**U.S. DEPARTMENT OF LABOR** 

**Occupational Safety and Health Administration** 

**DIRECTIVE NUMBER:** CPL 20-04 (04-01) | **EFFECTIVE DATE:** October 1, 2019

SUBJECT: Regional Emphasis Program for the Oil and Gas Industry

**REGIONAL IDENTIFIER:** Region VIII

#### **ABSTRACT**

**Purpose**: This Instruction renews a Regional Emphasis Program (REP) to reduce the

lost workday and fatality rates in the Oil and Gas industry and to eliminate or reduce the exposure to health hazards as they occur during fracturing operations. The employers to be targeted are in within 2007 NAICS codes

213111, 213112, 238910, 237120, 541360 and 211111.

**Scope:** This Instruction applies to Oil and Gas Industry operations located within

the jurisdiction of Federal OSHA Area Offices in Region VIII.

**Reference:** OSHA Instruction CPL 04-00-002, Procedures for Approval of Local

Emphasis Programs (LEP), November 13, 2018.

Cancellation: This Instruction cancels OSHA Regional Notice 19-04, CPL 04-01,

Emphasis Program for the Oil and Gas Industry, October 1, 2018.

**State Impact:** None

**Action Offices:** Billings, Bismarck, Sioux Falls, Denver, and Englewood Area Offices

Originating Office: Denver Regional Office

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By and Under the Authority of:

Rita Lucero Acting Regional Administrator, VIII

#### **Executive Summary**

Workers employed in the oil and gas industry face many hazards that can lead to serious injury, illness, and death. Flash fires, explosions, falls from height, struck by high pressure equipment, and hydrocarbon and other chemical exposures are major hazards routinely faced by workers in the oil and gas industry.

The intent of this renewed Regional Emphasis Program is to encourage employers to take steps to address these hazards, ensure work sites are evaluated to determine if the employer is in compliance with all relevant OSHA requirements, and to help employers correct hazards, thereby reducing potential injuries, illnesses, and death for their workers.

OSHA in Region VIII proposes to accomplish this through outreach and enforcement activities. Outreach activities include seminars and training sessions with stakeholders, electronic information sharing activities through newsletters, and cooperative program agreements with industry associations. Enforcement activities will include, but not be limited to, the inspection of oil and gas work sites with review of hot work permits, use of personal protective equipment, controlled access zones, and exposure monitoring data to identify and obtain corrections of workplace hazards at all applicable inspection sites.

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- I. <u>Purpose</u>: This Instruction renews a Regional Emphasis Program (REP) for the purpose of conducting inspections within the Oil and Gas industry. The employers to be targeted are in the Oil and Gas industry and are classified within NAICS code 213111, Drilling Oil and Gas Wells; NAICS code 213112, Support Activities for Oil and Gas Operations; NAICS code 211111, Crude Petroleum and Natural Gas Extraction; NAICS code, 237120 Oil and Gas Pipeline and Related Structures Construction; NAICS code, 541360 Geophysical Surveying and Mapping Services; and NAICS code 238910, Site Preparation Contractors. The goal of this REP is to reduce the rate of injuries, illnesses and fatalities in this industry and to address health hazards as they occur during fracturing operations.
- **II.** <u>Scope</u>: This Instruction applies to Oil and Gas Industry operations located within the jurisdiction of Federal OSHA Area Offices in Region VIII.
- **III.** Expiration: This Instruction expires on September 30, 2024.
- **IV.** <u>Action:</u> OSHA Region VIII compliance personnel shall follow the procedures contained in this instruction when conducting outreach and enforcement activities.

### V. <u>References</u>:

- A. OSHA Instruction CPL 02-00-163, *Field Operations Manual (FOM)*, September 13, 2019, or the most recent version at the time of the inspection opening conference.
- B. OSHA Instruction CPL 04-00-002, *Procedures for Approval of Local Emphasis Program (LEPs)*, November 13, 2018.
- C. OSHA Instruction CPL 02-00-025, Scheduling System for Programmed Inspections, January 4, 1995.
- D. November 12, 2014, OSHA Memorandum: Establishments Targeting Lists for Emphasis Programs.
- E. Title 29 Code of Federal Regulations, Part 1910.
- F. OSHA Instruction CPL 02-00-051, *Enforcement Exemptions and Limitations under the Appropriations Act, May 28, 1998; Appendix A*, December 18, 2018, or the most recent version at date of inspection opening conference.
- G. Rig Data Reports of potentially active oil and gas drilling operations obtained from rigdata.com.
- H. NIOSH Oil and Gas Extraction Safety and Health Research, NIOSH Field Effort to Assess Chemical Exposures in Oil and Gas Workers: Health Hazards in Hydraulic Fracturing, May 29, 2012.

- I. State of Colorado Oil and Gas Conservation Commission (COGCC).
- J. Montana Board of Oil and Gas.
- K. North Dakota (ND) Industrial Commission, Oil and Gas Division.
- L. Bureau of Labor Statistics (BLS), Fatal Occupational Data, 2015, 2016, 2017.
- M.OSHA Information System (OIS) Trending/Statistics Report from January 1, 2014 to September 25, 2019.
- VI. <u>Cancellation</u>: This instruction cancels OSHA Regional Notice 19-04, CPL 04-01, Emphasis Program for the Oil and Gas Industry, October 1, 2018.
- VII. <u>Action Office</u>: Billings, Bismarck, Sioux Falls, Denver, and Englewood Area Offices.

## VIII. Background:

The Regional Office has chosen to address oil and gas operations for an enforcement emphasis program. The industry is engaged in oil and gas drilling, production, and servicing operations. An emphasis program is being established in this industry due to its high fatality rate and potential exposure to serious health hazards during fracturing operations.

According to Bureau of Labor Statistics (BLS), from 2015-2017, there were thirty fatalities in the extraction industries and one-hundred and eighty in the support industries. A trending and statistics report generated from the OSHA Information System, OIS, reveals that from January 1, 2014 through September 25, 2019, Region VIII conducted 641 inspections in the NAICS codes included in this Instruction. Forty-one (41) fatalities occurred during this same period and 524 violations were issued.

In addition, a recent NIOSH study of health hazards existing at oil and gas well drilling operations revealed that several potential health hazards exist during well drilling and hydraulic fracturing operations. Potential hazardous exposures to diesel particulate (stationary and mobile combustion engines), volatile organic chemicals in the form of naphthalene, benzene, toluene, ethyl benzene, and xylene (flow back operations and pit aeration), hydrogen sulfide, acid gases, aldehydes (water treatment chemicals) and metals such as lead were documented.

OSHA's Operating Plan continues to identify the oil and gas sector as a focus industry. By targeting inspection activity to employers in this industry, OSHA hopes to reduce the injury and fatality rates in the oil and gas industry and to eliminate or reduce exposure to health hazards during well fracturing operations.

#### **IX.** Inspection Scheduling:

A. Selection of NAICS 213111 (Drilling Oil and Gas Wells) sites to be inspected. Standard targeting and selection by each area office. Due to the unique conditions within each area office's territory, each area office will target and select sites for a comprehensive inspection in the manner set forth below. (Each area office may also, however, locate and select sites for inspection pursuant to paragraphs VII.A.1).

#### **Denver Area Office:.**

The Denver Area Office (DAO) will primarily target inspection activity for this NAICS code (213111) in Garfield and Weld counties, which are the two counties within the DAO's jurisdiction that historically have had, and currently have, the highest concentration of drilling activity. Weld and Garfield counties represent nearly 85% of the drilling activity within the State of Colorado. As resources allow, the DAO will conduct inspections pursuant to this REP.

For the Weld and Garfield county inspections, the Rig Data Reporting Service will be used to develop a list of establishments. The Rig Data Reporting Service will identify locations of active drilling rigs (NAICS code 213111) within the targeted county. The Rig Data reports are received via electronic mail every Tuesday. The most recent Rig Data report that is received prior to the area office developing its inspection list will be used to generate the inspection list. Rigs in the selected county list in the Rig Data report will first be numbered in the order they appear on the selected Rig Data list. A random numbers table will then be applied to create a randomized list of rigs. (The random numbers table will be developed in accordance with the November 12, 2014 Memorandum, Establishments-Targeting for Emphasis Programs.) Cycles of up to five rigs will be scheduled for inspection by application of the random numbers table. In the event the Area Office learns that a rig in the cycle is not active or is subject to the deletion criteria set forth in paragraph VII.C below, then the next available establishment on the randomized list will be selected for inspection. Prior to creating a new cycle, the DAO will exhaust all existing establishments in the current cycle.

#### Other Counties with DAO Jurisdiction:

As resources permit, the Rig Data Reporting Service will be used to identify locations of active drilling rigs (NAICS code 213111) in all counties within the area office's jurisdiction other than Weld County and Garfield County. The most recent Rig Data report will be used to generate the inspection list. Rigs first will be numbered in the order they appear on the selected Rig Data list. The random numbers table will then be applied to the list to create a randomized list of rigs. A cycle of up to five rigs will be scheduled for inspection by application of the random numbers table. In the event the Area Office learns that a rig in the cycle is not active or is subject to the deletion criteria set forth in paragraph VII.C below, then the next available establishment on the randomized list will be selected for inspection. Prior to creating a new cycle, the DAO will exhaust all existing establishments in the current cycle.

#### **Englewood Area Office:**

The Englewood Area Office (EAO) will target inspection activity for this NAICS code (213111) in all counties within EAO's jurisdiction. The counties will be divided into three zones (Zone A, Zone B, and Zone C), as noted below.

- Zone A consists of the following counties: Alamosa, Archuleta, Chaffee, Conejos, Dolores, Gunnison, Hinsdale, La Plata, Mineral, Montezuma, Montrose, Ouray, Rio Grande, Saguache, San Juan, and San Miguel.
- Zone B consists of the following counties: Arapahoe, Costilla, Custer, Douglas, Elbert, El Paso, Fremont, Huerfano, Jefferson, Las Animas, Park, Pueblo, and Teller.
- Zone C consists of the following counties: Baca, Bent, Cheyenne, Crowley, Kiowa, Kit Carson, Lincoln, Otero, and Prowers.

As resources permit, the EAO will conduct inspections pursuant to this REP. One of these three zones will be selected for inspections rotating systematically among the three zones. Information from the State of Colorado Oil and Gas Conservation Commission (COGCC) will be used to identify locations of active drilling rigs (NAICS code 21311) within the targeted zone. A request for a complete listing of all current drilling activity in the zone will be submitted from the EAO to the Southern Colorado Field Inspector Supervisor at COGCC. A random numbers table will then be applied to create a randomized list of rigs. (The random numbers table will be developed in accordance with the November 12, 2014, Memorandum, Establishments-Targeting List for Emphasis Programs.) Cycles ranging between two and five sites will be scheduled for inspection by application of the random numbers table. In the event the Area Office learns that a rig selected for inspection is not active or is subject to the deletion criteria set forth in paragraph VII.C below, then the next available establishment on the randomized list will be selected for inspection.

Inspection activity will begin in Zone A. Each of the selected sites from the randomized list will be inspected, up to a maximum of five sites. The inspection activity will then move sequentially to Zone B. The same selection and inspection procedures will be followed for Zone B. Inspection activity will then rotate to Zone C to complete the rotation.

If information gathered from COGCC indicates that there is not a minimum of two active sites in any selected Zone, the next Zone will be selected and the information gathering will begin for that Zone.

#### **Billings Area Office**

The Billings Area Office (BAO) will primarily target inspection activity for this NAICS code (213111) in Sheridan, Roosevelt, Richland, Dawson, Wibaux, Fallon, and Toole counties, which are the counties within the BAO's jurisdiction that

historically have the highest concentration of drilling activity. The counties will be divided into three zones as noted below.

- Zone A consists of the following counties: Sheridan, Roosevelt, and Richland.
- Zone B consists of the following counties: Dawson, Wibaux, and Fallon.
- Zone C consists of the following county: Toole

As resources permit, the BAO will conduct inspections pursuant to this REP. The Montana Board of Oil and Gas website will be used to identify active rigs and to develop an inspection list. The Montana Board of Oil and Gas maintains a list of active drillings rigs in Montana. On the Monday of the week the Billings Area Office plans on conducting inspections in NAICS code 213111, the Board report will be generated in order to obtain the most current information of active drilling rigs. Rigs in the Board report will first be numbered in the order they appear on the selected Board list. A random numbers table will then be applied to create a randomized list of rigs. (The random numbers table will be developed in accordance with the November 12, 2014 Memorandum: Establishments-Targeting Lists for Emphasis Programs.) The first two rigs that are selected by application of the random numbers table will be scheduled for inspection.

If the same Owner / Operator appear sequentially on the randomized list, the second site will be skipped and the next site with a different Owner / Operator will be scheduled for inspection. In the event the Area Office learns that a rig selected for inspection is not active or is subject to the deletion criteria set forth in paragraph VII.C below, then the next available establishment on the randomized list will be selected for inspection, so that two rigs will be inspected per month.

Inspection activity will begin in Zone A. Each of the selected sites from the randomized list will be inspected, up to a maximum of two sites. The inspection activity will then move sequentially to Zone B. The same selection and inspection procedures will be followed for Zone B. Inspection activity will then rotate to Zone C to complete the rotation.

#### **Bismarck Area Office:**

At least once a quarter, the BAO will conduct inspections pursuant to this REP. For this NAICS code (213111) the Bismarck Area Office will target only North Dakota. The North Dakota (ND) Industrial Commission, Oil and Gas Division website will be used to identify active rigs and develop an inspection list. The ND Industrial Commission develops a weekly list of active drillings rigs in North Dakota. On the Monday of the week the Bismarck Area Office plans on conducting inspections in NAICS code 213111, the Commission report will be generated in order to obtain the most current information of active drilling rigs. Rigs in the Commission report will first be numbered in the order they appear on the selected Commission list. A random numbers table will then be applied to create a randomized list of rigs. (The random numbers table will be generated in accordance with the November 12, 2014,

Memorandum: Establishments-Targeting Lists for Emphasis Programs.) The first two rigs that are selected by application of the random numbers table will be scheduled for inspection. If the same Owner / Operator appear sequentially on the randomized list, the second site will be skipped and the next site with a different Owner / Operator will be scheduled for inspection. In the event the Area Office learns that a rig selected for inspection is not active or is subject to the deletion criteria set forth in paragraph VII.C below, then the next available establishment on the randomized list will be selected for inspection, so that two rigs will be inspected per month.

#### **Sioux Falls Office:**

Employers in all the covered NAICS codes will be selected for inspection based on observation by a CSHO of a worksite at which oil and gas work is being conducted. If, in the normal course of their travels, a CSHO observes a work site within the individual area office's jurisdiction that is conducting operations in any of the covered NAICS codes, the CSHO will call the Area Office to inform the Area Director or other supervisor and, upon approval from a management representative, the CSHO will conduct the inspection. Employers in NAICS codes 541360, 213112, 211111, 237120, and 238910 known to have less than a total of 10 employees will be exempt from inspection.

## 1. Additional selection method: CSHO observation during normal course of travels.

Employers in NAICS code 213111 (drilling rigs) may also be selected for inspection based on observation by a CSHO of a worksite at which oil and gas work is being conducted. If, in the normal course of their travels, a CSHO observes a work site within the individual area office's jurisdiction that is conducting operations in NAICS code 213111, the CSHO will call the Area Office to inform the Area Director or other supervisor and, upon approval from a management representative, the CSHO will conduct the inspection.

# 2. Potential substitution of worksite selected for inspection if judicial warrant must be obtained.

In the event OSHA concludes a judicial warrant should be sought, either because permission to complete an inspection was denied, or because OSHA otherwise has reason to believe a judicial warrant may be necessary to complete an inspection, the worksite selected for inspection, for purposes of obtaining the warrant, shall be:

- (a) the original rig selected for inspection, irrespective of its location within the Area Office's territorial jurisdiction, if the rig is actively drilling upon arrival with the warrant, or
- (b) if the original rig selected is not actively drilling within the Area Office's territorial jurisdiction, any active drilling worksite of the same employer within the Area Office's territorial jurisdiction.

B. <u>Selection of Sites</u>: Selection of sites for NAICS 213112, Support Activities for Oil and Gas Operations; NAICS code 211111, Crude Petroleum and Natural Gas Extraction; NAICS code 237120, Oil and Gas Pipeline and Related Structures Construction; NAICS code, 541360 Geophysical Surveying and Mapping Services; and NAICS code 238910, Site Preparation Contractors:

# Billings Area Office, Bismarck Area Office, Denver Area Office, and Englewood Area Office:

CSHO observation during normal course of travels.

Employers may also be selected for inspection based on observation by a CSHO of a worksite at which oil and gas work is being conducted. If, in the normal course of their travels, a CSHO observes a work site within the individual area office's jurisdiction that is conducting operations within one of the identified NAICS codes 211111, 213112, 541360, 237120, and 238910, the CSHO will call the Area Office to inform the Area Director or other supervisor to seek permission to conduct the inspection. Employers in NAICS codes 541360, 213112, 211111, 237120, and 238910 known to have less than a total of 10 employees will be exempt from inspection.

## C. Inspection of Fracturing Operations

As resources allow, the area offices will conduct fracturing activity inspections pursuant to this REP. For this NAICS code (213112), the Bismarck Area Office will select sites for inspection in the following manner. The North Dakota (ND) Industrial Commission, Oil and Gas Division website will be used to identify Owner/Operators who have drill rigs operating within North Dakota and develop an inspection list. The ND Industrial Commission develops a weekly list of active drillings rigs in North Dakota. On the Monday of the week the Bismarck Area Office plans on conducting fracturing inspections associated with NAICS co code 213112, the Commission report will be generated in order to obtain the most current information of active drilling rigs, including potential fracturing sites. The Owner/Operators listed in the Commission report will first be numbered in the order they appear on the selected Commission list. A random numbers table will then be applied to create a randomized list of Owner/Operators. (The random numbers table will be generated in accordance with the November 12, 2014, Memorandum: Establishments-Targeting Lists for Emphasis Programs.) The first two Owner/Operators that are selected by application of the random numbers table will be scheduled for inspection.

If the first two Owner/Operators are the same, the second selection on the randomized list will be deleted and the next sequential Owner/Operator on the randomized list will be selected until two different Owner/Operators have been selected.

Upon selection of the Owner/Operator, the CSHO will travel to the nearest office of the selected company and seek a list of all fracturing operations scheduled to begin in North Dakota within ten (10) calendar days of the site visit. The identified worksites will be

numbered in the order they appear on the list provided by the Owner/Operator. A random numbers table will then be applied to create a randomized list of scheduled fracturing operations. If the first two fracturing companies are the same, the second selection on the randomized list will be deleted and the next fracturing company on the randomized list will be selected until two different fracturing companies have been targeted for inspection.

In the event the Area Office learns that a worksite selected for inspection is not active or is subject to the deletion criteria set forth in paragraph VII, D below, then the next available establishment on the randomized list will be selected for inspection, so that two fracturing worksites, each consisting of a different fracturing company, will be inspected per cycle.

A fracturing company will be limited to a total of 3 programmed inspections per year within each of the area office's jurisdiction.

- D. Deletions: The area offices will maintain a list of employers and worksites that are inspected. Before directing an inspection from the programmed list or based on visual observation of an oil and gas work site, the area office will determine whether the subject worksite (not employer) has had a programmed inspection within the last 90 days. If so, that worksite will not be the subject of a programmed inspection during the current cycle; otherwise, an inspection will be authorized. Any establishment within a NAICS code exempted by OSHA Instruction CPL 02-00-51, Exemptions and Limitations under the Current Appropriations Act, May 28, 1998, Appendix A, January 10, 2017Appendix A will be deleted from all lists. The CSHO shall follow the most recent version of Appendix A in this appropriations list to determine which employers with ten or fewer employees are exempt from OSHA inspections.
- E. Unprogrammed Inspections: Reports of imminent danger, fatality/catastrophe, complaints and referrals concerning worksites within the targeted NAICS codes shall be scheduled as unprogrammed inspections. An inspection will be conducted in the event such report, complaint, or referral (including a referral by a CSHO) provides reasonable cause to believe that a serious hazard or a serious violation may exist at the worksite. If such report, complaint, or referral does not provide reasonable cause to believe that a serious hazard or serious violation exists at the worksite, the report, complaint, or referral shall be processed in accordance with the applicable provisions of the FOM, OSHA Instruction CPL 02-00-160. In either case, if an unprogrammed inspection is to be conducted at an active facility that is also included in the current inspection cycle under this REP (and the exclusion criteria of paragraphs VII.D.do not apply), a comprehensive safety inspection shall be conducted.

## X. <u>Inspection Procedures</u>:

A. <u>For Inspections of drilling rig sites (NAICS 213111, Drilling Oil and Gas Wells):</u> The activities at the site of any contractors or auxiliary employers that are carrying out the function related to drilling activities will also be inspected.

B. <u>Inspection Procedures for inspecting NAICS 213112</u>, Support Activities for Oil and Gas Operations; NAICS code 211111, Crude Petroleum and Natural Gas Extraction; NAICS code 237120, Oil and Gas Pipeline and Related Structures Construction; NAICS code, 541360 Geophysical Surveying and Mapping Services; and NAICS code 238910, Site Preparation Contractors:

Upon observing oil and gas activity at a work site, the CSHO will call the Area Director or Supervisor and provide as much information about the site as possible without entering the worksite. The Area Director or Supervisor will review the information to determine if the worksite is eligible for inspection by applying the deletion criteria listed in VII.D of this directive. If the worksite meets the deletion criteria, the CSHO will be directed not to conduct the inspection. Otherwise, the CSHO will conduct a comprehensive inspection of the worksite.

### C. <u>General Inspection Procedures</u>:

- 1. Inspection procedures outlined in the FOM, OSHA Instruction CPL 02-00-163, will be followed for all oil and gas operations REP inspections.
- 2. Companies with ten or fewer total employees in NAICS codes 213112, 237120, 238910, 213111, 541360, and 211111 are included on the current Exemptions and Limitations list in CPL 02-00-51 and will not be subject to a programmed safety inspection under this REP. The CSHO shall follow the most recent version of Appendix A in this appropriations list to determine which employers with ten or fewer employees are exempt from OSHA inspections.
- 3. The inspections conducted under this REP will be focused on safety hazards. Due to a recent NIOSH study of health hazards existing at oil and gas well drilling operations, compliance officers performing inspections under this REP will address potential health hazards where a reasonable cause exists at the worksite. Alternatively, health referrals will be made as appropriate. For a description of these hazards, see paragraph VI.
- XI. <u>Outreach</u>: Each Area Office has conducted and continues to provide outreach on hazards in the oil and gas industry. Outreach has been in the form of speeches, training seminars, and newsletters to groups identified by the Compliance Assistance Specialist (CAS) and CSHOs.
- **XII.** OIS Coding: The following OSHA Information System (OIS) coding requirements address only the coding changes or additions necessary for inspections conducted under this REP:
  - A. The OIS Inspection Form for inspections initiated pursuant to the selection procedures in section "VII. A.-C." of this REP shall be marked "Programmed Planned" in *the Initiating Type* block. The code "OILGAS" shall be selected in the *Local Emphasis Program* block.

- B. The OIS Inspection Form for unprogrammed inspections initiated pursuant to Section "VII.E. Unprogrammed Inspections" of this REP (i.e., unprogrammed inspections initiated due to alleged serious hazards at sites under the targeted NAICS codes of this REP) shall be coded in the *Initiating Type* block as an "Unprogrammed" inspection. The code "OILGAS" shall be selected in the *Local Emphasis Program* block.
- C. Refer to "OSHA memorandum dated September 6, 2006, Subject: Coding Instruction Update for the FY2006-FY2011 Strategic Plan," for OSHA-1, item "25f Strategic Plan" codes that may be applicable.
- **XII. Program Report:** No later than midway through the life of the program the Area Offices will provide a report of this REP to the Regional Office.

**DISTRIBUTION:** Directorate of Enforcement Programs

Regional Office of the Solicitor