

| | |
|--|-------------------------------------|
| JAGUAR ENERGY SERVICES, LLC 310 N Parkerson Ave Crowley, LA 70526 | Benzene |
| Original Date of Implementation: October 2013 New Effective Date: | Plan Revision Date: Page 1 of 25 |
| Reviewed By: Jared Monk | Date: 01/10/2022 |

Section 54.0 BENZENE

A. Purpose

The purpose of this procedure is to provide guidance to **JAGUAR ENERGY SERVICES, LLC** personnel on the potential hazards associated with benzene and to identify occupational settings where this material can be encountered.

1. The implementation of this procedure will enable **JAGUAR ENERGY SERVICES, LLC** to comply with the Occupational Safety and Health Administrator (OSHA) Standard 29 CFR 1910.1028.
 - (a) This procedure establishes **JAGUAR ENERGY SERVICES, LLC** expectations for employees who work at locations where this material is present, thereby eliminating any potential threat to our employee's health.
 - (b) It will inform employees and contractors of proper procedures and practices when working with or near materials containing benzene.

B. Scope

This procedure applies to all **JAGUAR ENERGY SERVICES, LLC** while on or near **JAGUAR ENERGY SERVICES, LLC** or client premises where benzene has the potential to be present and thus cause employee exposure.

C. Responsibilities

1. The Safety Coordinator or his/her designee responsible for ensuring that employees have completed the training required by this procedure.
 - (a) Additional responsibilities include:
 - (i) The implementation of this Policy.
 - (ii) Documentation of completion by each employee.
 - (iii) Take corrective actions on all violations or suspected violations of this procedure.
 - (iv) Ensuring that this procedure is followed in work done at a client's or **JAGUAR ENERGY SERVICES, LLC** location.

| | |
|--|---|
| JAGUAR ENERGY SERVICES, LLC 310 N Parkerson Ave Crowley, LA 70526 | Benzene |
| Original Date of Implementation: October 2013 New Effective Date: | Plan Revision Date: Page 2 of 25 |
| Reviewed By: Jared Monk | Date: 01/10/2022 |

- (v) Ensuring that proper records are maintained on all work performed where benzene is present.

2. The Safety Director is responsible for aiding in the implementation of this Procedure.

- (a) Additional responsibilities include:
 - (i) Keeping the Safety Coordinator informed of any incidents related to this Procedure.
 - (ii) Providing appropriate safety equipment to **JAGUAR ENERGY SERVICES, LLC** personnel.
 - (iii) Investigating all employee concerns regarding benzene on **JAGUAR ENERGY SERVICES, LLC** or client's premises.
 - (iv) Reviewing current technical information available on benzene.
 - (v) Maintaining medical surveillance records on personnel working with benzene.
 - (i) The Assistant Secretary of Labor, affected employees and designated employees' representatives shall have access to this program.
 - (vi) Investigating all employee concerns regarding benzene on **JAGUAR ENERGY SERVICES, LLC** or client premises.
 - (vii) Informing the Safety Coordinator of any suspected or newly identified sources of benzene at **JAGUAR ENERGY SERVICES, LLC** or client's premises.

3. The Supervisor is responsible for providing assistance in the implementation of this policy.

- (a) Additional responsibilities include:
 - (i) Informing the Safety Director of any incidents involving benzene.
 - (ii) Informing the Safety Director of any suspected or newly identified sources of benzene at **JAGUAR ENERGY SERVICES, LLC** or client's premises.
 - (iii) Ensuring that all employees are informed of any suspected or newly identified sources of benzene on **JAGUAR ENERGY SERVICES, LLC** or client's premises.

| | |
|--|-------------------------------------|
| JAGUAR ENERGY SERVICES, LLC 310 N Parkerson Ave Crowley, LA 70526 | Benzene |
| Original Date of Implementation: October 2013 New Effective Date: | Plan Revision Date: Page 3 of 25 |
| Reviewed By: Jared Monk | Date: 01/10/2022 |

- (iv) Making suggestions to management for ways to improve this Policy.
- (v) Adhering to the rules and guidelines in this procedure.

4. **JAGUAR ENERGY SERVICES, LLC** personnel are responsible for recognizing and anticipating all job hazards that could involve the exposure to benzene to **JAGUAR ENERGY SERVICES, LLC** personnel, client personnel, the general public or impact the environment.

- (a) Additional responsibilities include
 - (i) Completing the training required by this procedure.
 - (ii) Adhering to the rules and guidelines in this procedure.
 - (iii) Reporting to their supervisor any suspected or newly identified sources of benzene on **JAGUAR ENERGY SERVICES, LLC** or client's premises.

D. Introduction

Benzene is an aromatic hydrocarbon that occurs naturally in petroleum crude oils and natural gas condensates.

1. Health Effects of Benzene
The acute health effects of benzene are:
 - (a) Headache
 - (b) Dizziness
 - (c) Drowsiness
 - (d) Respiratory irritation
2. The chronic health effect is Cancer of the blood forming organs (leukemia).
3. **Operations Where Benzene Can be Encountered**
JAGUAR ENERGY SERVICES, LLC personnel may be required to work at customer sites where benzene is present.
4. Benzene concentrations are usually greater in lighter crude oils and condensates.

| | |
|--|---|
| JAGUAR ENERGY SERVICES, LLC 310 N Parkerson Ave Crowley, LA 70526 | Benzene |
| Original Date of Implementation: October 2013 New Effective Date: | Plan Revision Date: Page 4 of 25 |
| Reviewed By: Jared Monk | Date: 01/10/2022 |

- (a) Benzene is also present in small percentages in gasoline and in many processing and cleaning fluids, where it is used as an additive.
- (b) Benzene, which has a boiling point of 176 F, will concentrate in naphtha and lighter streams.
- (c) It is also produced in various steps of hydrocarbon processing.

5. Intermediate streams and products that may contain 0.1 percent or more of benzene and will be considered as a possible source of benzene exposure are the following:

- (a) Crude Oil (Sweet and Sour)
- (b) Casing-head Gasoline
- (c) CTU Overhead Debutanizer Gas
- (d) Stabilizer Overhead Liquid
- (e) Naphtha
- (f) Reformer Feed
- (g) FCC Gasoline
- (h) Catalytic Reformed Naphtha
- (i) Coker Gasoline
- (j) Leaded Regular Gasoline
- (k) Unleaded Gasoline
- (l) Super Unleaded Gasoline
- (m) JP-4, Jet fuel
- (n) Slop Oil Waste Stream
- (o) Tail Gas Streams
- (p) Gasoline

E. Procedure

- 1. Under normal operating conditions, benzene should not be present in hazardous airborne concentrations in customer facilities.
- 2. If a customer site has areas that can have hazardous airborne benzene concentrations, they should be identified by signs with the following warning:

DANGER
BENZENE
CANCER HAZARD
FLAMMABLE - NO SMOKING
AUTHORIZED PERSONNEL ONLY
RESPIRATOR REQUIRED

- 1. **JAGUAR ENERGY SERVICES, LLC** personnel are prohibited from entering work sites posted as benzene regulated areas.

| | |
|--|---|
| JAGUAR ENERGY SERVICES, LLC 310 N Parkerson Ave Crowley, LA 70526 | Benzene |
| Original Date of Implementation: October 2013 New Effective Date: | Plan Revision Date: Page 5 of 25 |
| Reviewed By: Jared Monk | Date: 01/10/2022 |

2. **Detecting Benzene in the Workplace**
JAGUAR ENERGY SERVICES, LLC personnel may be required to work at a customer facility where there is a potential for benzene to be spilled or become airborne.
 - (a) A benzene spill or leak can be detected by:
 - (i) **Odor** - Benzene has an aromatic, slightly sweet odor.
 - (ii) **Physical Symptoms** - Benzene causes headaches, dizziness, drowsiness, and respiratory irritation.
 - (iii) **Gas Monitor** - For example, a personal gas monitor, worn by workers, that alarms if benzene is detected in dangerous concentrations.
 - (b) If an employee suspects that a benzene spill or leak has occurred, they must vacate the area immediately and notify the appropriate personnel at the customer facility.

3. In the event that **JAGUAR ENERGY SERVICES, LLC** personnel were exposed or required to perform any work in an area containing airborne concentration of benzene in excess of one part of benzene per million parts of air (1 ppm) as an 8-hour time-weighted average (TWA), or a short term exposure limit (STEL) in excess of 5 ppm as averaged over any 15 minute period, a site specific written Benzene Program will be established and implemented.

4. The program will address PEL and standard for reducing employee exposure.
 - (a) The program will use engineering and work practices controls as the primary means of reducing employee exposure.
 - (i) Proper PPE will be used to supplement these procedures.

5. This plan will include the schedule for developing and implementing or using engineering and work practice controls.
 - (a) The plan will be reviewed and revised to reflect the most current exposure monitoring data.
 - (b) The Assistant Secretary of Labor, affected employees and designated employees' representatives shall have access to this program.

| | |
|--|---|
| JAGUAR ENERGY SERVICES, LLC 310 N Parkerson Ave Crowley, LA 70526 | Benzene |
| Original Date of Implementation: October 2013 New Effective Date: | Plan Revision Date: Page 6 of 25 |
| Reviewed By: Jared Monk | Date: 01/10/2022 |

6. Tests to determine the presence of benzene shall be performed on equipment that is to be opened, blinded, etc.
 - (a) When the airborne concentration of benzene exceeds or can reasonably be expected to exceed the permissible exposure limit, a regulated area shall be established.
 - (b) A "Reasonably Expected Situation" would be either a positive test for benzene or the inaccessibility of a sampling point to test.
 - (c) A positive test is one which exceeds the permissible exposure limits (PEL), either the 8-hour time-weighted average (TWA) exposures of 1 ppm or the short term exposure limit (STEL) of 5 ppm for 15 minutes.

7. A regulated area shall remain intact until tests have proven the absence of benzene or controlled levels to be less than 1.0 ppm.

8. In the event of an unexpected spill or release of the materials the Emergency Response Plan shall immediately be implemented.
 - (a) Personnel shall leave the area and not be allowed to return without appropriate personal protective equipment.

9. The regulated area shall be barricaded with white barricade tape with "DANGER BENZENE HAZARD" printed in purple lettering and posted with signs.
 - (a) Access to a regulated area shall be limited to personnel required to perform work in that area.
 - (b) Personnel working in regulated areas shall wear approved respiratory and personal protective equipment.

10. **Personal Monitoring**
 Permissible exposure limit (PEL) or time-weight average (TWA) monitoring will be conducted where there are changes in equipment and/or work procedures according to the diagrammed strategy in Appendix A.
 - (a) Short-term exposure limit (STEL) monitoring will be conducted on certain jobs where the procedures indicate there may be an exposure according to the diagrammed strategy in Appendix B.
 - (b) Employees assigned to work in a regulated area will be monitored according to approved sampling procedures.

11. **Respiratory Protection**

| | |
|--|---|
| JAGUAR ENERGY SERVICES, LLC 310 N Parkerson Ave Crowley, LA 70526 | Benzene |
| Original Date of Implementation: October 2013 New Effective Date: | Plan Revision Date: Page 7 of 25 |
| Reviewed By: Jared Monk | Date: 01/10/2022 |

Respiratory protection must be worn to prevent potential exposures to benzene during the time period necessary to implement engineering controls or work practices, when engineering controls or work practices are not feasible, or in emergencies.

- (a) Respirators selected shall be those approved by MSHA/NIOSH.
- (b) Selection of respirators for preventing benzene exposure is based on the following criteria:
 - (i) For airborne concentrations of 10 ppm or less, as a minimum, a half-face, negative-pressure, air-purifying respirator with organic vapor cartridges must be used.
 - (ii) For airborne concentrations of 50 ppm or less, as a minimum, a full-face piece, negative-pressure, air-purifying respirator with organic vapor cartridges must be used.
 - (iii) For airborne concentrations of 100 ppm or less, a minimum, a full-face piece, powered air-purifying respirator with organic vapor cartridge must be used.
 - (iv) For any unknown or concentrations determined to be immediately dangerous to life and health (IDLH), a self-contained breathing apparatus (SCBA) with full-face piece in positive pressure demand mode, or a full-face piece, supplied-air respirator in positive pressure demand mode with auxiliary self-contained air supply must be used.
 - (v) For an emergency escape of any concentration, any organic vapor or supplied-air respirator may be used.
 - (vi) For fire fighting, a full-face piece, self-contained breathing apparatus (SCBA) in positive pressure demand mode must be used.

- 12. A written respiratory protection program shall be established in accordance with 29 CFR 1910.134 (b)(d)(e) & (f).
 - (a) Respirator organic vapor cartridges used for benzene protection must be dated at the time of use and must not be used after the day shown on the cartridge.
- 13. Personal protective equipment and clothing shall be worn where appropriate to prevent eye contact and limit dermal exposure to benzene or benzene vapors.
 - (a) PPE will be provided at no cost to all employees.

| | |
|--|---|
| JAGUAR ENERGY SERVICES, LLC 310 N Parkerson Ave Crowley, LA 70526 | Benzene |
| Original Date of Implementation: October 2013 New Effective Date: | Plan Revision Date: Page 8 of 25 |
| Reviewed By: Jared Monk | Date: 01/10/2022 |

- (b) PPE will meet or exceed the requirements established in 29 CFR 1910.133.

14. Medical Surveillance

If accumulated air monitoring data has indicated that exposures to benzene are well below the 0.5 parts per million Time Weighted Average (TWA) and the 5.0 parts per million Short-Term Exposure Limit (STEL) action levels annual physicals for benzene medical surveillance are not required.

- (a) If work practices change and personnel monitoring data determines exposures in excess of 0.5 ppm TWA or 5.0 ppm STEL affected employees will be placed in a medical surveillance program.
- (b) Employees not wearing personal protective clothing or respirators while being exposed to a benzene-containing stream, due to a leak or spill or cleanup of the spill, will be provided a post emergency examination by the end of their work shift.
- (c) Medical surveillance if employees are or may be exposed to benzene at or above the action level 30 or more days per year, above the PEL 20 or more days-for employees who have been exposed to more than 10m PPM of benzene for 30 or more days in a year prior to effective date.

B. Training Requirements

1. **JAGUAR ENERGY SERVICES, LLC** personnel must be trained in benzene safety.

- (a) At a minimum, the training will include the following topics:
 - (i) Physical Properties of benzene
 - (ii) Health effects of benzene:
 - (i) Acute - Headache, dizziness, drowsiness, respiratory irritation
 - (ii) Chronic - Cancer of the blood forming organs (leukemia)
 - (iii) Materials to avoid at customer facilities including crude oil, condensate, natural gas liquids, and other process plant liquids.

C. Training Frequency

| | |
|---|---|
| JAGUAR ENERGY SERVICES, LLC 310 N Parkerson Ave Crowley, LA 70526 Original Date of Implementation: October 2013 New Effective Date: Reviewed By: Jared Monk | Benzene Plan Revision Date: Page 9 of 25 Date: 01/10/2022 |
|---|---|

1. **JAGUAR ENERGY SERVICES, LLC** personnel will be trained according to the following schedule:
 - (a) Employees will be provided initial benzene training prior to being assigned jobs in the designated areas.
 - (b) Annual training will be provided to employees whose exposure exceeds the action level of 0.5 part per million (ppm).

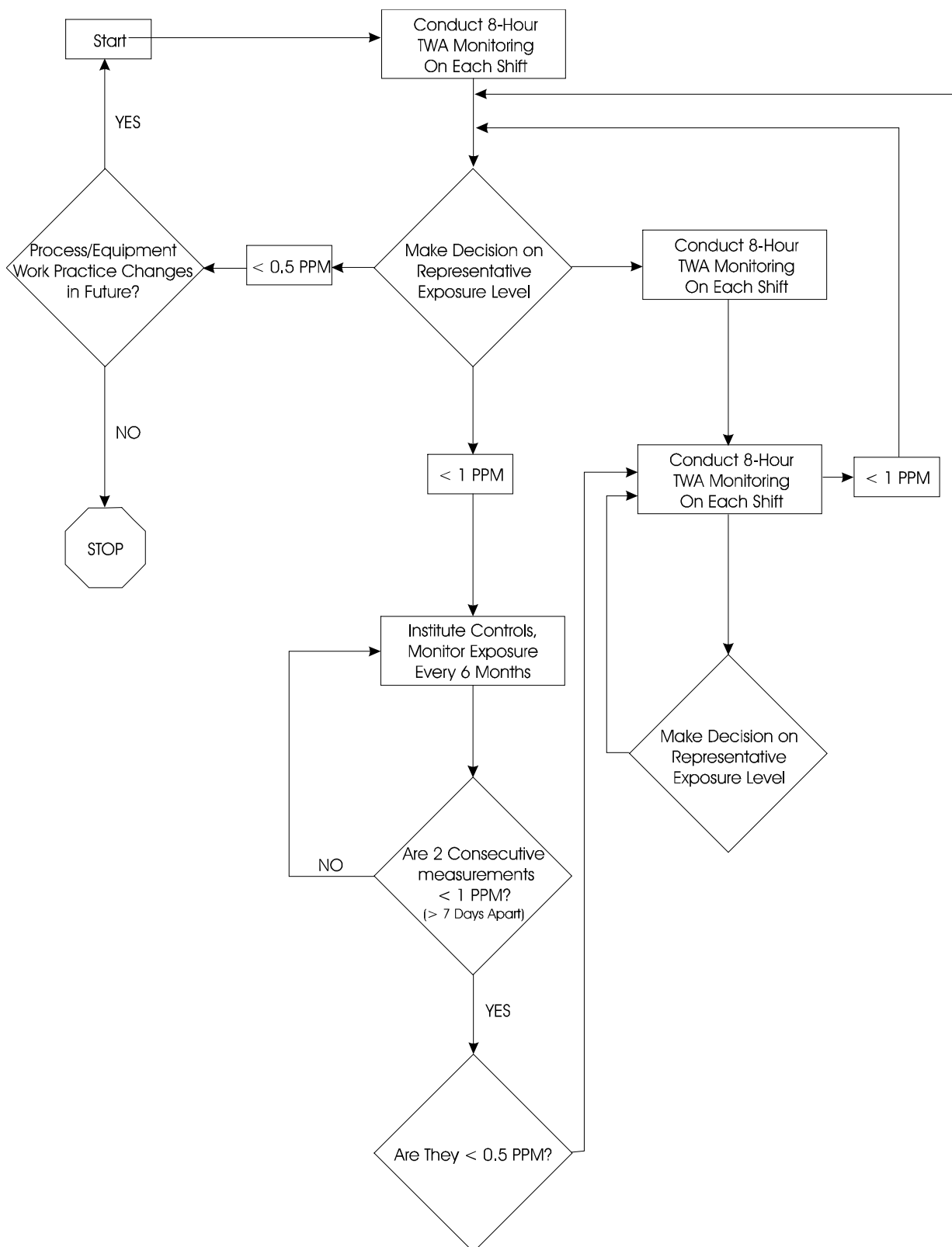
D. Definitions

1. **Benzene** is an aromatic hydrocarbon with the molecular formula C₆H₆. Benzene is a common intermediate in petroleum processing, and is commonly found in distillates, condensates and solvents.

| | |
|--|--|
| JAGUAR ENERGY SERVICES, LLC 310 N Parkerson Ave Crowley, LA 70526 Original Date of Implementation: October 2013 New Effective Date: | Benzene Plan Revision Date: Page 10 of 25 |
| Reviewed By: Jared Monk | Date: 01/10/2022 |

APPENDIX A

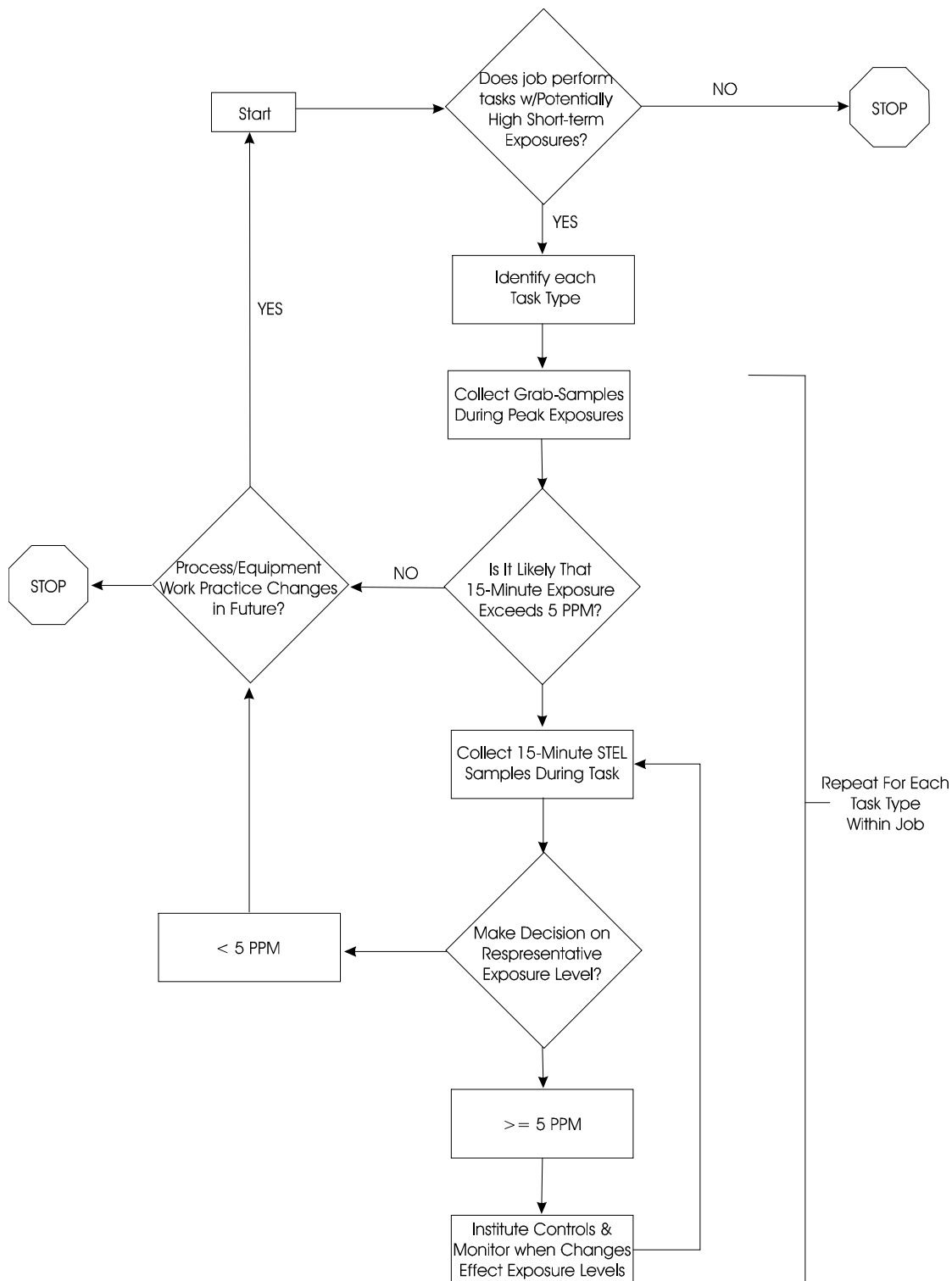
| | |
|--|--|
| JAGUAR ENERGY SERVICES, LLC 310 N Parkerson Ave Crowley, LA 70526 Original Date of Implementation: October 2013 New Effective Date: Reviewed By: Jared Monk | Benzene Plan Revision Date: Page 11 of 25 |
| | Date: 01/10/2022 |



| | |
|--|--|
| JAGUAR ENERGY SERVICES, LLC 310 N Parkerson Ave Crowley, LA 70526 | Benzene |
| Original Date of Implementation: October 2013 New Effective Date: | Plan Revision Date: Page 12 of 25 |
| Reviewed By: Jared Monk | Date: 01/10/2022 |

APPENDIX B

| | |
|--|--|
| JAGUAR ENERGY SERVICES, LLC 310 N Parkerson Ave Crowley, LA 70526 Original Date of Implementation: October 2013 New Effective Date: Reviewed By: Jared Monk | Benzene Plan Revision Date: Page 13 of 25 |
| | Date: 01/10/2022 |



| | |
|--|--|
| JAGUAR ENERGY SERVICES, LLC 310 N Parkerson Ave Crowley, LA 70526 | Benzene |
| Original Date of Implementation: October 2013 New Effective Date: | Plan Revision Date: Page 14 of 25 |
| Reviewed By: Jared Monk | Date: 01/10/2022 |

APPENDIX C

| Airborne Concentration | Respirator Type |
|---|--|
| 10 ppm or less | Half-face negative pressure air-purifying respirator with organic vapor cartridge |
| 50 ppm or less | Full-face piece negative pressure air-purifying respirator with organic vapor cartridge |
| 100 ppm or less | Full-face piece powered air-purifying respirator with organic vapor cartridge |
| Any unknown or concentrations determined to be immediately dangerous to life and health (IDLH). | Self-contained breathing concentration apparatus (SCBA) with full-face piece in positive pressure demand mode, or Full-face piece supplied-air respirator in positive pressure demand mode with auxiliary self-contained air supply |
| Emergency Escape (Any concentration) | Any organic vapor respirator Any supplied-air respirator |
| Fire Fighting | Full-face piece self-contained breathing apparatus (SCBA) in positive pressure demand mode |

| | |
|---|--|
| JAGUAR ENERGY SERVICES, LLC 310 N Parkerson Ave Crowley, LA 70526 Original Date of Implementation: October 2013 New Effective Date: Reviewed By: Jared Monk | Benzene Plan Revision Date: Page 15 of 25 Date: 01/10/2022 |
|---|--|

Section 57.0 CADMIUM

A. Purpose

The purpose of this procedure is to protect **JAGUAR ENERGY SERVICES, LLC** personnel and the general public from exposure to Cadmium and Cadmium Compounds.

1. This procedure is mandated by the Occupational Safety and Health Administration (OSHA) in both 29 CFR 1910.1027 and 29 CFR 1926.63 .

B. Scope

This section applies to all **JAGUAR ENERGY SERVICES, LLC** personnel that has the potential of being exposed to cadmium and cadmium compounds, in all forms.

C. Responsibilities

1. The Safety Coordinator or his/her designee responsible for ensuring that employees have completed the training required by this procedure.
 - (a) Additional responsibilities include:
 - (i) The implementation of this Policy.
 - (ii) Documentation of completion by each employee.
 - (iii) Take corrective actions on all violations or suspected violations of this procedure.
 - (iv) Ensuring that this procedure is followed in work done at a client's or **JAGUAR ENERGY SERVICES, LLC** location.
 - (v) Ensuring that proper records are maintained on all work performed where Cadmium and Cadmium Compounds are present.
 - (vi) For reviewing and revising the procedure as required.

| | |
|--|--|
| JAGUAR ENERGY SERVICES, LLC 310 N Parkerson Ave Crowley, LA 70526 | Benzene |
| Original Date of Implementation: October 2013 New Effective Date: | Plan Revision Date: Page 16 of 25 |
| Reviewed By: Jared Monk | Date: 01/10/2022 |

2. The Safety Director is responsible for aiding in the implementation of this Procedure.
 - (a) Additional responsibilities include:
 - (i) Keeping the Safety Coordinator informed of any incidents related to this Procedure.
 - (ii) Providing appropriate safety equipment to **JAGUAR ENERGY SERVICES, LLC** personnel.
 - (iii) Investigating all employee concerns regarding Cadmium and Cadmium Compounds on **JAGUAR ENERGY SERVICES, LLC** or client's premises.
 - (iv) Reviewing current technical information available on Cadmium and Cadmium Compounds.
 - (v) Maintaining medical surveillance records on personnel working with Cadmium and Cadmium Compounds.
 - (i) The Assistant Secretary of Labor, affected employees and designated employees' representatives shall have access to this program.
 - (vi) Investigating all employee concerns regarding Cadmium and Cadmium Compounds on **JAGUAR ENERGY SERVICES, LLC** or client premises.
 - (vii) Informing the Safety Coordinator of any suspected or newly identified sources of Cadmium and Cadmium Compounds at **JAGUAR ENERGY SERVICES, LLC** or client's premises.

3. The Supervisor is responsible for providing assistance in the implementation of this policy.
 - (a) Additional responsibilities include:
 - (i) Informing the Safety Director of any incidents involving benzene.
 - (ii) Informing the Safety Director of any suspected or newly identified sources of Cadmium and Cadmium Compounds at **JAGUAR ENERGY SERVICES, LLC** or client's premises.
 - (iii) Ensuring that all employees are informed of any suspected or newly identified sources of Cadmium and Cadmium Compounds on

| | |
|--|--------------------------------------|
| JAGUAR ENERGY SERVICES, LLC 310 N Parkerson Ave Crowley, LA 70526 | Benzene |
| Original Date of Implementation: October 2013 New Effective Date: | Plan Revision Date: Page 17 of 25 |
| Reviewed By: Jared Monk | Date: 01/10/2022 |

- (iv) **JAGUAR ENERGY SERVICES, LLC** or client's premises.
- (v) Making suggestions to management for ways to improve this Policy.
- (v) Adhering to the rules and guidelines in this procedure.

4. **JAGUAR ENERGY SERVICES, LLC** personnel are responsible for recognizing and anticipating all job hazards that could involve the exposure Cadmium and Cadmium Compounds to **JAGUAR ENERGY SERVICES, LLC** personnel, client personnel, the general public or impact the environment.

- (a) Additional responsibilities include
 - (i) Completing the training required by this procedure.
 - (ii) Adhering to the rules and guidelines in this procedure.
 - (iii) Reporting to their supervisor any suspected or newly identified sources of Cadmium and Cadmium Compounds on **JAGUAR ENERGY SERVICES, LLC** or client's premises.

D. Procedure

It is **JAGUAR ENERGY SERVICES, LLC's** intent not to work their personnel in areas that they might be exposed to cadmium, but in the event they were exposed the following procedures will be applied.

1. **Permissible Exposure Limit (PEL)**
JAGUAR ENERGY SERVICES, LLC will assure that no employee is exposed to an airborne concentration of cadmium in excess of five (5) micrograms per cubic meter (5ug/m³), calculated as an eight hour time - weighted average exposure (TWA).
 - (a) When ventilation is used to control exposure, measurements that demonstrate the effectiveness of the system in controlling exposure, such as capture velocity, or static pressure, or duct velocity will be made as necessary to maintain its effectiveness.
 - (b) Measurements of the system's effectiveness in controlling exposure will be made as necessary within five (5) working days of any change in production, process, or control that might result in a significant increase in employee exposure to cadmium.

| | |
|--|--|
| JAGUAR ENERGY SERVICES, LLC 310 N Parkerson Ave Crowley, LA 70526 | Benzene |
| Original Date of Implementation: October 2013 New Effective Date: | Plan Revision Date: Page 18 of 25 |
| Reviewed By: Jared Monk | Date: 01/10/2022 |

2. **JAGUAR ENERGY SERVICES, LLC** will develop and implement a written plan for dealing with emergency situations involving substantial releases of airborne cadmium.
 - (a) The plan shall include provisions for appropriate respirator and personal protective equipment (PPE) use.
 - (b) Employees who are not deemed to be essential in correcting the emergency situation shall be restricted from the area and normal operation shall be halted in that area until abatement of the emergency.

3. If an employee is exposed to airborne cadmium above the PEL or where eye or skin irritation is associated with cadmium exposure at any level, **JAGUAR ENERGY SERVICES, LLC** will provide, at no cost to the employee the appropriate protective work clothing and equipment.
 - (a) Protective work clothing and equipment includes but is not limited to:
 - (i) Coveralls or similar full-body work clothing;
 - (ii) Gloves, head coverings, and boots or foot coverings; and
 - (iii) Face shields, vented goggles, or other appropriate equipment complying with 29 CFR 1910.133.

4. **Recirculation of air**
 If air from exhaust ventilation is recirculated into the workplace, the system shall have a high efficiency filter (HEPA) and be monitored to assure effectiveness.
 - (a) Procedures will be developed and implemented to minimize exposure to cadmium when maintenance of ventilation systems and filter change is being conducted.

5. **Permissible Exposure Limit (PEL)**
JAGUAR ENERGY SERVICES, LLC will assure that no employee is exposed to an airborne concentration of cadmium in excess of five (5) micrograms per cubic meter (5ug/m³), calculated as an eight hour time - weighted average exposure (TWA).

6. **Exposure Monitoring**
JAGUAR ENERGY SERVICES, LLC will determine if any employee may be exposed to cadmium at or above the action level if cadmium or cadmium products are known or suspected to be encountered, during work activities.

| | |
|--|--------------------------------------|
| JAGUAR ENERGY SERVICES, LLC 310 N Parkerson Ave Crowley, LA 70526 | Benzene |
| Original Date of Implementation: October 2013 New Effective Date: | Plan Revision Date: Page 19 of 25 |
| Reviewed By: Jared Monk | Date: 01/10/2022 |

- (a) Determinations of employee exposure will be made from breathing zone air samples that affect the monitored employee's regular, daily 8 - hour TWA exposure to cadmium.
- (b) Eight - hour TWA exposures will be determined for each employee on the basis of one or more personal breathing zone air samples reflecting full shift exposure on each shift, for each job classification, in each work area.
- (c) Where several employees perform the same job tasks, in the same job classification, on the same shift, in the same work area, and the length, duration, and level of cadmium exposures are similar, **JAGUAR ENERGY SERVICES, LLC** will sample a representative fraction of the employees instead of all employees.
- (d) In representative sampling, **JAGUAR ENERGY SERVICES, LLC** will sample the employee(s) expected to have the highest cadmium exposures.
- (e) Wherever monitoring results indicate that employee exposure exceeds the PEL, **JAGUAR ENERGY SERVICES, LLC** will include in the written notice a statement that the PEL has been exceeded and a description of the corrective action being taken by the employer to reduce employee exposure to at or below the PEL.

7. **Regulated Areas**

JAGUAR ENERGY SERVICES, LLC will establish a cadmium regulated area wherever an employee's exposure to airborne concentrations of cadmium is, or can reasonably be expected to be, in excess of the permissible exposure limit (PEL).

- (a) Access to regulated areas shall be limited to authorized persons.

8. **Action Level**

At 2.5 micrograms per cubic meter (2.5ug/m³) of air as an 8 - hour time - weighted average (TWA), a written compliance program shall be implemented when the PEL is exceeded.

9. **Provision of Respirators**

Each person entering a regulated area shall be supplied with and required to use a respirator appropriate for use in a cadmium regulated area.

| | |
|--|--|
| JAGUAR ENERGY SERVICES, LLC 310 N Parkerson Ave Crowley, LA 70526 | Benzene |
| Original Date of Implementation: October 2013 New Effective Date: | Plan Revision Date: Page 20 of 25 |
| Reviewed By: Jared Monk | Date: 01/10/2022 |

10. Prohibited Activities

JAGUAR ENERGY SERVICES, LLC will assure that while employees are in regulated areas they do not:

- (a) Eat
- (b) Drink
- (c) Smoke
- (d) Chew tobacco or gum
- (e) Apply cosmetics
- (f) Carry or store any products associated with these activities into regulated areas.

11. Compliance Program

Where the PEL is exceeded, **JAGUAR ENERGY SERVICES, LLC** will establish and implement a written compliance program to reduce employee exposure to or below the PEL by means of engineering and work practice controls.

- (a) To the extent that engineering and work practice controls cannot reduce exposures at or below the PEL, **JAGUAR ENERGY SERVICES, LLC** will include in the written compliance program the use of appropriate respiratory protection in order to achieve compliance with the PEL.
- (b) Written compliance programs shall include at least the following:
 - (i) A description of each operation in which cadmium is emitted
 - (ii) Machinery used
 - (iii) Material processed
 - (iv) Controls in place
 - (v) Crew size
 - (vi) Employee job responsibilities
 - (vii) Operating procedures
 - (viii) Maintenance practices
 - (ix) A description of the specific means that will be employed to achieve compliance.
 - (x) A report of the technology considered in meeting the PEL
 - (xi) Air monitoring data that document the sources of cadmium emissions
 - (xii) A detailed schedule for implementation of the program, including documentation such as:
 - (i) Copies of purchase orders for equipment, etc.
 - (ii) A work practice program.

| | |
|--|--|
| JAGUAR ENERGY SERVICES, LLC 310 N Parkerson Ave Crowley, LA 70526 | Benzene |
| Original Date of Implementation: October 2013 New Effective Date: | Plan Revision Date: Page 21 of 25 |
| Reviewed By: Jared Monk | Date: 01/10/2022 |

- (iii) A written plan for emergency situations.
 - (iv) Any other relevant information.
 - (c) Written compliance programs will be reviewed and updated at least annually, or more often if necessary, to reflect any changes in the employer's compliance status.
 - (d) The written compliance program must be provided for examination and copying upon request of:
 - (i) Affected employees
 - (ii) Their designated representatives
 - (iii) The Assistant Secretary of Labor
 - (iv) Any other pertinent federal, state, or local official.

12. **Respiratory Protection**

Respirators shall be used in the following circumstances to comply with 29 CFR 1910.134:

- (a) Where exposure levels exceed the PEL, during the time period necessary to install or implement feasible engineering and work practice controls.
- (b) In those maintenance and repair activities and during those brief or intermittent operations where exposures exceed the PEL and engineering and work practice controls are not feasible or are not required.
- (c) In regulated areas as previously explained in this section.
- (d) Where **JAGUAR ENERGY SERVICES, LLC** has implemented all feasible engineering and work practice controls and such controls are not sufficient to reduce exposures to or below the PEL.
- (e) In emergencies
 - (i) Wherever the employee(s) who are exposed to cadmium at or above the action level requests a respirator.
- (f) Where respirators are required, **JAGUAR ENERGY SERVICES, LLC** will provide them at no cost to the employee and shall assure that they are used properly.

13. **Respirator Selection**

Where respirators are required, **JAGUAR ENERGY SERVICES, LLC** will select and provide the appropriate respirator.

- (a) **JAGUAR ENERGY SERVICES, LLC** will select respirators from among those jointly approved as acceptable protection against cadmium dust, fumes and mist by the Mine Safety and Health Administration (MSHA) and by the National Institute for Occupational

| | |
|--|--|
| JAGUAR ENERGY SERVICES, LLC 310 N Parkerson Ave Crowley, LA 70526 | Benzene |
| Original Date of Implementation: October 2013 New Effective Date: | Plan Revision Date: Page 22 of 25 |
| Reviewed By: Jared Monk | Date: 01/10/2022 |

Safety and Health (NIOSH) under the provisions of 30 CFR, part 11.

14. **Respirator Program**

Where respiratory protection is required, **JAGUAR ENERGY SERVICES, LLC** will institute a respiratory protection program in accordance with 29 CFR 1910.134.

- (a) Employees shall be permitted to leave the regulated area in order to change filter cartridges, replace the respirator, wash his/her face, or wash the facepiece when necessary.

15. **Respirator Fit Testing**

JAGUAR ENERGY SERVICES, LLC will assure that the respirator issued to the employee is fitted properly and exhibits the least possible facepiece leakage.

- (a) **JAGUAR ENERGY SERVICES, LLC** will utilize either qualitative or quantitative fit testing in order to assure a proper fit.
 - (i) Fit testing shall be accomplished in accordance with 29 CFR 1910.134.

16. **Medical Surveillance**

JAGUAR ENERGY SERVICES, LLC will institute a medical surveillance program for all employees who are or may be exposed to cadmium at or above the action level unless **JAGUAR ENERGY SERVICES, LLC** determines that the employee is not, and will not be, exposed at or above the action level on 30 or more days per year (twelve consecutive months); and,

- (a) **JAGUAR ENERGY SERVICES, LLC** shall also institute a medical surveillance program for all employees who might previously have been exposed to cadmium at or above the action level by **JAGUAR ENERGY SERVICES, LLC**, unless **JAGUAR ENERGY SERVICES, LLC** demonstrates that the employee did not work for them in jobs with exposure to cadmium for an aggregated total of more than 60 months.
- (b) In order to determine an employee's fitness for using a respirator, **JAGUAR ENERGY SERVICES, LLC** will require the employee to take a medical examination.
- (c) The employer shall assure that all medical examinations and procedures required are performed by, or under the supervision of a licensed physician, who has read and is familiar with the health effects of cadmium exposure, the

| | |
|--|--|
| JAGUAR ENERGY SERVICES, LLC 310 N Parkerson Ave Crowley, LA 70526 | Benzene |
| Original Date of Implementation: October 2013 New Effective Date: | Plan Revision Date: Page 23 of 25 |
| Reviewed By: Jared Monk | Date: 01/10/2022 |

regulatory requirements of 29 CFR 1910.1027, the protocol for sample handling and laboratory selection.

(i) These examinations shall be provided at no cost to the employee at a time and place that is convenient to the employee.

17. Warning Signs

Warning signs shall be provided and displayed in regulated areas.

- (a) In addition, warning signs shall be posted at all approaches to regulated areas.
- (b) Warning signs shall bear the following information:

**CAUTION
CADMIUM
CANCER HAZARD
CAN CAUSE LUNG AND KIDNEY DISEASE
AUTHORIZED PERSONNEL ONLY
RESPIRATORS REQUIRED IN THIS AREA**

- (a) The employer shall ensure that all signs are illuminated, cleaned and maintained as necessary so that the legend is readily visible.

- 2. **JAGUAR ENERGY SERVICES, LLC** will develop and implement a site specific maintenance program to minimize employee exposure to cadmium when performing maintenance on venation systems and changing filters.
- 3. **JAGUAR ENERGY SERVICES, LLC** will develop a written plan for dealing with emergency situations involving the substantial releases of cadmium.
 - (a) This program will address the use of respirators and PPE.
- 4. **Recordkeeping**
JAGUAR ENERGY SERVICES, LLC will establish and keep an accurate record of all air monitoring for cadmium in the workplace.
 - (a) **JAGUAR ENERGY SERVICES, LLC** will maintain this record for at least thirty (30) years, in accordance with 29 CFR 1910.20.

B. Training Requirements

| | |
|--|--|
| JAGUAR ENERGY SERVICES, LLC 310 N Parkerson Ave Crowley, LA 70526 | Benzene |
| Original Date of Implementation: October 2013 New Effective Date: | Plan Revision Date: Page 24 of 25 |
| Reviewed By: Jared Monk | Date: 01/10/2022 |

JAGUAR ENERGY SERVICES, LLC will institute a training program for all personnel who are potentially exposed to cadmium, assure employee participation, and maintain a record of program contents.

1. **JAGUAR ENERGY SERVICES, LLC** will make the training program understandable to the employee and shall assure that each employee is informed of the following:
 - (a) The health hazards associated with cadmium exposure.
 - (b) The quantity, location, manner of use, release, and storage of cadmium in the workplace.
 - (c) The specific nature of the operations that could result in the exposure to cadmium, especially exposures above the PEL.
 - (d) The engineering controls and work practices associated with the employee's job assignment.
 - (e) The measures employees can take to protect themselves from exposure to cadmium, including:
 - (i) Modification of such habits as smoking and personal hygiene.
 - (ii) Specific procedures the employer has implemented to protect employees from cadmium such as:
 - (i) Appropriate work practices
 - (ii) Emergency procedures
 - (iii) The provision of personal protective equipment
 - (iv) The purpose, proper selection, fitting, proper use, and limitations of respirators and protective clothing
 - (v) The purpose and a description of the medical surveillance program.
 - (vi) The contents of 29 CFR 1910.1027 (4)(iii) and its appendices.
 - (vii) The employee's rights of access to records under 29 CFR 1910.20(e) and (g).
 - (f) **JAGUAR ENERGY SERVICES, LLC** will certify that the training has been conducted by preparing a record that includes the following:
 - (i) Identity of employee trained.
 - (ii) The signature of the person who conducted the training.
 - (iii) Date of the training.
 - (iv) Training records must be maintained for a period of one (1) year.

| | |
|---|--|
| JAGUAR ENERGY SERVICES, LLC 310 N Parkerson Ave Crowley, LA 70526 Original Date of Implementation: October 2013 New Effective Date: Reviewed By: Jared Monk | Benzene Plan Revision Date: Page 25 of 25 Date: 01/10/2022 |
|---|--|

C. Training Frequency

1. **JAGUAR ENERGY SERVICES, LLC** personnel will be trained according to the following schedule:
 - (a) Prior to or at the time of initial assignment to a job involving potential exposure to cadmium.
 - (b) Annually thereafter.

D. Definitions

1. **PEL** means Permissible Exposure Limit
2. **TWA** means time - weighted average exposure.
3. **MSHA** means the Mine Safety and Health Administration
NIOSH means the National Institute for Occupational Safety and Health.