



Don H. Mahaffey Drilling Co.

HAZARD COMMUNICATION

Diesel Fuel
CAS NO. 68476-34-6

DANGER

Hazard Statements
Flammable liquid and vapor. Causes serious eye irritation. Suspected of causing genetic defects. Suspected of causing cancer. May cause respiratory irritation. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways. Harmful to aquatic life.

Precautionary Statements
Prevention: Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment.

CONSULT SDS FOR ADDITIONAL INFORMATION ON HAZARDS

Acetone
CAS NO. 67-64-1

DANGER

Hazard Statements
Highly flammable liquid and vapor. Causes mild skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness.

Precautionary Statements
Keep away from heat/sparks/open flames/hot surfaces - No smoking. Avoid breathing dust/fume/gas/mist/vapors/spray. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

CONSULT SDS FOR ADDITIONAL INFORMATION ON HAZARDS

Acetone

DANGER

Hazard Statements
Highly flammable liquid and vapor. Causes mild skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness.

Precautionary Statements
Keep away from heat/open flames/hot surfaces - No smoking. Avoid breathing dust/fume/gas/mist/vapors/spray. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

CONSULT SDS FOR ADDITIONAL INFORMATION ON HAZARDS



YOUR OSHA COMPLIANCE SOLUTION

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1 OBJECTIVE

In order to ensure chemical safety in the workplace, information about the identities and hazards of the chemicals will be communicated and understandable to employees through this Hazard Communication Program. The requirements of this program are designed and intended to be consistent with the provisions of the United Nations Globally Harmonized System of Labelling of Chemicals (GHS) Revision 3, and the California Code of Regulations, Title 8, Section 5194 and Title 8, Section 3204.

2 PROGRAM ADMINISTRATOR

Don H. Mahaffey Drilling Co. has designated Ashley Mahaffey Tullius for the implementation of the Hazard Communication program. Ashley Mahaffey Tullius, or designee, will be responsible for:

- a. Enforcing regulations to ensure chemical exposure control;
- b. Maintaining records pertaining to the program; and
- c. Maintaining, reviewing and updating the Hazard Communication Program as needed.

3 HAZARD COMMUNICATION, AN EXPLANATION OF

Chemicals pose a wide range of health hazards (such as irritation, sensitization, and carcinogenicity) and physical hazards (such as flammability, corrosion, and reactivity). About 32 million workers work with and are potentially exposed to one or more chemical hazards. There are an estimated 650,000 existing chemical products, and hundreds of new ones being introduced annually. This presents a serious problem for exposed workers.

Chemical exposure may cause or contribute to many serious health effects such as heart ailments, central nervous system, kidney and lung damage, sterility, cancer, burns, and rashes. Some chemicals may also be safety hazards and have the potential to cause fires and explosions and other serious accidents.

Due to the seriousness of these safety and health problems, the Occupational Safety and Health Administration (OSHA) issued the Hazard Communication Standard (HazCom). The basic goal of the standard is to ensure employees know about work hazards and how to protect themselves; this should help to reduce the incidence of chemical source illness and injuries.

4 HAZARD COMMUNICATION OVERVIEW

The Hazard Communication Standard establishes uniform requirements to make sure that the hazards of all chemicals imported into, produced or used in U.S. workplaces are evaluated, and that hazard information is transmitted to exposed employees.

4.1 Multi-Employer Workplaces

In multi-employer workplaces, Don H. Mahaffey Drilling Co. will inform any employers sharing the same work area of the hazardous chemicals to which their

employees may be exposed while performing their work, and any suggestions for appropriate protective measures, using methods which will include any of the following:

- a. The methods used to provide the other employer(s) with access to the safety data sheet, or to make it available at a central location in the workplace, for each hazardous chemical the other employer(s)' employees may be exposed to while working;
- b. The methods used to inform the other employer(s) of any precautionary measures that need to be taken to protect employees during the workplace's normal operating conditions and in foreseeable emergencies; and,
- c. The methods used to inform the other employer(s) of the labeling system used in the workplace.

4.2 Availability

This written hazard communication program will be made available, upon request, to employees, their designated representatives, the Chief, and NIOSH in accordance with the requirements of California Code of Regulations, Title 8, Section 3204(e).

5 HAZARDOUS MATERIALS/CHEMICALS INVENTORY LIST (APPENDIX 2)

- 5.1 A list will be kept of the hazardous chemicals known to be present using a product identifier that is referenced on the appropriate safety data. The list will include the name of the hazardous substance and the operation and/or work area the chemicals are used in.
- 5.2 If there are hazardous chemicals used for which no SDS has been received, the supplier, manufacturer or importer will be contacted to obtain the missing SDS. A record of the contact will be maintained.
- 5.3 This list will be maintained with the SDS and this program and will be updated as needed.

Note: Attached is a list of all hazardous materials/chemicals that are produced, processed, stored, used or otherwise present in this facility, please refer to Appendix 2.

6 SAFETY DATA SHEETS

6.1 General

A safety data sheet will be kept for each hazardous chemical which is used by employees.

6.2 Safety Data Sheets Content

The safety data sheets obtained from the chemical manufacturer or importer will be in English (although copies may be maintained in other languages as well), and will include at least the following section numbers and headings, and associated information under each heading, in the order listed:

- a. Section 1, Identification;
- b. Section 2, Hazard(s) identification;
- c. Section 3, Composition/information on ingredients;
- d. Section 4, First-aid measures;
- e. Section 5, Fire-fighting measures;
- f. Section 6, Accidental release measures;
- g. Section 7, Handling and storage;
- h. Section 8, Exposure controls/personal protection;
- i. Section 9, Physical and chemical properties;
- j. Section 10, Stability and reactivity;
- k. Section 11, Toxicological information;
- l. Section 12, Ecological information;
- m. Section 13, Disposal considerations;
- n. Section 14, Transport information;
- o. Section 15, Regulatory information;
- p. Section 16, Other information, including date of preparation or last revision; and
- q. A description in laymen terms, if not otherwise provided, on either a separate sheet or with the body of the information, of the specific health risks posed by the hazardous chemical intended to alert any person reading the information.

6.3 Access to Safety Data Sheets

- 6.3.1 Copies of the required safety data sheets for each hazardous chemical will be maintained in the workplace and will be readily accessible during each work shift to employees when they are in their work area(s).
- 6.3.2 Where employees must travel between workplaces during a work shift, the safety data sheets will be kept at the primary workplace facility. In this situation, employees can immediately obtain the required information in an emergency.
- 6.3.3 Safety data sheets may be kept in any form, including operating procedures, and may be designed to cover groups of hazardous chemicals in a work area where it may be more appropriate to address the hazards of a process rather than individual hazardous chemicals. However, in all cases the required information will be provided for each hazardous chemical, and will be readily accessible during each work shift to employees when they are in their work area(s).
- 6.3.4 Safety data sheets will also be made readily available, upon request, to designated representatives, and to the Chief, in accordance with the requirements of California Code of Regulations, Title 8, Section 3204(e). NIOSH and the employee's physician will also be given access to safety data sheets in the same manner.

6.4 Missing Information

If a safety data sheet, or any item of information required by Section 6.2, is not provided by the manufacturer or importer, Don H. Mahaffey Drilling Co. will:

- a. Within 7 working days of noting this missing information, either from a request or in attempting to comply with section 6.1, make written inquiry to the manufacturer or importer of a hazardous chemical responsible for the safety data sheet, asking that the complete safety data sheet be sent.
- b. Notify the requester in writing of the date that the inquiry was made, to whom it was made, and the response, if any, received. Providing the requestor with a copy of the inquiry sent to the manufacturer, producer or seller and a copy of the response will satisfy this requirement.
- c. Notify the requestor of the availability of the safety data sheet within 15 days of the receipt of the safety data sheet from the manufacturer, producer or seller or provide a copy of the safety data sheet to the requestor within 15 days of the receipt of the safety data sheet from the manufacturer, producer or seller.
- d. Send the Director a copy of the written inquiry if a response has not been received within 25 working days.

6.5 Employee Exposure Records










Safety data sheets will be retained as necessary to comply with the provisions of this program. Where safety data sheets are destroyed, a record of the identity (chemical name if known) of the substance or agent, where it was used, and when it was used will be retained for at least 30 years.

7 LABELS AND OTHER FORMS OF WARNING

7.1 Labels on Containers

- 7.1.1 All containers of hazardous chemicals will be labeled, tagged, or marked with the following information:
 - a. Product identifier;
 - b. Signal word;
 - c. Hazard statement(s);
 - d. Pictogram(s);
 - e. Precautionary statement(s); and
 - f. Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party.
- 7.1.2 All pictograms on labels to alert users of the chemical hazards will consist of a symbol on a white background framed within a red border and represent a distinct hazard(s). Refer to Table 1 HCS Pictograms and Hazards.

Table 1: HCS Pictograms and Hazards

<p>Health Hazard</p>  <ul style="list-style-type: none"> • Carcinogen • Mutagenicity • Reproductive Toxicity • Respiratory Sensitizer • Target Organ Toxicity • Aspiration Toxicity 	<p>Flame</p>  <ul style="list-style-type: none"> • Flammables • Pyrophorics • Self-Heating • Emits Flammable Gas • Self-Reactives • Organic Peroxides 	<p>Exclamation Mark</p>  <ul style="list-style-type: none"> • Irritant (skin and eye) • Skin Sensitizer • Acute Toxicity (harmful) • Narcotic Effects • Respiratory Tract Irritant
<p>Gas Cylinder</p>  <ul style="list-style-type: none"> • Gases Under Pressure 	<p>Corrosion</p>  <ul style="list-style-type: none"> • Skin Corrosion/Burns • Eye Damage • Corrosive to Metals 	<p>Exploding Bomb</p>  <ul style="list-style-type: none"> • Explosives • Self-Reactives • Organic Peroxides
<p>Flame Over Circle</p>  <ul style="list-style-type: none"> • Oxidizers 	<p>Environment</p>  <ul style="list-style-type: none"> • Aquatic Toxicity 	<p>Skull and Crossbones</p>  <ul style="list-style-type: none"> • Acute Toxicity (fatal or toxic)

7.2 Workplace Labeling

- 7.2.1 Except as provided in sections 7.2.2 and 7.2.3, each container of hazardous chemicals in the workplace will be labeled, tagged or marked with either:
- The information specified under sections 7.1.1(a) through 7.1.1(e) of this section for labels on shipped containers; or
 - Product identifier and words, pictures, symbols, or combination thereof, which provide at least general information regarding the hazards of the chemicals, and which, in conjunction with the other information immediately available to employees under the hazard communication program, will provide employees with the specific information regarding the physical and health hazards of the hazardous chemical.

- 7.2.2 The use of signs, placards, process sheets, batch tickets, operating procedures, or other such written materials may be used in lieu of affixing labels to individual stationary process containers, as long as the alternative method identifies the containers to which it is applicable and conveys the information required by section 7.2.1 to be on a label.
- The written materials will be readily accessible to the employees in the work area throughout each work shift.
- 7.2.3 It will not be required to label portable containers into which hazardous chemicals are transferred from labeled containers, and which are intended only for the immediate use of the employee who performs the transfer.
- 7.2.4 Employees will not remove or deface existing labels on incoming containers of hazardous chemicals, unless the container is immediately marked with the required information.
- 7.2.5 Workplace labels or other forms of warning will be legible, in English, and prominently displayed on the container, or readily available in the work area throughout each work shift.
- Employees who speak other language(s): the other language(s) may be added to the information in their language on the material presented as long as the information is presented in English as well.
- 7.2.6 When new significant information regarding the hazards of a chemical arise, the labels for the chemical will be revised within 6 months of becoming aware of the new information.

8 ADDITIONAL REGULATIONS

8.1 Proposition 65 Warning

Before knowingly and intentionally exposing any employee to any hazardous substance that does not otherwise fall within the hazard communication scope, but which requires a warning under the Safe Drinking Water and Toxic Enforcement Act of 1986, either a warning will be provided to employees in compliance with California Code of Regulations, Title 22, Section 12601 (c) or the requirements set forth under California Code of Regulations, Title 8, Section 5194 will be complied with.

8.2 Non-Routine Tasks

When employees are required to perform hazardous non-routine tasks, affected employees will be given training by their supervisor on hazards to which they may be exposed during such an activity prior to starting work on such projects. This information will cover:

- a. Specific hazards;
- b. Measures the company has taken to reduce the risk of these hazards, such as providing ventilation, ensuring the presence of another employee, providing a respiratory protection program and establishing emergency procedures; and
- c. Required protective/safety measures.

9 TRAINING

9.1 General

- 9.1.1 Employees will be provided with effective information and training on hazardous chemicals in their work area:
 - a. At the time of their initial assignment; and
 - b. Whenever a new chemical hazard the employees have not previously been trained about is introduced into their work area.
- 9.1.2 Information and training may relate to general classes of hazardous chemicals to the extent appropriate and related to reasonably foreseeable exposures of the job.
- 9.1.3 Chemical-specific information will always be available through labels and safety data sheets.

9.2 Information and Training Content

Information and training will consist of at least the following topics:

- a. Employees will be informed of the requirements of the standard;
- b. Employees will be informed of any operations in their work area where hazardous chemicals are present;
- c. Employees will be informed of the location and availability of the written hazard communication program, including the list(s) of hazardous chemicals and safety data sheets required;
- d. Employees will be trained in the methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area (such as monitoring conducted by the employer, continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc.);
- e. Employees will be trained in the physical, health, simple asphyxiation, combustible dust and pyrophoric gas hazards, as well as hazards not otherwise classified, of the chemicals in the work area and the measures they can take to protect themselves from these hazards, including specific procedures that have been implemented to protect employees from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures and personal protective equipment to be used;
- f. Employees will be trained in the details of this hazard communication program, including an explanation of the labels received on shipped containers and the workplace labeling system used and the safety data sheet, and how employees can obtain and use the appropriate hazard information; and
- g. Employees will be informed of their right:
 - 1. To personally receive information regarding hazardous chemicals to which they may be exposed;
 - 2. For their physician or collective bargaining agent to receive information regarding hazardous chemicals to which the employee may be exposed;
 - 3. Against discharge or other discrimination due to the employee's exercise of the rights afforded pursuant to the provisions of the Hazardous Substances Information and Training Act.

9.3 New Information

Whenever a new or revised safety data sheet is received, such information will be provided to employees on a timely basis, not to exceed 30 days after receipt, if the new information indicates significantly increased risks to, or measures necessary to protect, employee health as compared to those stated on a safety data sheet previously provided.

APPENDIX 1 – DEFINITIONS

Article – A manufactured item: (1) Which is formed to a specific shape or design during manufacture; (2) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (3) which does not release, or otherwise result in exposure to, a hazardous chemical under normal conditions of use or in a reasonably foreseeable emergency resulting from workplace operations.

CAS number – The unique identification number assigned by the Chemical Abstracts Service to specific chemical substances.

Chemical – Any substance, or mixture of substances.

Chemical name – The scientific designation of a chemical in accordance with the nomenclature system developed by the International Union of Pure and Applied Chemistry (IUPAC) or the Chemical Abstracts Service (CAS) rules of nomenclature, or a name which will clearly identify the chemical for the purpose of conducting a hazard classification.

Chief – The Chief of the Division of Occupational Safety and Health, P.O. Box 420603, San Francisco, CA 94142, or designee.

Classification – Identification of relevant data regarding the hazards of a chemical; review of those data to ascertain the hazards associated with the chemical; and decision regarding whether the chemical will be classified as hazardous according to the definition of hazardous chemical in this section. In addition, classification for health and physical hazards includes the determination of the degree of hazard, where appropriate, by comparing the data with the criteria for health and physical hazards.

Combustible liquid – Any liquid having a flashpoint greater than 199.4°F (93°C) (formerly designated Class IIIB Combustible liquids).

Common name – Any designation or identification such as code name, code number, trade name, brand name or generic name used to identify a chemical other than by its chemical name.

Container – Any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, tank truck, or the like that contains a hazardous chemical. For purposes of this section, pipes or piping systems are not considered to be containers.

Department – The Department of Industrial Relations, P.O. Box 420603, San Francisco, CA 94142, or designee.

Designated representative – Any individual or organization to whom an employee gives written authorization to exercise such employee's rights under this section. A recognized or certified collective bargaining agent will be treated automatically as a designated representative without regard to written employee authorization.

Director – The Director of Industrial Relations, P.O. Box 420603, San Francisco, CA 94142, or designee.

Distributor – A business, other than a manufacturer or importer, which supplies hazardous chemicals to other distributors or to employers.

Division – The Division of Occupational Safety and Health (Cal/OSHA), California Department of Industrial Relations, or designee.

Emergency – Any potential occurrence such as, but not limited to, equipment failure, rupture of containers, or failure of control equipment, which may or does result in a release of a hazardous chemical into the workplace.

Employee – Every person who is required or directed by any employer, to engage in any employment, or to go to work or be at any time in any place of employment.

Employer – Employer means:

- A. The State and every State agency.
- B. Each county, city, district, and all public and quasi-public corporations and public agencies therein.
- C. Every person including any public service corporation, which has any natural person in service.
- D. The legal representative of any deceased employer.

Exposure or Exposed – Any situation arising from work operation where an employee may ingest, inhale, absorb through the skin or eyes, or otherwise come into contact with a hazardous chemical.

Hazard category – The division of criteria within each hazard class, e.g., oral acute toxicity and flammable liquids include four hazard categories. These categories compare hazard severity within a hazard class and should not be taken as a comparison of hazard categories more generally.

Hazard class – The nature of the physical or health hazards, e.g., flammable solid, carcinogen, oral acute toxicity.

Hazard not otherwise classified (HNOC) – An adverse physical or health effect identified through evaluation of scientific evidence during the classification process that does not meet the specified criteria for the physical and health hazard classes addressed in this section. This does not extend coverage to adverse physical and health effects for which there is a hazard class addressed in this section, but the effect either falls below the cut-off value/concentration limit of the hazard class or is under a GHS hazard category that has not been adopted by OSHA (e.g., acute toxicity Category 5).

Hazard statement – A statement assigned to a hazard class and category that describes the nature of the hazard(s) of a chemical, including, where appropriate, the degree of hazard.

Hazardous chemical – Any chemical which is classified as a physical hazard or a health hazard, a simple asphyxiant, combustible dust, pyrophoric gas, a hazard not otherwise classified, or is included in the List of Hazardous Substances prepared by the Director pursuant to Labor Code section 6382.

Health hazard – A chemical which is classified as posing one of the following hazardous effects: acute toxicity (any route of exposure); skin corrosion or irritation; serious eye damage or eye irritation; respiratory or skin sensitization; germ cell mutagenicity; carcinogenicity; reproductive toxicity; specific target organ toxicity (single or repeated exposure); or aspiration hazard. The criteria for determining whether a chemical is classified as a health hazard are detailed in subsection (d) and Appendix A to this section - Health Hazard Criteria.

Immediate use – The hazardous chemical will be under the control of and used only by the person who transfers it from a labeled container and only within the work shift in which it is transferred.

Importer – The first business with employees within the Customs Territory of the United States which receives hazardous chemicals produced in other countries for the purpose of supplying them to distributors or purchasers within the United States.

Label – An appropriate group of written, printed or graphic information elements concerning a hazardous chemical that is affixed to, printed on, or attached to the immediate container of a hazardous chemical, or to the outside packaging.

Label elements – The specified pictogram, hazard statement, signal word and precautionary statement for each hazard class and category.

Manufacturer – A person who produces, synthesizes, extracts, or otherwise makes a hazardous chemical.

Mixture – A combination or a solution composed of two or more substances in which they do not react.

NIOSH – The National Institute for Occupational Safety and Health, U.S. Department of Health and Human Services.

Physical hazard – A chemical that is classified as posing one of the following hazardous effects: explosive; flammable (gases, aerosols, liquids, or solids); oxidizer (liquid, solid or gas); self-reactive; pyrophoric (liquid or solid); self-heating; organic peroxide; corrosive to metal; gas under pressure; combustible liquid; water-reactive; or in contact with water emits flammable gas. See Appendix B to section 5194 - Physical Hazard Criteria.

Pictogram – A composition that may include a symbol plus other graphic elements, such as a border, background pattern, or color, that is intended to convey specific information about the hazards of a chemical. Eight pictograms are designated under this standard for application to a hazard category.

Precautionary statement – A phrase that describes recommended measures that should be taken to minimize or prevent adverse effects resulting from exposure to a hazardous chemical, or improper storage or handling.

Produce – To manufacture, process, formulate, repackage, or relabel.

Product identifier – The name or number used for a hazardous chemical on a label or in the SDS. It provides a unique means by which the user can identify the chemical. The product identifier used will permit cross-references to be made among the list of hazardous chemicals required in the written hazard communication program, the label and the SDS.

Pyrophoric gas – A chemical in a gaseous state that will ignite spontaneously in air at a temperature of 130 degrees F (54.4 degrees C) or below.

Responsible party – Someone who can provide additional information on the hazardous chemical and appropriate emergency procedures, if necessary.

Safety data sheet (SDS) – Written or printed material concerning a hazardous chemical that is prepared in accordance with section 5194(g).

Signal word – A word used to indicate the relative level of severity of hazard and alert the reader to a potential hazard on the label. The signal words used in this section are “danger” and “warning.” “Danger” is used for the more severe hazards, while “warning” is used for the less severe.

Simple asphyxiant – A substance or mixture that displaces oxygen in the ambient atmosphere, and can thus cause oxygen deprivation in those who are exposed, leading to unconsciousness and death.

Specific chemical identity – The chemical name, Chemical Abstracts Service (CAS) Registry Number, or any other information that reveals the precise chemical designation of the substance.

Substance – Chemical elements and their compounds in the natural state or obtained by any production process, including any additive necessary to preserve the stability of the product and any impurities deriving from the process used, but excluding any solvent which may be separated without affecting the stability of the substance or changing its composition.

Trade secret – Any confidential formula, pattern, process, device, information, or compilation of information which gives its user an opportunity to obtain a business advantage over competitors who do not know or use it. A trade secret will not include chemical identity information which is readily discoverable through qualitative analysis. Appendix E to section 5194-Definition of Trade Secret sets out the criteria to be used in evaluating trade secrets.

Use – To package, handle, react, or transfer.

Work area – A room or defined space in a workplace where hazardous chemicals are produced or used, and where employees are present.

Workplace – Any place, and the premises appurtenant thereto, where employment is carried on, except a place the health and safety jurisdiction over which is vested by law in, and actively exercised by, any state or federal agency other than the Division.

APPENDIX 2 – HAZARDOUS CHEMICALS INVENTORY LIST

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