safety inspections & follow the rules.

Never work alone on a scaffold. Have someone on the ground at all times.

Scaffold Tag System

1. Green tags are to be placed on 100 percent complete scaffolds with all braces, locks and hand, mid, and toe rails in place before use.
2. Yellow tags indicate incomplete scaffolds. If scaffold is missing a hand, mid, or toe board, it must have a yellow tag and employees on it must be tied off at all times.
3. Red tags indicate scaffolds that are in the process of either being erected or disassembled. These scaffolds are not to be used at any time. Scaffold tags should be placed in a highly visible location on the scaffolds for all employees to see.

Ladders, Stairways and Platforms

Guardrails consisting of 42” high top rail, intermediate rail and posts shall be installed at the outer edge of any floor, platform, walkway or runway which is six (6) feet or more above ground level or another floor or working level. Exempt from the requirement are personnel egress (exit or entrance) openings, loading and unloading openings.

Electrical Safety Program

Amsys Energy, LLC.

Company Procedure, Policy and Program Requirements

Most oilfield equipment operates on 440 volts or higher. Use caution around any electrical equipment, especially during wet weather. The following safety rules should be followed whenever you work with or around electrical equipment.

1. You are not an electrician. Only qualified and authorized employees are permitted to work on electrical equipment.
2. Treat all electrical equipment as if it were energized.
3. Check both the insulation and the electrical cords of portable electric tools before using them. Use ground-fault circuit interrupters (GCFI) when appropriate. Report possible faulty equipment to your immediate supervisor.
4. De-energize all electrical circuits before work begins. Use electrical lockout/tagout procedures to avoid accidentally turning electrical circuits on.
5. Do not contribute to overloading circuits. Only replace fuses with the proper type and size of fuse.

6. Use proper tools. Hard hats and ladders must be non-conductive.
7. Do not wear metal jewelry such as rings, bracelets and wristwatches.
8. Do not leave covers plates off electrical connection boxes, pressure switches and

Minimum approach distances for qualified employees to energized alternating currents	
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Voltage Range (phase to phase)	Minimum Approach Distance (in feet)
300 V and less	Avoid Contact
Over 300 V, but less than 750 V	1.0'
Over 750 V, but less than 2 kV	1.5'
Over 2 kV, but less than 15 kV	2.0'
Over 15 kV, but less than 37 kV	3.0'
Over 37 kV, but less than 87.5 kV	3.5'
Over 87.5 kV, but less than 121 kV	4.0'
Over 121 kV, but less than 140 kV	4.5'

similar small electrical equipment. Replace all cover plate bolts or screws when work is completed and equipment is energized. Do not leave the door or front panel open as any motor controller or other electrical enclosures.

9. Reconnect all grounding or bonding cables which were temporarily removed before reenergizing the equipment.
10. Avoid working on electrical equipment while clothing or shoes are wet, or when hands or feet are in water.
11. In operating a disconnecting switch, stand to one side rather than in front of the switch.
12. Check motor control boxes and the handles of switches with the back of your hand before grasping them.
13. Make sure all portable electrical equipment and extension cords are either three-wire grounded or double insulated. Use only approved portable electrical equipment in an area where there may be explosive vapors.
14. To shut down equipment driven by electrical motors, first open (turn off) the main switch, and then press the start button to be sure that the unit is disengaged.
15. If the motor controller is remote from the motor or in back with other motor controllers, check to be sure you have shut down the right piece of equipment.
16. When it is not apparent which piece of equipment is controlled by a particular motor controller, identify and immediately label both the equipment and the controller.
17. Employees may not enter spaces containing exposed energized parts unless illumination is provided that enables the employees to work safely.
18. When working under overhead lines, the lines shall be de-energized and grounded or other protective measures shall be provided before work is started.

Any vehicle or mechanical equipment with parts of its structure near energized overhead lines will operate so that a clearance of 10 feet is maintained. If the voltage is higher than 50 kV, the clearance shall be increased 4 inches for every 10 kV, over that voltage.

Policy

Electrical maintenance or installation other than routine operations will be handled by specialized contractors and by Amsys Energy, LLC. personnel trained and authorized to do so. Electrical equipment, cords, circuits and connections will be free from recognized hazards that are likely to cause death or physical injury to employees as specified in 29 CFR 1910.331-335.

It is company policy that:

1. Only authorized personnel shall work on electrical systems. Stay away from electric circuits unless you operate or work on them.
2. Unauthorized personnel will not attempt to make repairs to electrical equipment. All unsafe electrical equipment including appliances and lines should be reported to your supervisor.
3. All electrical equipment shall be properly grounded.
4. All personnel should know how to turn off the power on each electrical device they use.

Training

Employees will be trained yearly in accordance with the requirements set forth in our program. Training records will be kept as long as Amsys Energy, LLC. is in service.

Testing

All equipment grounding conductors shall be tested for continuity & shall be electrically continuous. Each receptacle & attachment cap or plug shall be tested for correct attachment of the equipment grounding conductors.

The equipment grounding conductor shall be connected to its proper terminal:

1. Before each use.
2. Before equipment is returned to service following any repairs
3. Before equipment is used such as when a cord has been run over.
4. At intervals not to exceed 3 months,

5. Cord sets & receptacles which are fixed & not exposed to damage shall be tested at intervals not exceeding 6 months.

Tests performed as required by this program shall be recorded as to the identity of each receptacle, cord set, & cord & plug connected equipment that passed the test and shall indicate the last date tested or interval for which it was tested. This record shall be kept by means of logs, color coding, or other effective means & shall be maintained until replaced by a more current record. These records shall be made available at the job site for inspection by the Assistant Secretary & any affected employees.

When an unqualified person is working in an elevated position near overhead lines, the location shall be such that the person and the longest conductive object he or she may contact cannot come closer to any unguarded, energized overhead line than the following distances:

- For voltages to ground 50kV or below - 10 feet (305 cm);
- For voltages to ground over 50kV - 10 feet (305 cm) plus 4 inches (10 cm) for every 10kV over 50kV.

Policy

The goal of Amsys Energy, LLC. is to provide all employees with a work site free from areas of potential fire hazards. In order to achieve this site, we will provide employees with the basic elements to eliminate and control fire hazards. Due to the nature of business, quantities of combustible and flammable materials store on-site create a grave fire hazard. No Smoking is allowed in chemical storage areas or where ever else posted. In the event a fire is detected, the first step is to notify emergency personnel. If it is a small fire and can be easily extinguished, use an ABC extinguisher. If it is near flammable or combustible materials, evacuate the premises and wait for emergency personnel. Never try to fight a fire that has spread up walls or into more than one area. Fire extinguishers will not provide you with enough chemical to perform this function.

Training

All employees will be trained in:

- Classification of fires
- Determining fire hazards
- Storage and handling procedures
- Potential ignition sources
- Fire protection equipment.

Classification of Fires

Fires are classified into four groups – A, B, C, and D.

- Class A Ordinary combustible materials such as paper, wood, cloth, and some rubber and plastic materials.
- Class B Flammable or combustible liquids, flammable gases, greases and similar materials and some rubber and plastic materials.
- Class C Energized electrical equipment, power supply circuits, and related materials.
- Class D Combustible metals such as magnesium, titanium, zirconium, sodium, lithium, and potassium.

Determining Fire Hazards

This is a two step process:

- Identify the existing fire hazard
- Taking the action to resolve them

When using an oxy-acetylene torch or welder, clear all debris and combustibles from the area. A class ABC fire extinguisher must be within 10 feet of work area.

Storage and Handling Procedures

Flammable liquids shall be stored in original bulk containers. If not, they shall be stored in approved containers and used in well-ventilated areas. Gas cylinders shall be secured in place and stored away from any heat or ignition source. Pressurized gas cylinders shall never be used without pressure and back flow valves.

Potential Ignition Sources

Extension cords and electrical devices start thousands of fires each year. If an odor is detected from one of these items, inspect and remove it from service. If a hot or under inflated tire is discovered, move it well away from the vehicle or building.

Training

Fire Prevention training shall be conducted upon initial assignment and at least annually thereafter. All employees shall be instructed on the locations and proper use of fire extinguishers in their work areas. They shall also be familiar with evacuation routes. Regular training will be provided based on site-specific needs. The safety personnel will be responsible for annual training in the use of fire extinguishers and types of fires.

Maintenance

Amsys Energy, LLC. shall assure that fire extinguishers should be inspected on a monthly basis and serviced once a year by a certified or licensed professional. It is everyone's responsibility to make sure fire extinguishers are current. If not, you can switch them out with properly inspected equipment.

Fire Prevention Plan

1. Smoking shall not be allowed inside the guy lines of a rig.
2. All employees will leave matches, lighters and cigarettes at the doghouse or pickup, while working at the wellhead.
3. No smoking or open flame shall be allowed in the proximity of flammable liquids or gases.
4. Burning stoves, open fires or other sources of ignition will be permitted only in designated areas outside of guy lines.
5. Equipment and ground area adjacent to the well shall be kept reasonably free from oil and other materials which might create or aggravate fire hazards.
6. Natural gas or liquefied petroleum gas shall not be used to operate spray guns or pre-matic tools.
7. Combustible material such as oily rags and waste shall be stored in covered metal containers.
8. Fire fighting equipment shall not be tampered with nor removed for other than fire protection and fire fighting purposes.
9. Well service rigs shall have ready accessible, in good operating condition, a minimum of two (2) 30 lb fire extinguishers.
10. When a rig is in service, the fire extinguisher will be placed on the ground near the wind guys.
11. Fire extinguishers on rigs will be inspected every three (3) months. The extinguisher will be tagged with the date of the inspection and the name of the person making the inspection. Extinguishers which are unserviceable or have been used shall be made operation as soon as possible.
12. The fire extinguishers on each unit (2-30 lbs. or 60 lbs total) will be used for incipient fires only.

Hydrogen Sulfide (H₂S) Safety

Program Amsys Energy, LLC.

Company Procedure for H₂S Safety

Hydrogen Sulfide Gas is also known as: H₂S Sour Gas, Rotten Egg Gas, Sulfurated Hydrogen.

Hydrogen Sulfide Gas H₂S is present in produced liquids as well as produced gas. H₂S will always be more prevalent in produced water (i.e. drilling muds, frac fluids, workover returns, etc.) since H₂S is more soluble in water than in crude, condensate or gas. This means that you should be equally, if not more careful, around these water based liquids than as you are around sour hydrocarbons that are associated with them.

H₂S is a highly toxic, colorless gas which has a characteristic rotten egg odor. This odor is only detectable when the H₂S is present in low and comparatively harmless concentrations. The sense of smell is deadened by concentrations approaching 100ppm.

H₂S is heavier than air, and will accumulate in low areas such as cellars, ditches and drain systems. H₂S can be dispersed easily by air currents. H₂S is flammable and explosive and should not be ignited as a method of control. When burned, H₂S oxidizes to SO₂, which is a colorless gas with a pungent odor. SO₂ is not combustible and is heavier than air. It is a severe irritant to the eyes, mucous membranes and skin and exposure should not exceed 2 ppm over an 8 hour period (OSHA). If employees are exposed to high concentrations, move them immediately to fresh air and seek medical attention. If breathing has stopped, provide artificial respiration.

The following table explains the affects of hydrogen sulfide on the human body:

Concentration	% Exposure	Physical Effects
0.02 to 1.0	0.000002 to 0.00001%	Detectable odor
10	0.001%	Unpleasant odor. Eyes may become irritated.
15	0.0015%	OSHA's acceptable short term exposure level.
100	0.01%	Kills sense of smell in 3-15 minutes. May burn eyes in 15-30 minutes, and throat after 1 hour.
200	0.02%	Kills sense of smell rapidly. Burns eyes and throat.
600	0.06%	Dizziness, respiratory disturbance in 2-15 minutes. Prompt artificial respiration needed.
700	0.07%	Causes unconsciousness quickly. Death will occur in 4 to 6 minutes if victim is not rescued promptly.
1,000	0.10%	Immediate unconsciousness. Death will result within minutes and is irreversible.

Every effort shall be made to keep H₂S gas within a closed system.

Remember, the sense of smell cannot be relied upon to detect hazardous concentrations of H₂S. Most H₂S accidents occur on calm days. Every employee must be very cautious when

entering or working in low-lying areas near sour operations, or areas without adequate ventilation. Especially, do not enter confined spaces in sour environments. Self-contained breathing apparatus (SCBA) and approved H₂S detection equipment must only be used by properly trained individuals in these type environments.

Anyone using SCBA in an H₂S environment should be clean shaven and have a tight respiratory-to-face seal. Those employees wearing glasses will require a custom made face-shield with their eye protection built in.

The “buddy system” should always be practiced when entering an H₂S or suspected H₂S environment. Your supervisor will provide you specific instructions if you are required to work in an H₂S area.

Company Policy and Program for H₂S Safety

Policy

Operations involving workers who enter work areas having the potential for H₂S concentrations in excess of 20 ppm will normally be contracted to independent contractors who have the knowledge, equipment, and training to safely work in an H₂S environment. The following information is provided as guidance for Amsys Energy, LLC. personnel in evaluation of H₂S operations. Amsys Energy, LLC. employees that may encounter H₂S in their job performance will be familiar with requirements of the emergency procedures and will participate in the training program provided by Amsys Energy, LLC. Training for such employees will start prior to work in H₂S operational areas. Amsys Energy, LLC. will provide necessary respiratory equipment to personnel whose job requires them to work and enter into areas having the potential for H₂S concentrations in excess of 100 ppm or 10 ppm for eight-hour exposure (based on 40-hour week).

Where state rules apply, those rules will be followed.

Program

All H₂S training programs will be conducted by a specialist trained in this area.

The following H₂S Program will be followed:

- a)** All personnel should be familiar with portable or continuous Hydrogen Sulfide gas detection equipment that is available for monitoring a condition which could result in the information of a toxic atmosphere.
- b)** Employees should be aware of client's contingency plan provisions.
- c)** Personal or area monitors that alarm when PEL exceeds the preset level of 20 PPM for 1910 or 10 PPM for 1926 must be used.
- d)** Wear breathing equipment if rescuing a person in an area suspected to be contaminated by H₂S.
- e)** All new employees are to be thoroughly schooled in H₂S Safety before they are sent to the field.
- f)** Understand that appropriate tests should be made before persons enter areas suspected of being contaminated by H₂S. These tests should be made after personnel have put on self-contained breathing equipment.

- g)** All personnel who are affected should be trained in the Operating Procedure for Self-Contained Breathing apparatus and know how to operate and maintain resuscitator and respiration equipment, if applicable. Respirators should be stored in a convenient, clean and sanitary location and a record kept of inspection dates and findings on all breathing equipment maintained for emergency use. Respirators that are not routinely used but are kept ready for emergency use should be inspected at least once a month. All other respirators should be inspected after each use.
- h)** Safe Practices – If you are faced with an H₂S problem in your operation, the following safe practices are recommended.
- 1.** In areas of high concentrations, a two-man operation is required.
 - 2.** Be sure all concerned are familiar with the hazards concerning H₂S and how to avoid them.
 - 3.** Personnel will avoid H₂S gas whenever possible. Work on the windward side and have fresh air mask available. Avoid low lying areas where H₂S is likely to accumulate.
 - 4.** Never let bad judgement guide you. Wear respirator equipment when gauging tanks, etc. Never try to hold your breath in order to enter a contaminated atmosphere.
 - 5.** Wear proper respiratory equipment for the job at hand. Never take a chance with equipment with which you are unfamiliar. If in doubt, consult your supervisor.
 - 6.** Never enter a tank, cellar or other enclosed place where gas can accumulate without proper respiratory protective equipment and a safety belt secured to a life line held by another person located outside the enclosed place.
 - 7.** Check out danger areas first with H₂S detectors before allowing anyone to enter. Do not try to determine the presence of gas by its odor.
 - 8.** Post areas where there is H₂S gas with suitable warning signs.
 - 9.** Care should be taken to prevent the escape of H₂S fumes into the air of work areas by leaks, etc.
 - 10.** Communications such as radios and telephones will be provided for those people employed where H₂S may be present.

Respiratory Protection
Amsys Energy, LLC.

Respiratory Protection Program Policy

Operations which require respirator equipment will be handled by specialized contractors and NOT Amsys Energy, LLC. personnel. The following information is provided as guidance for supervisors, to evaluate Amsys Energy, LLC. personnel and contract personnel. If Amsys Energy, LLC. personnel are involved in situations which require the use of a respirator, Amsys Energy, LLC. will provide the necessary respiratory protective equipment and training to ensure the protection, health and well-being of the employee free of charge to the employee. Respiratory protection equipment will be worn properly at all times when an employee is in a contaminated atmosphere which may result in overexposure. If there is any doubt as to the personal protection equipment required for a particular task, the employees are to consult with their supervisors.

Program Requirements

The program must address employee knowledge of respirators, fit, use, limitations, emergency situations, wearing, fit checks, maintenance & storage, medical signs & symptoms of effective use, and general requirements of the OSHA standard. The training must be provided before requiring the employee to use the respirator. The respiratory protection program will comply with OSHA standard 1910.134 and include the following minimum standards where applicable. Training on proper Respiratory Protection will be conducted annually and before initial assignment.

1. Respirators will be selected on the basis of the hazards to which the worker is exposed, such as:
 - Nature and extent of hazard;
 - Contaminants present and their concentrations (if greater than their permissible exposure limits [PEL]);
 - Characteristics and limitations of respirators;
 - Expected activity of worker; and
 - The presence of oxygen deficient atmospheres (less than 19.5% oxygen present).When working in IDLH atmospheres, outside standby persons, being able to maintain communication, proper training and equipment, notification procedures, and necessary action must be readily available and action taken. Mandatory equipment must include SCBA or SAR with auxiliary air supply & appropriate retrieval equipment or equivalent rescue means.
2. The user will be instructed and trained in the proper use and maintenance of respirators and their exclusive limitations. Records of training will be kept with the training files in the Field Offices where the workers are employed at Amsys Energy, LLC.
3. A respiratory program administrator shall be named by position or job title and this individual must be knowledgeable of the complexity of the program, able to conduct evaluations and have the proper training.

4. The program administrator must address appropriate surveillance, and ensure employees leave the area to wash, change cartridges, or if they detect breakthrough or resistance.
5. Where practicable, the respirators will be assigned to individual workers for their exclusive use.
6. Respirators will be regularly inspected, cleaned and disinfected after each use. Respirators for emergency use, such as self-contained devices, will be thoroughly inspected at least once a month and after each use.
7. Respirators will be stored in a convenient, clean and sanitary location.
8. Appropriate surveillance of work area conditions and degree of employee exposure or stress will be maintained.
9. Persons will not be assigned to tasks requiring use of respirators unless it has been determined that they are physically able to perform the work and use the equipment.
10. Approved or accepted respirators will be used in accordance with these standards.
11. Medical evaluation prior to fit testing must be confidential, during normal working hours, convenient, understandable, employee given chance to discuss results with PLHCP.
12. Every worker who is required to wear a respirator will be properly fit tested for the specific respirator unit they will be wearing. Employees are required to pass qualitative fit test (QLFT) or quantitative fit test (QNFT) before initial use, if a different respirator is used, and annually. Proper procedures regarding the wearing of facial hair, eye glasses or contact lenses will be strictly adhere to as follows:
 - Men who wear respirators or SCBA will remain clean shaven to ensure proper fit.
 - Eyeglasses will not be worn with full face respirator or SCBA to ensure proper fit.
 - Contact lenses will not be worn in areas where there is a risk of chemical sprays.

Approved respirators are provided by Amsys Energy, LLC. to its employees who may come in contact with a hazardous atmosphere. A hazardous atmosphere is one that contains gas fumes or contaminants in the form of vapor or airborne particles, or one in which there is an oxygen deficiency. A written Company respiratory protection program will define any sites and areas requiring respirators, and who is responsible for seeing that proper selection and use is made of respirators. See this program for detailed procedures on this subject. Your supervisor will advise you as to the work areas or job assignments where there are existing or potential respiratory hazards, and what respiratory equipment may be necessary. A respirator with a face piece shall not be worn when facial contours, facial hair or eyeglass temple pieces prevent forming a respirator-to-face seal. Employees included in the respiratory protection program who use a respirator which requires a facial seal, shall themselves be clean shaven to ensure that facial hair does not interfere with the respirator face seal.

Welding/Cutting/Hot Work Policy

Amsys Energy, LLC.

Hot work or safe work permit programs ensure that proper precautions are taken to protect against fire and explosion from welding and other hot work that must be done in areas where flammable materials might be present. Typical examples of hot work include but are not limited to: welding, cutting, grinding, hot taps, etc. Do not perform welding or cutting operations unless you have been trained and are authorized. Always wear personal protective equipment when performing welding or cutting operations. Ensure a fire extinguisher remains in the vicinity of welding or cutting operations. Obtain a hot work permit if required prior to beginning welding or cutting operations. If required by the hot work permit, ensure fire watch is posted. Secure compressed gas cylinders in an upright position with chain or #9 wire. Do not look at or watch the welder's flash or arc. If the object to be welded or cut cannot readily be moved, all moveable fire hazards should be removed. If the object to be welded or cut cannot be moved and if all the fire hazards cannot be removed, then guards shields, fire blankets, etc. shall be used to confine the heat, sparks and slag and to protect the immovable fire hazards. If fire hazards cannot be taken to a safe place or guards cannot be used to confine heat, sparks, slag and protect the immovable fire hazards, the welding and cutting shall not be performed. Any welding, cutting or burning of lead base metals, zinc, cadmium, mercury, beryllium or exotic metals or paints not listed here shall have proper ventilation or respiratory protection. Operators of equipment should report any equipment defect or safety hazards and discontinue use of equipment until its safety has been assured. Repairs shall be made only by qualified personnel.

Although local policy will dictate the type of hot work permitting program for that area, the following procedures should be adhere to at a minimum:

- Make sure all appropriate departments and personnel are aware of the hot work plans.
- The supervisor must appoint a person to inspect the area for flammable materials.
- Isolate all possible fuel sources.
- Use a combustible gas meter to check the atmosphere for explosive vapors.
- Ensure that all batteries are disconnected prior to welding on equipment; the battery may explode and damage electronic components.
- Maintain fire watch while the hot work is being done and for at least 30 minutes after the hot work has been completed.
- The fire watch must have fire extinguishing equipment readily available in working order and be trained in its use.
- Maintain a copy of the permit at the work site while the work is being done.
- Double-check the job site before leaving to ensure that no ignition sources remain.
- Welders and their supervisors must be suitably trained in the safe operations of their equipment and the safe use of the process.

If a break (such as lunch) is taken during the hot work, the above procedures must be repeated and ensured before hot work resumes.

Lockout / Tagout Program

Amsys Energy, LLC.

Company Procedures, Policy and Program Requirements

Procedure

- 1.** Let the appropriate operating personnel know what you are doing and how long you think the equipment will be locked out.
- 2.** Survey the work area and study the system to ensure that all equipment involved is shut down or otherwise secured.
- 3.** Clear away tools, remove employees, remove the LOTO device, energize and proceed with testing, de-energize and reapply control measures.
- 4.** If applicable, turn the equipment's power supply off at the breaker, and make sure that the equipment cannot be turned back on by such operating controls as push buttons.
- 5.** Attach a lock to the appropriate breaker, even if someone else has locked the control before you.
- 6.** Physically locking out equipment may not be practical. It may be necessary to completely disconnect a pump, compressor or other equipment from its prime mover. *In such cases, drive bolts, chains and shafts should be disconnected and/or removed, and rotating parts should be blocked where possible.
- 7.** After lockout, place a "Do Not Operate" sign at the control (or otherwise tag out). Make sure both the sign and the devices blocking rotating parts are securely fastened.
- 8.** Do not let someone else remove your lock for you.
- 9.** Be sure that you are not exposing someone else to danger by removing your lock and/or tag. Always inspect the job site before removing either of those protective devices.
- 10.** Remember, cooperation, coordination and communication is essential to a successful Lockout/Tagout program.
- 11.** The machine or equipment shall be turned off or shutdown using the procedures established for the machine or equipment. An orderly shutdown must be utilized to avoid any additional or increased hazard(s) to employees as a result of the equipment stoppage.

Policy & Purpose

Any energy isolating device, such as a breaker, disconnect switch, valve, etc., that is capable of being locked out shall be equipped for potential lock out. All employees and contractors are required to adhere to these regulations. The purpose of this standard is to establish lockout/tagout procedures for the safety of all personnel who work on equipment that requires lockout/tagout prior to the performance of work or maintenance to prevent unexpected releases of energy, such as electrical, hydraulic, pneumatic or mechanical. The standard covers the servicing and maintenance of machines and equipment which if unexpectedly energized or started could cause injury to the employee. Equipment covered by this standard is to have procedure developed and documented telling how that piece of equipment will be handled.

General Requirements

Definitions:

Lockout – to put a padlock on an energy isolating device such as a disconnect switch or valve, after the machine has been shutdown to prevent the equipment from being operated until the lockout device is removed.

Tagout – to put special tags on equipment energy isolating devices to warn other employees that the equipment must not be operated until the tags are removed by authorized employees.

1. All new equipment installations, replacement equipment or equipment undergoing major restoration shall include lockout capability.
2. Existing equipment which cannot be secured by lockout will be secured by utilizing a tagout system.
3. A tagging system capable of lockout is acceptable when the system is otherwise isolated by removing fuses, blocking a switch, removing a valve handle, etc.
4. Locks and tags shall be provided to the employee. They will be durable, standardized (in color, shape, and size), substantial and include the identity of the employee applying the device.
5. The energy control procedure will be reviewed annually by a qualified person for inadequacies, roles, and responsibilities. The review will be documented with the date performed, employees involved in the inspection and the person conducting the inspection.
6. Amsys Energy, LLC. will provide training to ensure employees understand and apply the energy control program.
7. Training records will be kept on file of this Program.
8. Retraining is required when there is a change in job assignments, in machines, a change in the energy control procedures, or a new hazard is introduced.
9. The authorized employee should ascertain the exposure status of individual group members. Each employee shall attach a personal lockout or tagout device to the group's device while he/she is working & then removes it when finished. During shift change or personnel changes, there should be specific procedures to ensure the continuity of lockout or tagout procedures. Documentation should be specific.
10. The procedures should address different crafts, departments, etc. The procedures should afford the group of employees a level of protection equal to that provided by a personal lockout or tagout device.
11. All energy isolating devices that are needed to control the energy to the machine or equipment shall be physically located & operated in such a manner as to isolate the machine or equipment from the energy source.
12. Following the application of lockout or tagout devices to energy isolating devices, all potentially hazardous stored or residual energy shall be relieved, disconnected, restrained & otherwise rendered safe. If there is a possibility of reaccumulation of stored energy level, verification of isolation shall be continued until the servicing or maintenance is completed, or until the possibility of such accumulation no longer exists.
13. Before an authorized or affected employee turns off a machine or equipment, the authorized employee shall have knowledge of the type & magnitude of the energy,

the hazards of the energy to be controlled, & the methods or means to control the energy.

Lockout / Tagout – Pumping Units

Electric power to the pumping unit should be de-energized a sufficient distance from the wellhead to eliminate potential electrical hazards during well servicing operations. In confined locations, overhead electrical power to pumping unit control panel shall be de-energized. Where necessary, an electric power service should be de-energized while moving the rig in or out and during rig-up and down operations.

When well servicing operations are to be performed, the pumping unit shall be turned off, the brake set, and where applicable, the master electrical control switch locked out and tagged out.

If the pumping unit is stopped with counterweights in other than down position, additional means, (such as securing the beam by a chain to a fixed member of the pumping unit) shall be used to prevent any unintended movement of the counterweights of beam.

Upon completion of well servicing operations, precautions shall be taken to determine that all personnel and equipment are clear of weight and beam movement before energizing the power source.

Grounding Conductor Program/Ground Fault Circuit Interrupter (GFCI) Policy

Amsys Energy, LLC.

A daily visual inspection shall be made of the following to determine any external defects or indications of internal damage prior to use: Cord sets, attachment cap, plug & receptacle of cord sets & any other equipment connected by cord & plug (with the exception of cord sets & receptacles which are fixed & not exposed to damage) such as deformed or missing plug, insulation damage. Damaged items shall not be used until repaired. Any equipment which has not met the requirements for the work to be performed shall not be available or permitted to be used. Damaged items shall not be used until repaired.

Circuit Protective Devices

At construction sites, the most common electrical hazard is the ground fault electrical shock. The OSHA electrical rules require employers to provide either: (1) ground fault circuit interrupters (GFCIs) for receptacle outlets, or (2) an assured equipment for grounding conductor program. Either method can eliminate ground fault electric shock hazards.

Circuit protective devices, such as fuses, circuit breakers, and GFCIs, automatically limit or shut off current flow in the event of a ground-fault, overload, or short circuit in a wiring system.

Fuses and circuit breakers protect conductors and equipment. They prevent overheating of wires and components that could create hazards for workers. They also open the circuit under certain hazardous ground-fault conditions.

One or more competent persons must be designated to implement the program.

Grounding

Grounding is required to protect employees from electrical shock, safeguard against fire, and protect against damage to electrical equipment. There are two kinds of grounding: (1) service or system ground – where one wire, the neutral conductor, is grounded. This type of ground is designed to protect machines, tools, and insulation; (2) equipment ground – provides a path for current from a tool or machine to ground. This safeguards the operator in the event of a malfunction.

Personal Protective Equipment

If your employees work where there are potential electrical hazards, you must provide them with electrical protective equipment. You must use equipment appropriate for the body parts needing protection, and the work being done. No specific training requirements are mentioned in the electrical standard. However, you must always “instruct each employee in the recognition and avoidance of unsafe conditions and the regulations applicable to his work environment to control or eliminate any hazards or other exposure to illness or injury.” Have a supply of circuit breakers, fuses, GFCIs, etc., on hand to explain their functions for protecting workers. Promote the fact that these are only mechanical devices and subject to failure. The best accident preventive methods are still correct installation of temporary wiring and safe work places and practices. Equipment that does not meet requirements or is found to be defective shall not be used.

Confined Space Entry Permit Program

Amsys Energy, LLC.

Entry into a confined space presented personnel with special hazards associated with potential oxygen deficient atmospheres of the presence of toxic or flammable vapors and the restricted access or exit during the event of an emergency. Program must include provisions & procedures for pedestrian, vehicle & other barriers as necessary to protect entrants from external hazards & a method for verifying that conditions in the permit space are acceptable for entry during its duration. The following procedure specifies the maximum safety requirements for any confined space entry:

- A confined space is defined in this case as the interior of any tank, vessel, sump, pit, or cellar over four (4) feet in depth or any other types of confining place not intended for human entry or occupancy.
- Entry in this case is defined as any time the face passes through the opening of the confined space.
- There shall be a written permit system documenting authorization for passage into the confined space, also documented will be the work performed, the results of the atmosphere checks, and any special precautions to be taken. The permit shall be completed prior to work.
- When a person enters a confined space another person needs to stand by the entrance of the space to monitor the person in the confined space.
- All confined space atmospheres shall be tested with a three (3) head instrument by a trained person. The tests will be conducted prior to each entry.
- The practice of a single attendant monitoring several confined spaces during an emergency is not allowed.
- Employees, or their representatives, must be given an opportunity to request the space be re-evaluated.
- Hazardous atmospheric conditions are listed below:
 1. The presence of combustible vapors in excess of ten percent (10%) of the lower explosive limit (LEL).
 2. An atmosphere with an oxygen concentration less than 19.5%.
 3. The presence of toxic gases such as H₂S in concentrations greater than established permissible exposure levels.

Duties of authorized entrants:

The employer shall ensure that all authorized entrants:

Entrants or their representatives are given an opportunity to participate in and review calibrated air monitoring data before entry.

Know the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure;

Properly use equipment as required;

Communicate with the attendant as necessary to enable the attendant to monitor entrant status and to enable the attendant to alert entrants of the need to evacuate the space as required; Alert the attendant whenever:

The entrant recognizes any warning sign or symptom of exposure to a dangerous situation,
or

The entrant detects a prohibited condition; and
Exit from the permit space as quickly as possible whenever:
An order to evacuate is given by the attendant or the entry supervisor,
The entrant recognizes any warning sign or symptom of exposure to a dangerous situation,
The entrant detects a prohibited condition, or
An evacuation alarm is activated.

Duties of attendants:

The employer shall ensure that each attendant:
Knows the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure;
Is aware of possible behavioral effects of hazard exposure in authorized entrants;
Continuously maintains an accurate count of authorized entrants in the permit space and ensures that the means used to identify authorized entrants accurately identifies who is in the permit space;
Remains outside the permit space during entry operations until relieved by another attendant;

Duties of entry supervisors:

The employer shall ensure that each entry supervisor:
Knows the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure;
Verifies, by checking that the appropriate entries have been made on the permit, that all tests specified by the permit have been conducted and that all procedures and equipment specified by the permit are in place before endorsing the permit and allowing entry to begin;
Terminates the entry and cancels the permit; Verifies that rescue services are available and that the means for summoning them are operable;
Removes unauthorized individuals who enter or who attempt to enter the permit space during entry operations; and determines, whenever responsibility for a permit space entry operation is transferred and at intervals dictated by the hazards and operations performed within the space, that entry operations remain consistent with terms of the entry permit and that acceptable entry conditions are maintained.

NOTE: When the employer's permit entry program allows attendant entry for rescue, attendants may enter a permit space to attempt a rescue if they have been trained and equipped for rescue operations and if they have been relieved. Communicates with authorized entrants as necessary to monitor entrant status and to alert entrants of the need to evacuate the space; monitors activities inside and outside the space to determine if it is safe for entrants to remain in the space and orders the authorized entrants to evacuate the permit space immediately; if the attendant detects a prohibited condition; if the attendant detects the behavioral effects of hazard exposure in an authorized entrant; If the attendant detects a situation outside the space that could endanger the authorized entrants; or if the attendant cannot effectively and safely perform all the duties; summon rescue and other emergency services as soon as the attendant determines that authorized entrants may need assistance to escape from permit space hazards; takes the following actions when unauthorized persons approach or enter a permit space while entry is underway: warn the unauthorized persons that they must stay away from the permit space; advise the unauthorized persons that they must exit immediately if they have entered the permit

space; and inform the authorized entrants and the entry supervisor if unauthorized persons have entered the permit space; performs non-entry rescues as specified by the employer's rescue procedure; and performs no duties that might interfere with the attendant's primary duty to monitor and protect the authorized entrants.

Training:

The employer shall provide training so that all employees whose work is regulated by this section acquire the understanding, knowledge, and skills necessary for the safe performance of the duties assigned under this section. Training shall be provided to each affected employee, before the employee is first assigned duties under this section, before there is a change in assigned duties, & whenever there is a change in permit space operations that presents a hazard about which an employee has not previously been trained. The training record shall include employee name, trainer signature/initials and dates of training. Training records must be made available to employees and their authorized representative(s).

Develop and implement procedures for summoning rescue and emergency services, for rescuing entrants from permit spaces, for providing necessary emergency services to rescued employees, and for preventing unauthorized personnel from attempting a rescue; Develop and implement procedures to coordinate entry operations when employees of more than one employer are working simultaneously as authorized entrants in a permit space, so that employees of one employer do not endanger the employees of any other employer; Develop and implement procedures (such as closing off a permit space and canceling the permit) necessary for concluding the entry after entry operations have been completed;

Review the permit space program, using the canceled permits within 1 year after each entry and revise the program as necessary, to ensure that employees participating in entry operations are protected from permit space hazards.

NOTE: Employers may perform a single annual review covering all entries performed during a 12-month period. If no entry is performed during a 12-month period, no review is necessary.

Rescue services must be either:

1. Provided by the host facility, or
2. Provided by an outside service which is given an opportunity to examine the entry site, practice rescue, and decline as appropriate, or
3. Provided by the employer by selecting a rescue team that is equipped and trained to perform the needed rescue services.
4. Rescue service must be on-site for immediately dangerous to life and health (IDLH) conditions while work is being performed.

Excavation, Trenching and Shoring

Operations that involve excavation, trenching and shoring will be handled by specialized contractors and not Amsys Energy, LLC. personnel. The following information is provided as guidance for supervisors to evaluate Amsys Energy, LLC. personnel and contract personnel. If Company personnel are involved in situations which involve these activities, Amsys Energy, LLC. will provide the necessary respiratory protective equipment and training to ensure the protection, health and well-being of the employee.

When work is being performed in a ditch or excavation, adequate protection from cave-ins and a convenient escape route shall be provided by the contractor. Such protection shall be required if contractor employees could be exposed to moving ground or cave-ins or the excavation exceeds four feet in depth. The Supervisor in charge should be consulted to assist in identifying existing and predictable hazards in the work area. Trenches or excavations exceeding four (4) feet in depth must be sloped or shored and tested for explosive or toxic mixtures in accordance with OSHA 29 CFR 1926.652 prior to entry by contractor employees. Any open trenches, ditches or excavations shall be properly barricaded and marked and at night marked with reflectors or lights. The following procedures must be adhered to in preparing for excavation operations:

- 1.** The entire area to be excavated must be surveyed and all existing line crossings staked. Proper notification and approval or permits must be made and obtained for all non- Amsys Energy, LLC. operated lines before excavating begins. Metal line finders will be utilized.
- 2.** A work plan will be submitted to Amsys Energy, LLC. representative prior to commencing operations. The plan must be coordinated with any and all other companies/contractors working or having equipment in the area.
- 3.** Digging around line crossings to locate and establish depth and direction of any and all other lines (including buried cables, lateral line takeoffs or other lines in the defined area to be excavated) shall be done by hand.
- 4.** If red concrete is encountered, extreme caution is necessary, since this is used to indicate buried electrical wiring
- 5.** For exposure to public traffic, the employees shall be provided reflective vests, etc.
- 6.** Employees should not work under loads of digging equipment where loads may fall.
- 7.** Employees must be protected from water accumulation, including the use of shields, and must be inspected by a competent person before work begins.
- 8.** Competent persons should examine the possibility of cave-ins, failures or protective systems, etc. If problems are found, provisions should be made for immediate personnel removal.
- 9.** The competent person should be specified and his duties described. Duties might include: inspections prior to entry, atmospheric testing, removal of workers if conditions dictate.

- 10.** There should be some means to protect against falls. Examples could include railings or guardrails.
- 11.** Soil classifications must be determined by testing and protective systems designed according to soil classifications. Red concrete is also a mark for plugged and abandoned wells into which NORM wastes have been disposed.
- 12.** Trench excavations shall have ramps, ladders, stairs, etc.; the means of egress must be within 25 feet of lateral travel for employees.

This appendix applies when a sloping or benching system is designed in accordance with the requirements set forth as a method of protection for employees from cave-ins. This also applies when timber shoring for excavations is designed as a method of protection from cave-ins, and when aluminum hydraulic shoring is designed. This also applies if other protective systems are designed and selected for use from data predicated on the use of the soil classification system set forth.

- a)** Cemented soil - means a soil in which the particles are held together by a chemical agent, such as calcium carbonate, such that a hand-size sample cannot be crushed into powder or individual soil particles by finger pressure.
- b)** Cohesive soil - means clay (fine grained soil), or soil with a high clay content, which has cohesive strength. Cohesive soil does not crumble, can be excavated with vertical sideslopes, and is plastic when moist. Cohesive soil is hard to break up when dry, and exhibits significant cohesion when submerged. Cohesive soils include clayey silt, sandy clay, silty clay, clay and organic clay.
- c)** Dry soil - means soil that does not exhibit visible signs of moisture content.
- d)** Fissured - means a soil material that has a tendency to break along definite planes of fracture with little resistance, or a material that exhibits open cracks, such as tension cracks, in an exposed surface.
- e)** Granular soil - means gravel, sand, or silt (coarse grained soil) with little or no clay content. Granular soil has no cohesive strength. Some moist granular soils exhibit apparent cohesion. Granular soil cannot be molded when moist and crumbles easily when dry.
- f)** Layered system - means two or more distinctly different soil or rock types arranged in layers. Micaceous seams or weakened planes in rock or shale are considered layered.
- g)** Moist soil - means a condition in which a soil looks and feels damp. Moist cohesive soil can easily be shaped into a ball and rolled into small diameter threads before crumbling. Moist granular soil that contains some cohesive material will exhibit signs of cohesion between particles.
- h)** Plastic - means a property of a soil which allows the soil to be deformed or molded without cracking, or appreciable volume change.
- i)** Saturated soil - means a soil in which the voids are filled with water. Saturation does not require flow. Saturation, or near saturation, is necessary for the proper use of instruments such as a pocket penetrometer or shear vane.
- j)** Soil classification system - means, for the purpose of this subpart, a method of categorizing soil and rock deposits in a hierarchy of Stable Rock, Type A, Type B, and Type C, in decreasing order of stability. The categories are determined based on

an analysis of the properties and performance characteristics of the deposits and the characteristics of the deposits and the environmental conditions of exposure.

- k)** Stable rock - means natural solid mineral matter that can be excavated with vertical sides and remain intact while exposed.
- l)** Submerged soil - means soil which is underwater or is free seeping.
- m)** Type A - means cohesive soils with an unconfined, compressive strength of 1.5 ton per square foot (tsf) (144 kPa) 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, no soil is Type A if:
 - (i)** The soil is fissured; or
 - (ii)** The soil is subject to vibration from heavy traffic, pile driving, or similar effects; or
 - (iii)** The soil has been previously disturbed; or
 - (iv)** The soil is part of a sloped, layered system where the layers dip into the excavation on a slope of four horizontal to one vertical (4H:1V) or greater; or
 - (v)** The material is subject to other factors that would require it to be classified as a less stable material.
- n)** Type B" means:
 - (i)** Cohesive soil with an unconfined compressive strength greater than 0.5 tsf (48 kPa) but less than 1.5 tsf (144 kPa); or
 - (ii)** Granular cohesionless soils including: angular gravel (similar to crushed rock), silt, silt loam, sandy loam and, in some cases, silty clay loam and sandy clay loam.
 - (iii)** Previously disturbed soils except those which would otherwise be classed as Type C soil.
 - (iv)** Soil that meets the unconfined compressive strength or cementation requirements for Type A, but is fissured or subject to vibration; or
 - (v)** Dry rock that is not stable; or
 - (vi)** Material that is part of a sloped, layered system where the layers dip into the excavation on a slope less steep than four horizontal to one vertical (4H:1V), but only if the material would otherwise be classified as Type B.
- o)** Type C" means:
 - (i)** Cohesive soil with an unconfined compressive strength of 0.5 tsf (48 kPa) or less; or
 - (ii)** Granular soils including gravel, sand, and loamy sand; or
 - (iii)** Submerged soil or soil from which water is freely seeping;
 - (iv)** Submerged rock that is not stable, or
 - (v)** Material in a sloped, layered system where the layers dip into the excavation or a slope of four horizontal to one vertical (4H:1V) or steeper.
- p)** Unconfined compressive strength - means the load per unit area at which a soil will fail in compression. It can be determined by laboratory testing, or estimated in the field using a pocket penetrometer, by thumb penetration tests, and other methods.
- q)** Wet soil - means soil that contains significantly more moisture than moist soil, but in such a range of values that cohesive material will slump or begin to flow when vibrated. Granular material that would exhibit cohesive properties when moist will lose those cohesive properties when wet.

Requirements. Classification of soil and rock deposits. Each soil and rock deposit shall be classified by a competent person as Stable Rock, Type A, Type B, or Type C in accordance with the definitions set forth in paragraph (b) of this appendix.

Basis of classification. The classification of the deposits shall be made based on the results of at least one visual and at least one manual analysis. Such analyses shall be conducted by a competent person using tests described in paragraph (d) below, or in other recognized methods of soil classification and testing such as those adopted by the American Society for Testing Materials, or the U.S. Department of Agriculture textural classification system.

Visual and manual analyses. The visual and manual analyses, such as those noted as being acceptable in paragraph (d) of this appendix, shall be designed and conducted to provide sufficient quantitative and qualitative information as may be necessary to identify properly the properties, factors, and conditions affecting the classification of the deposits.

Layered systems. In a layered system, the system shall be classified in accordance with its weakest layer. However, each layer may be classified individually where a more stable layer lies under a less stable layer.

Reclassification. If, after classifying a deposit, the properties, factors, or conditions affecting its classification change in any way, the changes shall be evaluated by a competent person. The deposit shall be reclassified as necessary to reflect the changed circumstances.

Acceptable visual and manual tests. Visual analysis is conducted to determine qualitative information regarding the excavation site in general, the soil adjacent to the excavation, the soil forming the sides of the open excavation, and the soil taken as samples from excavated material.

- (i) Observe samples of soil that are excavated and soil in the sides of the excavation. Estimate the range of particle sizes and the relative amounts of the particle sizes. Soil that is primarily composed of fine-grained material is cohesive material. Soil composed primarily of coarse-grained sand or gravel is granular material.
- (ii) Observe soil as it is excavated. Soil that remains in clumps when excavated is cohesive. Soil that breaks up easily and does not stay in clumps is granular.
- (iii) Observe the side of the opened excavation and the surface area adjacent to the excavation. Crack-like openings such as tension cracks could indicate fissured material. If chunks of soil spall off a vertical side, the soil could be fissured. Small spalls are evidence of moving ground and are indications of potentially hazardous situations.
- (iv) Observe the area adjacent to the excavation and the excavation itself for evidence of existing utility and other underground structures, and to identify previously disturbed soil.

- (v) Observed the opened side of the excavation to identify layered systems. Examine layered systems to identify if the layers slope toward the excavation. Estimate the degree of slope of the layers.
- (vi) Observe the area adjacent to the excavation and the sides of the opened excavation for evidence of surface water, water seeping from the sides of the excavation, or the location of the level of the water table.
- (vii) Observe the area adjacent to the excavation and the area within the excavation for sources of vibration that may affect the stability of the excavation face.

Manual tests

Manual analysis of soil samples is conducted to determine quantitative as well as qualitative properties of soil and to provide more information in order to classify soil properly.

- (i) **Plasticity.** Mold a moist or wet sample of soil into a ball and attempt to roll it into threads as thin as 1/8-inch in diameter. Cohesive material can be successfully rolled into threads without crumbling. For example, if at least a two inch (50 mm) length of 1/8-inch thread can be held on one end without tearing, the soil is cohesive.
- (ii) **Dry strength.** If the soil is dry and crumbles on its own or with moderate pressure into individual grains or fine powder, it is granular (any combination of gravel, sand, or silt). If the soil is dry and falls into clumps which break up into smaller clumps, but the smaller clumps can only be broken up with difficulty, it may be clay in any combination with gravel, sand or silt. If the dry soil breaks into clumps which do not break up into small clumps and which can only be broken with difficulty, and there is no visual indication the soil is fissured, the soil may be considered unfissured.
- (iii) **Thumb penetration.** The thumb penetration test can be used to estimate the unconfined compressive strength of cohesive soils. (This test is based on the thumb penetration test described in American Society for Testing and Materials (ASTM) Standard designation D2488 - "Standard Recommended Practice for Description of Soils (Visual - Manual Procedure).") Type A soils with an unconfined compressive strength of 1.5 tsf can be readily indented by the thumb; however, they can be penetrated by the thumb only with very great effort. Type C soils with an unconfined compressive strength of 0.5 tsf can be easily penetrated several inches by the thumb, and can be molded by light finger pressure. This test should be conducted on an undisturbed soil sample, such as a large clump of spoil, as soon as practicable after excavation to keep to a minimum the effects of exposure to drying influences. If the excavation is later exposed to wetting influences (rain, flooding), the classification of the soil must be changed accordingly.
- (iv) **Other strength tests.** Estimates of unconfined compressive strength of soils can also be obtained by use of a pocket penetrometer or by using a hand-operated shearvane.

- (v) **Drying test.** The basic purpose of the drying test is to differentiate between cohesive material with fissures, unfissured cohesive material, and granular material. The procedure for the drying test involves drying a sample of soil that is approximately one inch thick (2.54 cm) and six inches (15.24 cm) in diameter until it is thoroughly dry:

If the sample develops cracks as it dries, significant fissures are indicated.

Samples that dry without cracking are to be broken by hand. If considerable force is necessary to break a sample, the soil has significant cohesive material content. The soil can be classified as an unfissured cohesive material and the unconfined compressive strength should be determined.

If a sample breaks easily by hand, it is either a fissured cohesive material or a granular material. To distinguish between the two, pulverize the dried clumps of the sample by hand or by stepping on them. If the clumps do not pulverize easily, the material is cohesive with fissures. If they pulverize easily into very small fragments, the material is granular.

Roustabout Work

- 1.** All workmen should stand clear when a winch line is being used.
- 2.** When the winch line is not in use, the hook on the end of the line should be securely fastened to the bed of the truck and the line pulled snug with the winch brake set.
- 3.** Workmen should not walk under a gin pole, loaded or unloaded, unless it is in the line of duty, such as tying load or hooking and unhooking tail chain.
- 4.** Truck loads should be boomed on the right side with handle pointing down, if possible.
- 5.** Extreme care should be exercised when employees are working near a winch line because it may become taut or slack without warning. Employees should never step over such a winch line.

Handling and Hauling Pipe

- 1.** In hauling pipe, the load should be boomed as tightly as possible before starting haul and then after traveling a short distance, the chain should be checked and again tightened, if necessary. Such loads will frequently settle, causing the chains to become loose.
- 2.** Workmen should not stand directly over boomer handle when releasing or tightening the boomer.
- 3.** Loads extending over the rear of the truck, or in front of the radiator, should be flagged with red bunting.
- 4.** If the load on a truck starts to roll off, the workmen should not try to stop it.
- 5.** Workmen should not get between the unloading skids unless absolutely necessary. In the latter event, he should notify other crewmen in order that no pipe will be turned loose during the time he is between the skids.
- 6.** Pipe should be rolled from the ends since this will allow the workmen to get out of the way if the joint or loads get out of control.
- 7.** While stringing pipe, the workmen should stay behind the truck while it is moving.
- 8.** No employee should be between the pipe rack and a truck load of pipe during loading, unloading and transferring operations.
- 9.** Pipe should be loaded and unloaded, layer by layer, with bottom layer pinned or blocked securely on all four corners.
- 10.** When hauling pipe, employees will not place their hands in the ends of the pipe.

Lead Policy

Amsys Energy, LLC. employees shall be informed of the regulations involving lead. All affected employees are required to attend initial and annual training programs. Amsys Energy, LLC. employees should be informed of the specific nature of the operations which could result in exposure to lead above the action level, the purpose, proper selection, fitting, use, and limitation of respirators, engineering controls, purpose & a description of the medical surveillance program & the medical removal program.

No Amsys Energy, LLC. employee should be exposed to lead at concentrations greater than fifty micrograms per cubic meter of air averaged over an 8-hour period.

Full shift personal samples shall be representative of the Amsys Energy, LLC. employees regular, daily exposure to lead.

If the initial determination or subsequent air monitoring reveals employee exposure to be at or above the action level but below the permissible exposure limit the employer shall repeat air monitoring in accordance with this paragraph at least every 6 months. The employer shall continue air monitoring at the required frequency until at least two consecutive measurements, taken at least 7 days apart, are below the action level at which time the employer may discontinue monitoring for that Amsys Energy, LLC. employee.

Affected Amsys Energy, LLC. employees shall be notified of the results of any monitoring performed within 15 working days, either individually in writing or by posting the results in an appropriate location that is accessible to affected employees. Whenever the results indicate that the representative employee exposure, without regard to respirators, exceeds the permissible exposure limit, in the written notice shall be included a statement that the permissible exposure limit was exceeded and a description of the corrective action taken or to be taken to reduce exposure to or below the permissible exposure limit.

The site specific compliance program should address means of engineering & work practice controls, air monitoring, a description of each operation in which lead is emitted, The written program must be revised & updated annually.

The respirator shall be used during the time period necessary to install or implement engineering or work practice controls, where engineering and work practice controls are insufficient, and in emergencies.

Gloves, hats, vented goggles, shoes or disposable shoe covers and all other required PPE shall be provided at no cost to the Amsys Energy, LLC. employee. Protective clothing shall be cleaned and laundered at least weekly. Clothing shall also be properly disposed and repaired or replaced as necessary.

Medical examinations & procedures shall be performed by or under the supervision of a licensed physician. The medical surveillance is provided without cost to the employees. The blood sampling & monitoring should be conducted every 6 months until two consecutive blood samples & analysis are acceptable. The sampling & monitoring should be performed at least monthly during the removal period. Any employee with elevated blood levels should be temporarily removed. Employees should be notified in writing within five days when lead levels are not acceptable. The standard requires temporary medical removal with Medical Removal Protection benefits. Lunch room, hygiene, shower, and changing facilities must be provided when exposures are above the PEL.

Warning signs should be posted in the work area where the PEL is exceeded.

Lead awareness training is required for employees whose work activities may contact lead containing materials but do not disturb the material during their work activities. Lead awareness training is required at time of hire, during orientation, or before assignment to areas containing lead. Refresher training must be given annually.

Lead awareness training will be documented and include dates of training, employee names (of who attended), and trainer's name.

Possible locations of lead containing materials such as leaded paints, leaded solders, pipes, batteries, circuit boards, cathode ray tubes, leaded glass, and demolition/salvage materials.

Common symptoms of acute lead poisoning are loss of appetite, nausea, vomiting, stomach cramps, constipation, difficulty in sleeping, fatigue, moodiness, headache, joint or muscle aches, and anemia. Long term (chronic) overexposure to lead may result in severe damage to the blood-forming, nervous, urinary, and reproductive systems.

Amsys Energy, LLC. employees must abide by any signs/labels/assessment reports indicating the presence of lead containing materials. Appropriate work practices should be followed to ensure the lead containing materials are not disturbed.

Amsys Energy, LLC. employees' hands and faces are to be washed if lead containing materials are contacted. If Amsys Energy, LLC. employees working immediately adjacent to a lead abatement activity are exposed to lead due to the inadequate containment of such job, their employer shall either remove the employees from the area until the enclosure breach is repaired or perform an initial exposure assessment.

Hazardous Waste Operations and Emergency Response

Amsys Energy, LLC.

A first responder awareness level program is provided to employees. The 8-hour and 24-hour HAZWOPER program will be offered to Amsys Energy, LLC. employees as required. The training should be based on the duties and functions. Individuals who are likely to witness or discover a hazardous substance release & who have been trained to initiate an emergency response sequence by notifying the proper authorities of the release. Amsys Energy, LLC. employees shall have the training and/or academic credentials and instructional experience to demonstrate competency.

Spill Prevention and Control Plan

- Supervisors must be informed of procedures and equipment required by Amsys Energy, LLC. Spill Prevention and Control Plan. They must communicate this information to each new crew member.
- Chemical substances should be stored in proper containers to minimize the potential for a spill. Whenever possible, chemicals should be kept in closed containers and stored so they are not exposed to storm water.
- When a unit is moved to a new location, the rig supervisor and operator must discuss well site drainage patterns and ways to contain possible spills.
- Regularly inspect all equipment that stores or transfers fluids, and report any damage or leakage to the mechanical department for repair.
- Crews must use all means to avoid spilling oil or other contaminants on the ground. When working in an area where there is the possibility of spilling oil or having petroleum contaminants washed into a drainage ditch, system, or waterway, take extra care to contain any possible spill. Quickly implement Amsys Energy, LLC. and the customer's spill control plans.
- In the event of a spill, the operator must contact the supervisor and customer representative. The rig supervisor should contact Amsys Energy, LLC. implement Amsys Energy, LLC. 's and/or the customer's spill control plan to contain and control any spill, as directed by the customer representative.
- A proper spill kit must contain the appropriate supplies for materials that may be spilled. Supplies must be easily accessible when required, and considerations must be made for both the type and quantity of materials.
- In the event of a spill, communication with Amsys Energy, LLC. 's management and customer's representatives is essential.
- Employees must be instructed on the proper response procedures for spilled materials. The training should include materials available for use, proper waste disposal, and communication procedures.
- Emergency response employees who exhibit signs or symptoms which may have resulted from exposure to hazardous substances during the course of an emergency shall be provided with medical consultation.
- Areas where chemicals may be used or stored must be maintained using good housekeeping best management practices. This includes, but is not limited to, clean and organized storage, labeling, and secondary containment where necessary.

Emergency Action Plan

The senior official at an emergency response is the most senior official on the site who has the responsibility for controlling operations at the site. As prescribed by OSHA standards 29 CFR part 1910 and any applicable state and local laws, the Emergency Action Plan will be carried on each rig, vehicle, or piece of equipment (“unit”) of Amsys Energy, LLC. One copy will be given to each unit supervisor, answering service and the district office.

Emergency phone numbers will be posted at each unit site and office. A copy is to be kept near each district office phone and radio for immediate use. Evacuation routes and assembly are identified at each unit site and district office (along with emergency shut-down and start-up procedures). The primary goal of Amsys Energy, LLC. ’s Emergency Action Plan is to ensure that all necessary action is taken to minimize the effect of all injuries resulting from accidents and to provide the quickest and maximum available medical care when such accidents do occur. All Amsys Energy, LLC. employees and contractors, if used, will be trained in the plan along with annual emergency preparedness drills being conducted. The plan will be revised, when needed, and employees will be trained in the revised plan. The plan will cover the following recognized contingencies:

- Medical Emergency
- Blowout Emergency, Well Control Procedure
- HAS Emergency
- Weather Emergency
- Vehicle Emergency
- Fire Emergency
- HAZWOPER Emergency

The minimum items should be addressed:

1. Pre-emergency planning & coordination with outside parties.
2. Personnel roles, lines of authority, training & communications.
3. Emergency recognition & prevention.
4. Safe distances & places of refuge.

Employees who are trained in accordance with the plan shall receive annual refresher training. A record of methods used must be kept.

Medical Emergency

When a medical emergency occurs, take the following steps:

- Survey the scene.
- Supervisors must account for all employees after an emergency evacuation has been completed.
- Administer proper first aid.
- Determine the nature and the severity of injuries and illness.
- Notify the district office by phone or radio. (Post emergency numbers in the office at the unit sites)
- If required, arrange to transport any injured persons to the nearest medical facility.
- Return operations to safe condition (if this can be done) or shut down the operation.
- Notify safety representatives and supervisors.
- Complete reports and investigations as soon as practical.

Media Crisis Communication

Notify the district office in the event of an accident that results in injuries, vehicle, or rig damage, or a hazard to the public. District personnel must then immediately notify the President, Vice President, and Secretary Treasurer. The corporate office will coordinate any news releases to the media through the district office. Politely tell the news media that the matter is being investigated and that a statement will be released as soon as the facts are determined.

Hazard Communication Program

Amsys Energy, LLC.

Policy

The following policy of Amsys Energy, LLC. is designated to conform with the Hazard Communication; Final Rule of the Occupational Safety & Health Administration (29 CFR 1910.1200) (Standard) and applicable state regulations. Programs should have specific methods for providing other employer information concerning hazardous chemicals at job sites, methods of providing SDS sheets, methods of precautionary measures to be taken & methods of providing information on labeling systems. Where employees must travel between work places during a work shift (multi job sites), the written program may be kept at a primary job site. If there is no primary, then the program should be sent with employees.

Purpose

The purpose of this Program is to establish uniform guidelines to ensure the hazards of chemicals used by Amsys Energy, LLC. are evaluated and that this information is transmitted to all affected employees.

Employees Notices

Amsys Energy, LLC. will give notice of the act and its provisions to its employees in the following ways.

- Posters – posters will be continuously posted in conspicuous places available to employees.
- Hazard Communication Meetings – Employees will be informed of the Act in safety meetings.
- New Employees or Change of Job Orientation
 - (a) A new employee will be informed of the Act during the pre-employment or new employee orientation.
 - (b) An employee changing positions will be informed of the Act during the new job orientation.

Rights of the Employee

The rights of the employee under the Standard are as follows:

- The employee has a right to know the hazards of the chemicals with which he/she is associated.
- The employee has a right to access a safety data sheet (SDS).
- The employee has a right to receive training.
- The employee has a right to Personal Protective Equipment.
- The employee has a right to exercise his/her rights without the fear of being terminated.

Responsibility

Amsys Energy, LLC. will be responsible for assuring that:

- Information as to physical and health hazards associated with products and/or materials used in the work place is obtained before the purchasing, use or disposal of such products. The Company relies on the accuracy of the hazard determination made by the products producer. This information is received via Safety Data Sheets and the product label on the containers.

- The product and/or materials, when received or discovered, are adequately labeled to identify the product or material, the hazardous components, the principle hazards and the appropriate warnings and/or precautions necessary for its use.
- Employees who use or otherwise come in contact with the product or material have access to this information and are informed of the hazards associated with the product and/or material.
- Information is provided to employees of the hazards of non-routine tasks (i.e., the cleaning of reactor vessels, etc.) & the hazards associated with chemicals contained in unlabeled pipes in their work areas.

Labeling

All containers, when received, will have affixed in legible condition the label furnished by the manufacturer or supplier which will comply with federal, state and local regulations. Commonly, this would include: the product name; the chemical name and any hazardous component or ingredient and possibly the Chemical Abstract Service or Trade Secret Registry number; the hazards and precautions associated with the use. The person responsible for ensuring labeling of job site containers is your supervisor or his/her designees. Any container, when received, which does not have a label or the label is not legible or does not comply with the federal, state and local regulations or minimum Company requirements, will be returned to the manufacturer or supplier. The only exception to this rule is that a dispensing container used by one person who fills the container from a bulk source and empties the dispensing container, while on the job, does not need labeling. Containers that cannot actually have a label physically placed on them will be identified by posting signs in the area of work.

Safety Data Sheets

Safety Data Sheets (SDSs) furnished by the manufacturer or supplier will be the primary method for providing information to employees regarding products or materials known to be, or to contain hazardous substances. Amsys Energy, LLC. will require a current SDS from the supplier of each chemical received.

- The chemical will be received by the Supervisor.
- The Supervisor will check to see that the shipment is accompanied by:
 - (a) A Safety Data Sheet
 - (b) Proper warning on the container.
- If there is no SDS or an incomplete SDS, the Supervisor will contact the supplier immediately to request it. The chemical will be received only at the discretion of the supervisors.
 - (a) Your supervisor will check to see if there is a current SDS on file.
 - (b) A written request of the SDS will be sent out immediately to the supplier at the Company's request
- If the SDS is received or is on file, it will be checked to see that it matches the shipment, is current, and meets the requirements of the act. Copies will be made if needed.
- If it is a hazardous chemical:

- (a) It will be stored properly.
 - (b) The employees will be informed of the hazards connected with the chemical.
 - (c) It will be placed on the HAZCOM list on the location, if required.
 - (d) It will be placed on the HAZCOM list for the Fire Chief, if required.
 - (e) The container will be properly labeled.
 - (f) Your Supervisor or his designee(s) will check to see that safety equipment and personal protective equipment are available and supplied to the employee.
- The Original SDS will be filed with the Operations Manager.
 - Each company vehicle must be accompanied by an SDS book.
 - The Operations Manager or safety coordinator will periodically check the SDSs to update the file (at least annually).
 - Employees or contractors may obtain additional information on the SDS by reading the SDS book.
 - When new and significant health information is found and added to a SDS, the Operations Manager/safety coordinator will follow the procedure listed below:
 1. Inform employees of dangers.
 2. Add SDS to files/books.

Hazardous Chemical Inventory

A list of all hazardous chemicals, if any that are present on Amsys Energy, LLC. leases will be compiled. The chemicals identified on this list will be referenced to the appropriate SDSs. The list and the SDSs are located at the appropriate offices.

The person responsible for updating the chemical inventory list whenever new hazardous chemicals are purchased, used or manufactured is the Operations Manager or Safety Coordinator.

Training

Each employee will receive instructions about this program, be shown where the SDSs are maintained and be provided access to them. Employees are to be trained at the time they are assigned to work with a hazardous chemical. Additional training will be conducted whenever a new hazard is introduced into the work area. Periodic training will be provided for new employees and employees who missed previously held training sessions. A new employee who has been trained by a previous employer may be given credit for the instruction if after evaluation, the company is satisfied the employee understands the hazards in the work place.

The person responsible for training is your Supervisor/Safety Coordinator. Training records will be kept on file.

Procedures

The following procedure will be used to train new employees and to train employees when a new hazard is introduced into the workplace.

- 1) Training materials will be provided to give guidance in the safe handling of chemicals. An evaluation of the employees' knowledge of the material will also be made. A handbook or other informational material will be provided for this training. Written tests and oral evaluations will be utilized in evaluating the employees' knowledge.
- 2) An annual training program will be utilized to provide ongoing training for employees concerning the hazards of chemicals in the workplace. The following elements will be included in the training program and passed on to employees in that training:
 - a) The existence of OSHA'S regulation, 29 CFR 1910.1200;
 - b) The operations in their work area where dangerous chemicals are present;
 - c) The location and availability of the written hazard communication program, the list of hazardous chemicals, the SDSs and their right and responsibility to share access to them as necessary.
 - d) The methods and observations that may be used to detect the presence of a hazardous chemical in the work area;
 - e) The physical and health hazards of the chemicals in the work area;
 - f) The measures employees can take to protect themselves from these hazards such as appropriate work practices, emergency procedures and personal protective equipment to be used; and
 - g) The details of the hazard communication program developed by this company including an explanation of the labeling system, the SDS and how employees can obtain and use the appropriate hazard information.

Location of Written Program

Amsys Energy, LLC. maintains a Written Hazard Communication Program in each Company Vehicle, Office and Warehouse. This program is updated periodically and is available for employee review as requested. Amsys Energy, LLC. requires that each field employee thoroughly understands this program and that verification of their understanding be ascertained by their supervisor.

Well Pulling

Amsys Energy, LLC.

The following general safety rules apply to all well pulling operations:

- When pulling stuck rods or tubing, clear the derrick floor of all unnecessary personnel.
- Use all safety devices, safeguards, and PPE as necessary.
- Only authorized service vehicles are allowed near the well. Park all other vehicles in a designated area at least 100 ft. from the well.
- Keep the work floor clean and clear.
- Lockout mechanical equipment before repairing or servicing.
- When erecting a rig, keep all equipment at least 20 ft. from high voltage lines.

Derrick Safe Practices – The following safe practices apply specifically to derrick operations when well pulling:

- When working on a portable derrick or mast, the derrick hand must wait for the initial pull before ascending to position.
- Employees working 6 ft. or more above the ground must wear approved body harnesses with a tail line. When climbing derrick, always wear fall protection including transfer from ladder to tubing board or rod basket.
- Employees must use both hands to ascend or descend the derrick ladder.
- If hand tools needed, send up by tag line or basket.
- To prevent accidents when going in hole with tubing, the derrick hand must let blocks pass the finger before leaning the next stand against the finger.
- Derrick tools must never be thrown or dropped to the ground.
- To prevent hand injuries when the elevator and hook are lowered, the derrick hand must keep hands below the tubing collars when racking tubing.
- The derrick hand must secure each stand of tubing or drill pipe with rope.

Floor Safe Practices – The following practices apply specifically to drilling floor areas when well pulling:

- When moving pipes, pumps, rods, etc., with an elevator, the back of the elevator must be face down with the door opening between the links.
- When pulling a polish rod, the stuffing box must be stripped to the lower end of the polish rod before laying down the rod.
- If the stuffing box sticks to the polish rod and cannot be removed, chain the stuffing box to the polish rod to prevent it from falling.
- The floor hand should set tubing in regular rows.
- Pipes, rods, and wirelines should never be stripped by hand.
- When repairing or servicing air tongs, only one designated employee may operate tong controls. The hoses must be disconnected and hydraulic tongs must be locked and tagged out.
- Catheads must be stopped before removing fouled loops. The tight line may not be used to guide or remove fouled loops.
- Cathead wraps must be attended.
- When stabbing tubing, the floor hand should keep his or her hands 1 ft. above the pipe threads to prevent hand injuries.

Well Servicing

Supervisors and contractor personnel are responsible for implementing the safety requirements of both their company's and Amsys Energy, LLC. Well servicing contractors must provide Amsys Energy, LLC. with a copy of their safety and operations handbooks, and must continually maintain close communication with the drilling and production personnel. If contractor procedures violate Amsys Energy, LLC. requirements, the contractor must inform a Amsys Energy, LLC. supervisor before proceeding with work.

Well servicing procedures are based on government regulations and the following API standards:

- API RP 53 – Blowout Prevention Equipment Systems for Drilling Wells
- API RP 54 – Oil and Gas Well Drilling and Servicing Operations
- API RP 68 – Well Servicing and Workover Operations Involving Hydrogen Sulfide.
- API RP 4G – Maintenance and use of Drilling and Well Servicing Structures.

The following general safety precautions apply to well serving operations:

- Keep the area clean and orderly.
- At least one crew member must have formal first aid training and a valid first aid card.
- Well servicing contractors must have regular, documented safety meetings.
- Daily documented tailgate safety meetings must be held prior to each work shift and before critical operations.
- Any personnel not actively involved in operations must remain beyond the guy lines on land jobs.
- Instrument readings for hazardous operations must be observed from safe and remote locations.

The following sections discuss specific safety procedures and guidelines for well servicing operations.

Well Servicing Units – Employees should enforce the following safety guidelines for well servicing units:

- Before rigging up a well servicing unit, visually inspect the guy line anchors to a depth of 12 in. Replace the anchors if they seem unstable. Pull-test and tag guy lines every two years or as required by state regulations.
- Electrical lines are at least 100 ft. from the wellhead.
- Guy lines are installed in accordance with API RP 9B and at least 20 ft. from overhead electrical lines.
- Wind streamers are placed on guy lines.
- All equipment is bonded and grounded to prevent stray currents or static charges.
- Dwellings within 125 ft. of the derrick are evacuated whenever possible.
- All units have three 30-lb. or larger dry chemical fire extinguishers placed by guy line anchors.

Non-DOT Drug & Alcohol Policy

Amsys Energy, LLC.

- Drug and alcohol testing will be given to all individuals prior to employment with Amsys Energy, LLC. , testing must be given before initial assignment.
- Amsys Energy, LLC. Employees will be chosen through an unbiased selection process and will be administered with drug and alcohol testing at random times.
- If a competent person has determined that there is reasonable cause or suspicion that an individual working for Amsys Energy, LLC. is performing work under the influence, then that individual will be required to submit to a drug and alcohol test.
- Amsys Energy, LLC. Employees involved in a work-related incident will be required to submit to a drug and alcohol test.
- Any Amsys Energy, LLC. Employee that receives unacceptable drug and alcohol test results will not be allowed to work on a Client/Host site or facility.

Scaffolds Policy

Amsys Energy, LLC.

The employer shall have each employee who is involved in erecting, disassembling, moving, operating, repairing, maintaining, or inspecting a scaffold trained by a competent person to recognize any hazards associated with the work in question. A competent person must ensure scaffolds are safe prior to and during use.

The employer shall have each employee who performs work while on a scaffold trained by a person qualified in the subject matter to recognize the hazards associated with the type of scaffold being used and to understand the procedures to control or minimize those hazards. The training shall include the following areas, as applicable:

- The nature of any electrical hazards, fall hazards and falling object hazards in the work area;
- The correct procedures for dealing with electrical hazards and for erecting, maintaining, and disassembling the fall protection systems and falling object protection systems being used;
- The proper use of the scaffold, and the proper handling of materials on the scaffold;
- The maximum intended load and the load-carrying capacities of the scaffolds used; and
- Any other pertinent requirements of this subpart.

When the employer has reason to believe that an employee lacks the skill or understanding needed for safe work involving the erection, use or dismantling of scaffolds, the employer shall retrain each such employee so that the requisite proficiency is regained. Retraining is required in at least the following situations:

- Where changes at the worksite present a hazard about which an employee has not been previously trained; or
- Where changes in the types of scaffolds, fall protection, falling object protection, or other equipment present a hazard about which an employee has not been previously trained; or
- Where inadequacies in an affected employee's work involving scaffolds indicate that the employee has not retained the requisite proficiency. Hazards including fall protection, electrical safety, falling object protection, scaffold use and load capacity should all be addressed in the training provided to employees. Unsafe equipment or conditions must be tagged out by Competent Person, and must be complied with

Process Safety Management

Amsys Energy, LLC.

The major objective of process safety management (PSM) of highly hazardous chemicals is to prevent unwanted releases of hazardous chemicals especially into locations that could expose employees and others to serious hazards. An effective process safety management program requires a systematic approach to evaluating the whole chemical process. Using this approach, the process design, process technology, process changes, operational and maintenance activities and procedures, nonroutine activities and procedures, emergency preparedness plans and procedures, training programs, and other elements that affect the process are all considered in the evaluation.

The various lines of defense that have been incorporated into the design and operation of the process to prevent or mitigate the release of hazardous chemicals need to be evaluated and strengthened to ensure their effectiveness at each level. Process safety management is the proactive identification, evaluation and mitigation or prevention of chemical releases that could occur as a result of failures in processes, procedures, or equipment.

The process safety management standard targets highly hazardous chemicals that have the potential to cause a catastrophic incident. The purpose of the standard as a whole is to aid employers in their efforts to prevent or mitigate episodic chemical releases that could lead to a catastrophe in the workplace and possibly in the surrounding community.

To control these types of hazards, employers need to develop the necessary expertise, experience, judgement, and initiative within their work force to properly implement and maintain an effective process safety management program as envisioned in the Occupational Safety and Health Administration (OSHA) standard.

The OSHA standard is required by the Clean Air Act Amendments, as is the Environmental Protection Agency's Risk Management Plan, which will be proposed in 1992. Employers who merge the two sets of requirements into their process safety management program will better assure full compliance with each as well as enhance their relationship with the local community.

Although OSHA believes process safety management will have a positive effect on the safety of employees and will offer other potential benefits to employers, such as increased productivity, smaller businesses that may have limited resources to them at this time, might consider alternative avenues of decreasing the risks associated with highly hazardous chemicals at their workplaces. One method that might be considered is reducing inventory of the highly hazardous chemical. This reduction in inventory will result in reducing the risk or potential for a catastrophic incident. Also, employers, including small employers, may establish more efficient inventory control by reducing, to below the established threshold, the quantities of highly hazardous chemicals onsite. This reduction can be accomplished by ordering smaller shipments and maintaining the minimum inventory necessary for efficient and safe operation. When reduced inventory is not feasible, the employer might consider dispersing inventory to several locations onsite.

Dispersing storage into locations so that a release in one location will not cause a release in another location is also a practical way to reduce the risk or potential for catastrophic incidents.

Piping and instrument diagrams (P&IDs) may be the more appropriate type diagrams to show some of the above details as well as display the information for the piping designer and engineering staff. The P&IDs are to be used to describe the relationships between equipment and instrumentation as well as other relevant information that will enhance clarity. Computer software programs that do P&IDs or other diagrams useful to the information package may be used to help meet this requirement.

For existing equipment designed and constructed many years ago in accordance with the codes and standards available at that time and no longer in general use today, the employer must document which codes and standards were used and that the design and construction along with the testing, inspection, and operation are still suitable for the intended use. Where the process technology requires a design that departs from the applicable codes and standards, the employer must document that the design and construction are suitable for the intended purpose.

Section 304 of the Clean Air Act Amendments states that employers are to consult with their employees and their representatives regarding their efforts in developing and implementing the process safety management program elements and hazard assessments. Section 304 also requires employers to train and educate their employees and to inform affected employees of the findings from incident investigations required by the process safety management program. Many employers, under their existing safety and health programs, already have established methods to keep employees and their representatives informed about relevant safety and health issues and may be able to adapt these practices and procedures to meet their obligations under PSM.

Employers who have not implemented an occupational safety and health program may wish to form a safety and health committee of employees and management representatives to help the employer meet the PSM obligations. Such a committee can be a significant ally in helping the employer implement and maintain an effective process safety management program for all employees.

A process hazard analysis (PHA), or evaluation, is one of the most important elements of the process safety management program. A PHA is an organized and systematic effort to identify and analyze the significance of potential hazards associated with the processing or handling of highly hazardous chemicals. A PHA provides information that will assist employers and employees in making decisions for improving safety and reducing the consequences of unwanted or unplanned releases of hazardous chemicals.

A PHA analyzes potential causes and consequences of fires, explosions, releases of toxic or flammable chemicals, and major spills of hazardous chemicals. The PHA focuses on equipment, instrumentation, utilities, human actions (routine and nonroutine), and external factors that might affect the process.

The selection of a PHA methodology or technique will be influenced by many factors

including how much is known about the process. Is it a process that has been operated for a long period of time with little or no innovation and extensive experience has been generated with its use? Or, is it a new process or one that has been changed frequently by the inclusion of innovation features? Also, the size and complexity of the process will influence the decision as to the appropriate PHA methodology to use. All PHA methodologies are subject to certain limitations. For example, the checklist methodology works well when the process is very stable and no changes are made, but it is not as effective when the process has undergone extensive change. The checklist may miss the most recent changes and consequently they would not be evaluated. Another limitation to be considered concerns the assumptions made by the team or analyst. The PHA is dependent on good judgement and the assumptions made during the study need to be documented and understood by the team and reviewer and kept for a future PHA.

The team conducting the PHA needs to understand the methodology that is going to be used. A PHA team can vary in size from two people to a number of people with varied operational and technical backgrounds. Some team members may be part of the team for only a limited time. The team leader needs to be fully knowledgeable in the proper implementation of the PHA methodology to be used and should be impartial in the evaluation. The other full or part-time team members need to provide the team with expertise in areas such as process technology; process design; operating procedures and practices; alarms; emergency procedures; instrumentation; maintenance procedures, both routine and nonroutine tasks, including how the tasks are authorized; procurement of parts and supplies; safety and health; and any other relevant subjects. At least one team member must be familiar with the process.

The ideal team will have an intimate knowledge of the standards, codes, specifications, and regulations applicable to the process being studied. The selected team members need to be compatible and the team leader needs to be able to manage the team and the PHA study. The team needs to be able to work together while benefiting from the expertise of others on the team or outside the team to resolve issues and to forge a consensus on the findings of the study and recommendations.

The application of a PHA to a process may involve the use of different methodologies for various parts of the process. For example, a process involving a series of unit operations of varying sizes, complexities, and ages may use different methodologies and team members for each operation. Then the conclusions can be integrated into one final study and evaluation. A more specific example is the use of a PHA checklist for a standard boiler or heat exchanger and the use of a Hazard and Operability PHA for the overall process. Also, for batch-type processes like custom batch operations, a generic PHA of a representative batch may be used where there are only small changes of monomer or other ingredient ratio and the chemistry is documented for the full range and ratio of batch ingredients. Another process where the employer might consider using a generic type of PHA is a gas plant. Often these plants are simply moved from site to site, and therefore, a generic PHA may be used for these movable plants. Also, when an employer has several similar size gas plants and no sour gas is being processed at the site, a generic PHA is feasible as long as the variations of the individual sites are accounted for in the PHA.

Finally, when an employer has a large continuous process with several control rooms for different portions of the process, such as for a distillation tower and a blending operation, the employer may wish to do each segment separately and then integrate the final results.

Small businesses covered by this rule often will have processes that have less storage volume and less capacity and may be less complicated than processes at a large facility. Therefore, OSHA would anticipate that the less complex methodologies would be used to meet the process hazard analysis criteria in the standard. These process hazard analyses can be done in less time and with fewer people being involved. A less complex process generally means that less data, P&IDs, and process information are needed to perform a process hazard analysis.

Many small businesses have processes that are not unique, such as refrigerated warehouses or cold storage lockers or water treatment facilities. Where employer associations have a number of members with such facilities, a generic PHA, evolved from a checklist or what-if questions, could be developed and effectively used by employers to reflect their particular process; this would simplify compliance for them.

When the employer has a number of processes that require a PHA, the employer must set up a priority system to determine which PHAs to conduct first. A preliminary hazard analysis may be useful in setting priorities for the processes that the employer has determined are subject to coverage by the process safety management standard. Consideration should be given first to those processes with the potential of adversely affecting the largest number of employees. This priority setting also should consider the potential severity of a chemical release, the number of potentially affected employees, the operating history of the process, such as the frequency of chemical releases, the age of the process, and any other relevant factors. Together, these factors would suggest a ranking order using either a weighting factor system or a systematic ranking method. The use of a preliminary hazard analysis will assist an employer in determining which process should be of the highest priority for hazard analysis resulting in the greatest improvement in safety at the facility occurring first.

Operating procedures describe tasks to be performed, data to be recorded, operating conditions to be maintained, samples to be collected, and safety and health precautions to be taken. The procedures need to be technically accurate, understandable to employees, and revised periodically to ensure that they reflect current operations. The process safety information package helps to ensure that the operating procedures and practices are consistent with the known hazards of the chemicals in the process and that the operating parameters are correct. Operating procedures should be reviewed by engineering staff and operating personnel to ensure their accuracy and that they provide practical instructions on how to actually carry out job duties safely. Also the employer must certify annually that the operating procedures are current and accurate.

Operating procedures provide specific instructions or details on what steps are to be taken or followed in carrying out the stated procedures. The specific instructions should include the applicable safety precautions and appropriate information on safety implications. For example, the operating procedures addressing operating parameters will contain operating instructions about pressure limits, temperature ranges, flow rates, what to do when an

upset condition occurs, what alarms and instruments are pertinent if an upset condition occurs, and other subjects. Another example of using operating instructions to properly implement operating procedures is in starting up or shutting down the process. In these cases, different parameters will be required from those of normal operation. These operating instructions need to clearly indicate the distinctions between startup and normal operations, such as the appropriate allowances for heating up a unit to reach the normal operating parameters. Also, the operating instructions need to describe the proper method for increasing the temperature of the unit until the normal operating temperatures are reached.

Computerized process control systems add complexity to operating instructions. These operating instructions need to describe the logic of the software as well as the relationship between the equipment and the control system; otherwise, it may not be apparent to the operator.

Operating procedures and instructions are important for training operating personnel. The operating procedures are often viewed as the standard operating practices (SOPs) for operations. Control room personnel and operating staff, in general, need to have a full understanding of operating procedures. If workers are not fluent in English, then procedures and instructions need to be prepared in a second language understood by the workers. In addition, operating procedures need to be changed when there is a change in the process. The consequences of operating procedure changes need to be fully evaluated and the information conveyed to the personnel. For example, mechanical changes to the process made by the maintenance department (like changing a valve from steel to brass or other subtle changes) need to be evaluated to determine whether operating procedures and practices also need to be changed. All management of change actions must be coordinated and integrated with current operating procedures, and operating personnel must be alerted to the changes in procedures before the change is made. When the process is shut down to make a change, then the operating procedures must be updated before re-starting the process.

Employee Training

All employees, including maintenance and contractor employees involved with highly hazardous chemicals, need to fully understand the safety and health hazards of the chemicals and processes they work with so they can protect themselves, their fellow employees, and the citizens of nearby communities. Training conducted in compliance with the OSHA Hazard Communication standard (Title 29 Code of Federal Regulations (CFR) Part 1910.1200) will inform employees about the chemicals they work with and familiarize them with reading and understanding SDSs. However, additional training in subjects such as operating procedures and safe work practices, emergency evacuation and response, safety procedures, routine and non-routine work authorization activities, and other areas pertinent to process safety and health need to be covered by the employer's training program.

In establishing their training programs, employers must clearly identify the employees to be trained, the subjects to be covered, and the goals and objectives they wish to achieve. The learning goals or objectives should be written in clear measurable terms before the

training begins. These goals and objectives need to be tailored to each of the specific training modules or segments. Employers should describe the important actions and conditions under which the employee will demonstrate competence or knowledge as well as what is acceptable performance.

Training must include instruction on how to handle upset conditions as well as what operating personnel are to do in emergencies such as pump seal failures or pipeline ruptures. Communication among operating personnel and workers within the process area performing nonroutine tasks also must be maintained. The hazards of the tasks are to be conveyed to operating personnel in accordance with established procedures and to those performing the actual tasks. When the work is completed, operating personnel should be informed to provide closure on the job.

Hands-on training, where employees actually apply lessons learned in simulated or real life situations, will enhance learning. For example, operating personnel, who will work in a control room or at control panels, would benefit by being trained at a simulated control panel. Upset conditions of various types could be displayed on the simulator, and then the employee could go through the proper operating procedures to bring the simulator panel back to the normal operating parameters. A training environment could be created to help the trainee feel the full reality of the situation but under controlled conditions. This type of realistic training can be very effective in teaching employees correct procedures while allowing them also to see the consequences of what might happen if they do not follow established operating procedures. Other training techniques using videos or training also can be very effective for teaching other job tasks, duties, or imparting other important information. An effective training program will allow employees to fully participate in the training process and to practice their skills or knowledge.

Employers need to evaluate periodically their training programs to see if the necessary skills, knowledge, and routines are being properly understood and implemented by their trained employees. The methods for evaluating the training should be developed along with the training program goals and objectives. Training program evaluation will help employers to determine the amount of training their employees understood and whether the desired results were obtained. If, after the evaluation, it appears that the trained employees are not at the level of knowledge and skill that was expected, the employer should revise the training program, provide retraining, or provide more frequent refresher training sessions until the deficiency is resolved. Those who conducted the training and those who received the training also should be consulted as to how best to improve the training process. If there is a language barrier, the language known to the trainees should be used to reinforce the training messages and information.

Careful consideration must be given to ensure that employees, including maintenance and contract employees, receive current and updated training. For example, if changes are made to a process, affected employees must be trained in the changes and understand the effects of the changes on their job tasks. Additionally, as already discussed, the evaluation of the employee's absorption of training will certainly determine the need for further training.

Contractors

Employers who use contractors to perform work in and around processes that involve highly hazardous chemicals have to establish a screening process so that they hire and use only contractors who accomplish the desired job tasks without compromising the safety and health of any employees at a facility. For contractors whose safety performance on the job is not known to the hiring employer, the employer must obtain information on injury and illness rates and experience and should obtain contractor references. In addition, the employer must ensure that the contractor has the appropriate job skills, knowledge, and certifications (e.g., for pressure vessel welders). Contractor work methods and experience should be evaluated. For example, does the contractor conducting demolition work swing loads over operating processes or does the contractor avoid such hazards?

Maintaining a site injury and illness log for contractors is another method employers must use to track and maintain current knowledge of activities involving contract employees working on or adjacent to processes covered by PSM. Injury and illness logs of both the employer's employees and contract employees allow the employer to have full knowledge of process injury and illness experience. This log contains information useful to those auditing process safety management compliance and those involved in incident investigations.

Contract employees must perform their work safely. Considering that contractors often perform very specialized and potentially hazardous tasks, such as confined space entry activities and nonroutine repair activities, their work must be controlled while they are on or near a process covered by PSM. A permit system or work authorization system for these activities is helpful for all affected employers. The use of a work authorization system keeps an employer informed of contract employee activities. Thus, the employer has better coordination and more management control over the work being performed in the process area. A well-run and well-maintained process, where employee safety is fully recognized, benefits all of those who work in the facility whether they are employees of the employer or the contractor.

Pre-Startup Safety Review

For new processes, the employer will find a PHA helpful in improving the design and construction of the process from a reliability and quality point of view. The safe operation of the new process is enhanced by making use of the PHA recommendations before final installations are completed. P&IDs should be completed, the operating procedures put in place, and the operating staff trained to run the process, before startup. The initial startup procedures and normal operating procedures must be fully evaluated as part of the pre-startup review to ensure a safe transfer into the normal operating mode.

For existing processes that have been shut down for turnaround or modification, the employer must ensure that any changes other than "replacement in kind" made to the process during shutdown go through the management of change procedures. P&IDs will need to be updated, as necessary, as well as operating procedures and instructions. If the changes made to the process during shutdown are significant and affect the training program, then operating personnel as well as employees engaged in routine and nonroutine work in the process area may need some refresher or additional training. Any

incident investigation recommendations, compliance audits, or PHA recommendations need to be reviewed to see what affect they may have on the process before beginning the startup.

Mechanical Integrity of Equipment

Employers must review their maintenance programs and schedules to see if there are areas where "breakdown" is used rather than the more preferable on-going mechanical integrity program. Equipment used to process, store, or handle highly hazardous chemicals has to be designed, constructed, installed, and maintained to minimize the risk of releases of such chemicals. This requires that a mechanical integrity program be in place to ensure the continued integrity of process equipment.

Elements of a mechanical integrity program include identifying and categorizing equipment and instrumentation, inspections and tests and their frequency; maintenance procedures; training of maintenance personnel; criteria for acceptable test results; documentation of test and inspection results; and documentation of manufacturer recommendations for equipment and instrumentation.

Process Defenses

The first line of defense an employer has is to operate and maintain the process as designed and to contain the chemicals. This is backed up by the second line of defense which is to control the released chemicals through venting to scrubbers or flares, or to surge or overflow tanks designed to receive such chemicals. This also would include fixed fire protection systems like sprinklers, water spray, or deluge systems, monitor guns, dikes, designed drainage systems, and other systems to control or mitigate hazardous chemicals once an unwanted release occurs.

Written Procedures

The first step of an effective mechanical integrity program is to compile and categorize a list of process equipment and instrumentation to include in the program. This list includes pressure vessels, storage tanks, process piping, relief and vent systems, fire protection system components, emergency shutdown systems and alarms, and interlocks and pumps. For the categorization of instrumentation and the listed equipment, the employer should set priorities for which pieces of equipment require closer scrutiny than others.

Inspection and Testing

The mean time to failure of various instrumentation and equipment parts would be known from the manufacturer's data or the employer's experience with the parts, which then influence inspection and testing frequency and associated procedures. Also, applicable codes and standards-such as the National Board inspection Code, or those from the American Society for Testing and Materials, American Petroleum Institute, National Fire Protection Association, American National Standards institute, American Society of Mechanical Engineers, and other groups-provide information to help establish an effective testing and inspection frequency, as well as appropriate methodologies.

The applicable codes and standards provide criteria for external inspections for such items as foundation and supports, anchor bolts, concrete or steel supports, guy wires, nozzles

and sprinklers, pipe hangers, grounding connections protective coatings and insulation, and external metal surfaces of piping and vessels. These codes and standards also provide information on methodologies for internal inspection and a frequency formula based on the corrosion rate of the materials of construction. Also, internal and external erosion must be considered along with corrosion effects for piping and valves. Where the corrosion rate is not known, a maximum inspection frequency is recommended (methods of developing the corrosion rate are available in the codes). Internal inspections need to cover items such as the vessel shell, bottom and head; metallic linings; nonmetallic linings; thickness measurements for vessels and piping; inspection for erosion, corrosion, cracking and bulges; internal equipment like trays, baffles, sensors and screens for erosion, corrosion or cracking and other deficiencies. Some of these inspections may be performed by state or local government inspectors under state and local statutes. However, each employer must develop procedures to ensure that tests and inspections are conducted properly and that consistency is maintained even where different employees may be involved. Appropriate training must be provided to maintenance personnel to ensure that they understand the preventive maintenance program procedures, safe practices, and the proper use and application of special equipment or unique tools that may be required. This training is part of the overall training program called for in the standard.

Quality Assurance

A quality assurance system helps ensure the use of proper materials of construction, the proper fabrication and inspection procedures, and appropriate installation procedures that recognize field installation concerns. The quality assurance program is an essential part of the mechanical integrity program and will help maintain the primary and secondary lines of defense designed into the process to prevent unwanted chemical releases or to control or mitigate a release. "As built" drawings, together with certifications of coded vessels and other equipment and of construction, must be verified and retained in the quality assurance documentation.

Equipment installation jobs need to be properly inspected in the field for use of proper materials and procedures and to ensure that qualified craft workers do the job. The use of appropriate gaskets, packing, bolts, valves, lubricants and welding rods needs to be verified in the field. Also, procedures for installing safety devices need to be verified, such as the torque on the bolts on rupture disc installations, uniform torque on flange bolts, and proper installation of pump seals. If the quality of parts is a problem, it may be appropriate for the employer to conduct audits of the equipment supplier's facilities to better ensure proper purchases of required equipment suitable for intended service. Any changes in equipment that may become necessary will need to be reviewed for management of change procedures.

Non-routine Work Authorizations

Non-routine work conducted in process areas must be controlled by the employer in a consistent manner. The hazards identified involving the work to be accomplished must be communicated to those doing the work and to those operating personnel whose work could affect the safety of the process. A work authorization notice or permit must follow a procedure that describes the steps the maintenance supervisor, contractor representative, or other person needs to follow to obtain the necessary clearance to start the job. The work

authorization procedures must reference and coordinate, as applicable, lockout/tagout procedures, line breaking procedures, confined space entry procedures, and hot work authorizations. This procedure also must provide clear steps to follow once the job is completed to provide closure for those that need to know the job is now completed and that equipment can be returned to normal.

Managing Change

To properly manage changes to process chemicals, technology, equipment and facilities, one must define what is meant by change. In the process safety management standard, change includes all modifications to equipment, procedures, raw materials, and processing conditions other than "replacement in kind." These changes must be properly managed by identifying and reviewing them prior to implementing them. For example, the operating procedures contain the operating parameters (pressure limits, temperature ranges, flow rates, etc.) and the importance of operating within these limits. While the operator must have the flexibility to maintain safe operation within the established parameters, any operation outside of these parameters requires review and approval by a written management of change procedure. Management of change also covers changes in process technology and changes to equipment and instrumentation. Changes in process technology can result from changes in production rates, raw materials, experimentation, equipment unavailability, new equipment, new product development, change in catalysts, and changes in operating conditions to improve yield or quality. Equipment changes can be in materials of construction, equipment specifications, piping pre-arrangements, experimental equipment, computer program revisions, and alarms and interlocks. Employers must establish means and methods to detect both technical and mechanical changes.

Temporary changes have caused a number of catastrophes over the years, and employers must establish ways to detect both temporary, and permanent changes. It is important that a time limit for temporary changes be established and monitored since otherwise, without control, these changes may tend to become permanent. Temporary changes are subject to the management of change provisions. In addition, the management of change procedures are used to ensure that the equipment and procedures are returned to their original or designed conditions at the end of the temporary change. Proper documentation and review of these changes are invaluable in ensuring that safety and health considerations are incorporated into operating procedures and processes. Employers may wish to develop a form or clearance sheet to facilitate the processing of changes through the management of change procedures. A typical change form may include a description and the purpose of the change, the technical basis for the change, safety and health considerations, documentation of changes for the operating procedures, maintenance procedures, inspection and testing, P&IDs, electrical classification, training and communications, pre-startup inspection, duration (if a temporary change), approvals, and authorization. Where the impact of the change is minor and well understood, a check list reviewed by an authorized person, with proper communication to others who are affected, may suffice. (See Figure 2 for a sample request for change form that can be helpful in guiding this procedure.)

For a more complex or significant design change, however, a hazard evaluation procedure with approvals by operations, maintenance, and safety departments may be appropriate.

Changes in documents such as P&IDs, raw materials, operating procedures, mechanical integrity programs, and electrical classifications should be noted so that these revisions can be made permanent when the drawings and procedure manuals are updated. Copies of process changes must be kept in an accessible location to ensure that design changes are available to operating personnel as well as to PHA team members when a PHA is being prepared or being updated.

Incident Investigation

Incident investigation is the process of identifying the underlying causes of incidents and implementing steps to prevent similar events from occurring. The intent of an incident investigation is for employers to learn from past experiences and thus avoid repeating past mistakes. The incidents OSHA expects employers to recognize and to investigate are the types of events that resulted in or could reasonably have resulted in a catastrophic release. These events are sometimes referred to as "near misses," meaning that a serious consequence did not occur, but could have. (See Figure 3 for sample incident investigation report form.)

Employers must develop in-house capability to investigate incidents that occur in their facilities. A team should be assembled by the employer and trained in the techniques of investigation including how to conduct interviews of witnesses, assemble needed documentation, and write reports. A multi-disciplinary team is better able to gather the facts of the event and to analyze them and develop plausible scenarios as to what happened, and why. Team members should be selected on the basis of their training, knowledge and ability to contribute to a team effort to fully investigate the incident.

Emergency Preparedness

Each employer must address what actions employees are to take when there is an unwanted release of highly hazardous chemicals. Emergency preparedness is the employer's third line of defense that will be relied on along with the second line of defense, which is to control the release of chemical. Control releases and emergency preparedness will take place when the first line of defense to operate and maintain the process and contain the chemicals fails to stop the release. In preparing for an emergency chemical release, employers will need to decide the following:

- Whether they want employees to handle and stop small or minor incidental releases;
- Whether they wish to mobilize the available resources at the plant and have them brought to bear on a more significant release;
- Whether employers want their employees to evacuate the danger area and promptly escape to a preplanned safe zone area, and then allow the local community emergency response organizations to handle the release; or
- Whether the employer wants to use some combination of these actions.

Employers will need to select how many different emergency preparedness or third lines of defense they plan to have, develop the necessary emergency plans and procedures, appropriately train employees in their emergency duties and responsibilities, and then implement these lines of defense.

Employers, at a minimum, must have an emergency action plan that will facilitate the prompt evacuation of employees when there is an unwanted release of a highly hazardous chemical. This means that the employer's plan will be activated by an alarm system to alert employees when to evacuate, and that employees who are physically impaired will have the necessary support and assistance to get them to a safe zone. The intent of these requirements is to alert and move employees quickly to a safe zone. Delaying alarms or confusing alarms are to be avoided. The use of process control centers or buildings as safe areas is discouraged. Recent catastrophes indicate that lives are lost in these structures because of their location and because they are not necessarily designed to withstand overpressures from shock waves resulting from explosions in the process area.

When there are unwanted incidental releases of highly hazardous chemicals in the process area, the employer must inform employees of the actions/procedures to take. If the employer wants employees to evacuate the area, then the emergency action plan will be activated. For outdoor processes, where wind direction is important for selecting the safe route to a refuge area, the employers should place a wind direction indicator, such as a wind sock or pennant, at the highest point visible throughout the process area. Employees can move upwind of the release to gain safe access to a refuge area by knowing the wind direction.

If the employer wants specific employees in the release area to control or stop the minor emergency or incidental release, these actions must be planned in advance and procedures developed and implemented. Handling incidental releases for minor emergencies in the process area must include pre-planning, providing appropriate equipment for the hazards, and conducting training for those employees who will perform the emergency work before they respond to handle an actual release. The employer's training program, including the Hazard Communication standard training, is to address, identify, and meet the training needs for employees who are expected to handle incidental or minor releases.

Preplanning for more serious releases is an important element in the employer's line of defense. When a serious release of a highly hazardous chemical occurs, the employer, through preplanning, will have determined in advance what actions employees are to take. The evacuation of the immediate release area and other areas, as necessary, would be accomplished under the emergency action plan. If the employer wishes to use plant personnel-such as a fire brigade, spill control team, a hazardous materials team-or employees to render aid to those in the immediate release area and to control or mitigate the incident, refer to OSHA's Hazardous Waste Operations and Emergency Response (HAZWOPER) standard (Title 29CFR Part 1910.120). If outside assistance is necessary, such as through mutual aid agreements between employers and local government emergency response organizations, these emergency responders are also covered by HAZWOPER. The safety and health protection required for emergency responders is the responsibility of their employers and of the on-scene incident commander.

Responders may be working under very hazardous conditions; therefore, the objective is to have them competently led by an on-scene incident commander and the commander's staff, properly equipped to do their assigned work safely, and fully trained to carry out their duties safely before they respond to an emergency. Drills, training exercises, or

simulations with the local community emergency response planners and responder organizations is one means to obtain better preparedness. This close cooperation and coordination between plant and local community emergency preparedness managers also will aid the employer in complying with the Environmental Protection Agency's Risk Management Plan criteria.

An effective way for medium to large facilities to enhance coordination and communication during emergencies within the plant and with local community organizations is by establishing and equipping an emergency control center. The emergency control center should be located in a safe zone so that it could be occupied throughout the duration of an emergency. The center should serve as the major communications link between the on-scene incident commander and plant or corporate management as well as with local community officials. The communications equipment in the emergency control center should include a network to receive and transmit information by telephone, radio, or other means. It is important to have a backup communications network in case of power failure or if one communication means fails. The center also should be equipped with the plant layout; community maps; utility drawings, including water for fire extinguishing; emergency lighting; appropriate reference materials such as a government agency notification list, company personnel phone list, SARA Title III reports and safety data sheets, emergency plans and procedures manual; a listing the location of emergency response equipment and mutual aid information; and access to meteorological data and any dispersion modeling data.

Compliance Audits

An audit is a technique used to gather sufficient facts and information, including statistical information, to verify compliance with standards. Employers must select a trained individual or assemble a trained team to audit the process safety management system and program. A small process or plant may need only one knowledgeable person to conduct an audit. The audit includes an evaluation of the design and effectiveness of the process safety management system and a field inspection of the safety and health conditions and practices to verify that the employer's systems are effectively implemented. The audit should be conducted or led by a person knowledgeable in audit techniques who is impartial towards the facility or area being audited. The essential elements of an audit program include planning, staffing, conducting the audit, evaluating hazards and deficiencies and taking corrective action, performing a follow-up and documenting actions taken.

Planning

Planning is essential to the success of the auditing process. During planning, auditors should select a sufficient number of processes to give a high degree of confidence that the audit reflects the overall level of compliance with the standard. Each employer must establish the format, staffing, scheduling, and verification methods before conducting the audit. The format should be designed to provide the lead auditor with a procedure or checklist that details the requirements of each section of the standard. The names of the audit team members should be listed as part of the format as well. The checklist, if properly designed, could serve as the verification sheet that provides the auditor with the necessary information to expedite the review of the program and ensure that all requirements of the standard are met. This verification sheet format could also identify

those elements that will require an evaluation or a response to correct deficiencies. This sheet also could be used for developing the follow-up and documentation requirements.

Staffing

The selection of effective audit team members is critical to the success of the program. Team members should be chosen for their experience, knowledge, and training and should be familiar with the processes and auditing techniques, practices, and procedures. The size of the team will vary depending on the size and complexity of the process under consideration. For a large, complex, highly instrumented plant, it may be desirable to have team members with expertise in process engineering and design; process chemistry; instrumentation and computer controls; electrical hazards and classifications; safety and health disciplines; maintenance; emergency preparedness; warehousing or shipping; and process safety auditing. The team may use part-time members to provide the expertise required and to compare what is actually done or followed with the written PSM program.

Conducting the Audit

An effective audit includes a review of the relevant documentation and process safety information, inspection of the physical facilities, and interviews with all levels of plant personnel. Utilizing the audit procedure and checklist developed in the preplanning stage, the audit team can systematically analyze compliance with the provisions of the standard and any other corporate policies that are relevant. For example, the audit team will review all aspects of the training program as part of the overall audit. The team will review the written training program for adequacy of content, frequency of training, effectiveness of training in terms of its goals and objectives as well as to how it fits into meeting the standard's requirements. Through interviews, the team can determine employees' knowledge and awareness of the safety procedures, duties, rules, and emergency response assignments. During the inspection, the team can observe actual practices such as safety and health policies, procedures, and work authorization practices. This approach enables the team to identify deficiencies and determine where corrective actions or improvements are necessary.

Evaluation and Corrective Action

The audit team, through its systematic analysis, should document areas that require corrective action as well as where the process safety management system is effective. This provides a record of the audit procedures and findings and serves as a baseline of operation data for future audits. It will assist in determining changes or trends in future audits.

Corrective action is one of the most important parts of the audit and includes identifying deficiencies, and planning, following-up, and documenting the corrections. The corrective action process normally begins with a management review of the audit findings. The purpose of this review is to determine what actions are appropriate, and to establish priorities, timetables, resource allocations and requirements, and responsibilities. In some cases, corrective action may involve a simple change in procedures or a minor maintenance effort to remedy the problem. Management of change procedures need to be used, as appropriate, even for a seemingly minor change. Many of the deficiencies can be acted on promptly, while some may require engineering studies or more detailed review of actual

procedures and practices. There may be instances where no action is necessary; this is a valid response to an audit finding. All actions taken, including an explanation when no action is taken on a finding, need to be documented.

The employer must assure that each deficiency identified is addressed, the corrective action to be taken is noted, and the responsible audit person or team is properly documented. To control the corrective action process, the employer should consider the use of a tracking system. This tracking system might include periodic status reports shared with affected levels of management, specific reports such as completion of an engineering study, and a final implementation report to provide closure for audit findings that have been through management of change, if appropriate, and then shared with affected employees and management. This type of tracking system provides the employer with the status of the corrective action. It also provides the documentation required to verify that appropriate corrective actions were taken on deficiencies identified in the audit.

Pandemic Preparedness

Amsys Energy, LLC.

With 2020, the world is currently fighting the COVID-19 Pandemic. This program will be applicable to any Pandemic. A pandemic disease plan or disease containment plan is developed for the company and coordinator appointed for the implementation of the plan. This may include contacting local health department and health care providers in advance and developing and implementing protocols for response to ill individuals. The plan and emergency communication strategies should be periodically tested to ensure it is effective and workable. Following a pandemic event, the person responsible for implementation of the plan should identify learning opportunities and take action to implement any corrective actions.

Amsys Energy, LLC., will confirm with all employees have no COVID-19 symptoms prior to being allowed on any job site. Temperature checks are a requirement for all employees upon arrival to the yard. If an employee has a temperature at the time of temperature check, employee will be dismissed and needed to seek medical attention. COVID-19 PPE will be available but not limited to all employees. This will include hand washing facilities, hand sanitizers, tissues, no touch trash cans, hand soap and disposable towels. These will be provided by the employer. Hand washing and use of hand sanitizers should be encouraged by company supervision. Face masks and or face coverings are required to be worn when social distancing (6 (six) feet apart) is not in affect. Social distancing including increasing the space between employee work areas and decreasing the possibility of contact by limiting large or close contact gatherings are considered. All areas will be cleaned that are likely to have frequent hand contact (like doorknobs, faucets, handrails) periodically and when visibly soiled. Work surfaces will also be cleaned frequently using recommended cleaning products.

Employees should be trained on health issues of the pertinent disease to include prevention of illness, initial disease symptoms, preventing the spread of the disease, and when it is appropriate to return to work after illness. Disease containment plans and

expectations should be shared with employees. Communicating information with non-English speaking employees or those with disabilities is considered.

Employees should be encouraged to stay at home when ill, when having to care for ill family members, or when caring for children when schools close, without fear of reprisal. If an employee tests “positive”, a mandatory 14 (fourteen) day quarantine is required. Employee may return to work with a release letter from a physician. Business continuity plans should be prepared so that if significant absenteeism or changes in business practices are required business operations can be effectively maintained. Tele-commuting or other work-at-home strategies should be developed. Amsys Energy, LLC., employees should be encouraged to obtain appropriate immunizations to help avoid disease. Granting time off work to obtain the vaccine should be considered when vaccines become available in the community.

In the event of an “outbreak” or if an employee tests “positive” for COVID-19, employer will inform employees who have worked closely with the “positive” employee. Employees will then monitor themselves for possible exposure symptoms and take the necessary precautions. Key contacts, a chain of communications and contact numbers for employees, and processes for tracking business and employee’s status should be developed. A procedure must be developed to notify key contacts including both customers and suppliers in the event an outbreak has impacted your company's ability to perform services. This procedure must also include notification to customers and suppliers when operations resume.

Employee Handbook Sign Off

I clarify that I have received a copy of Amsys Energy, LLC. Handbook and Safety Manual. I will abide by the policies, procedures and standards. I will perform my job in the safest manner possible in order to prevent injury to myself, my fellow employees, and the general public.

Print Name

Signature

Date