ABSTRACT

Purpose: This Notice transmits the policies and procedures to be followed when conducting local emphasis program inspections of grain handling facilities within the Boise Area Office jurisdiction.

Scope: This Notice applies to all inspections under federal OSHA jurisdiction in Idaho where grain handling operations are occurring.

References: OSHA Instruction CPL 02-00-025, Scheduling System for Programmed Inspections, January 4, 1995.

OSHA Instruction CPL 02-00-051, Exemptions and Limitations under the Current Appropriations Act, May 28, 1998.

OSHA Instruction 02-00-150, Field Operations Manual (FOM), April 22, 2011.


OSHA Instruction CPL 04-00-001, Procedures for Approval of Local Emphasis Program (LEPs) and Experimental Programs, November 10, 1999.

OSHA Instruction CPL 03-00-008, Combustible Dust National Emphasis Program (Reissued), March 11, 2008.
OSHA Notice 13-01 (CPL 02), Site-Specific Targeting 2012 (SST 12), January 4, 2013.

PER 04-00-001, Ch. 1, Region X Internal Safety and Health Program, March 6, 2009.


NIOSH Publication 88-102, Preventing Entrapment and Suffocation Caused by the Unstable Surfaces of Stored Grain and Other Materials (1987).


Expiration Date: This Notice will expire December 31, 2014, but may be renewed.

State Plan Impact: None.

Significant Changes: None.


Originating Office: Office of Federal and State Operations

Contact: Steve Gossman
Assistant Regional Administrator
Office of Federal and State Operations

By and Under the Authority of:

David L. Mahlum
Acting Regional Administrator
EXECUTIVE SUMMARY

This Notice establishes a Local Emphasis Program (LEP) to address serious and recognized hazards in the grain handling industry, including General Industry (1910).

The serious hazards associated with grain handling are well established. Grain engulfments, often resulting in a fatality of one or more, occur too often throughout the U.S. Hazardous atmospheres for workers entering grain bins have also continued to be a cause of worker deaths. Explosions and deflagrations from the ignition of combustible grain dusts are serious and recognized hazards. Additionally, facilities engaged in grain handling often have exposures to fall hazards from the numerous ladders and elevated platforms. Exposure to injury from unguarded equipment or equipment not properly de-energized and locked out continues to be a source of serious accidents.

This LEP will use compliance assistance and enforcement to more effectively focus on industry-specific and serious safety hazards. It provides an objective inspection scheduling system to target selected industries in accordance with current law and OSHA policy.

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I. **Purpose.** This Notice creates a local emphasis program (LEP) designed to reduce injury, illness, and death rates in the grain handling industry by increasing employers’ knowledge in safety and health and promoting safety and health programs through a combination of compliance assistance and enforcement activities.

II. **Scope.** This Notice applies to general industry establishments that are covered by 29 CFR 1910.272 within the jurisdictional boundaries of the Boise Area Office. This LEP establishes OSHA’s procedure for programmed comprehensive safety inspections of establishments in Standard Industrial Classification (SIC)/North American Industry Classification System (NAICS) codes 2041/311211 (flour mill products), 2044/311212 (rice milling), 2048/311119 (prepared feed for animals and fowls), 5153/424510 (grain and field bean merchant wholesalers) and 4221/493130 (grain and field beans warehousing and storage), for any grain handling or storage related activities performed at the establishment, pursuant to the provisions contained in the Field Operations Manual.


IV. **State Plan Impact.** None.

V. **References.**

A. OSHA Instruction CPL 02-00-025, Scheduling System for Programmed Inspections, January 4, 1995.

B. OSHA Instruction CPL 02-00-051, Exemptions and Limitations under the Current Appropriations Act, May 28, 1998.

C. OSHA Instruction 02-00-150, Field Operations Manual (FOM), April 22, 2011.


E. OSHA Instruction CPL 04-00-001, Procedures for Approval of Local Emphasis Program (LEPs) and Experimental Programs, November 10, 1999.

F. OSHA Instruction CPL 03-00-008, Combustible Dust National Emphasis Program (Reissued), March 11, 2008.

G. OSHA Notice 13-01 (CPL 02), Site-Specific Targeting 2012 (SST 12), January 4, 2013.

H. PER 04-00-001, Ch. 1, Region X Internal Safety and Health Program, March 6, 2009.

J. NIOSH Publication 88-102, Preventing Entrapment and Suffocation Caused by the Unstable Surfaces of Stored Grain and Other Materials (1987).


VI. **Cancellations.** OSHA Regional Notice 13-36 (CPL 04), November 26, 2013.

VII. **Background.**

A large portion of Idaho’s industry is associated with agriculture, including the handling and processing of grains, such as wheat, barley and corn.

The hazards associated with grain handling are well recognized. Employees are exposed to the potential of fires and explosions, and other significant hazards such as falls, machine guarding, rail car handling operations, and grain bin entry engulfment and hazardous atmospheres. In the late 1970s and early 1980s, OSHA implemented National Emphasis Programs covering grain handling facilities in order to focus its resources on these hazards. These programs have since been canceled. The Boise Area Office has determined that a renewed OSHA enforcement presence is warranted due to continuing incidences of fatalities and injuries in these facilities.

Nationally, OSHA has also determined a renewed focus on grain industries is necessary. Due to the hazardous nature of the grain industry and the fatalities that occurred during 2009, the Assistant Secretary for OSHA mailed letters to grain handling facilities in the United States warning those employers not to allow workers to enter grain storage facilities without proper equipment, precautions and training.

Suffocation is a leading cause of death in grain storage bins. In fact, the number of deaths more than doubled between 2006 and 2010. In 2010, 51 workers were engulfed by grain stored in bins, and 26 died – the highest number on record, according to a report issued by Purdue University. During the week of June 6, 2011, three workers, one each in Iowa, Michigan and North Dakota, were killed when they were engulfed by grain while on the job. In Texas, a fourth worker was also buried in grain, but was rescued and survived.

The Boise Area Office conducted a fatality investigation in 2010 where an employee was engulfed in a barley storage bin.

According to the U.S. Department of Labor Bureau of Labor Statistics, in 2011 the nationwide Total Case Incident Rate (TCIR) for Private Industry was 3.5 and the Days Away Restricted and Transfer Rate (DART) for Private Industry was 1.8. Upon
comparing the grain handling NAICS injury and illnesses data for 2011, “Grain Handling” industries consistently demonstrate high injury and illness rates.

<table>
<thead>
<tr>
<th>NAICS Code</th>
<th>2011 TCIR</th>
<th>% Greater than Private Industry TCIR</th>
<th>2011 DART</th>
<th>% Greater than Private Industry DART</th>
</tr>
</thead>
<tbody>
<tr>
<td>4245XX - Grain and Field Bean Wholesalers</td>
<td>4.9</td>
<td>40%</td>
<td>2.3</td>
<td>28%</td>
</tr>
<tr>
<td>493130 - Grain Elevator Storage</td>
<td>3.9</td>
<td>11%</td>
<td>2.4</td>
<td>33%</td>
</tr>
</tbody>
</table>

VIII. Program Procedures.

The following procedures will be utilized to implement enforcement activity. The Regional Administrator, through the Assistant Regional Administrator for Federal and State Operations (FSO), and the Boise Area Director shall ensure that the procedures outlined in this Notice are followed and adhered to in the scheduling of programmed inspections of grain handling facilities.

A. Programmed LEP Inspections. Inspections conducted under this program shall be scheduled and conducted pursuant to the following criteria. Inspections shall concentrate on grain handling establishments as defined by 29 CFR 1910.272(b).

Following is a list of sources for obtaining information to develop a roster from which inspections will be conducted.

1. Industry Selection. The following SIC/NAICS codes list the industries within the state of Idaho that are covered by 29 CFR 1910.272: Standard Industrial Classification (SIC)/North American Industry Classification System (NAICS) codes 2041/311211 (flour mill products), 2044/311212 (rice milling), 2048/311119 (prepared feed for animals and fowls), 5153/424510 (grain and field bean merchant wholesalers) and 4221/493130 (grain and field beans warehousing and storage)

2. Site Selection.

   a. Master List Generation. A listing of establishments within the above SIC/NAICS codes will be provided by OSHA’s Office of Statistics based on Dunn & Bradstreet information for the office’s area of jurisdiction. Establishments included on the OSHA National Office mailing list for grain facilities will be added to the listing of establishments.
NOTE: Small employers with fewer than ten employees in any NAICS code listed in OSHA Instruction CPL 02-00-051 as exempt from programmed OSHA safety inspections will not be inspected. Area office staff will consult the appropriation riders (CPL 02-00-051) each fiscal year for exempt employers in any given NAICS. However, other establishments with fewer than ten employees are to be included in this program.

b. **Deletions.** The area office may delete from their list any facility/site that meets the applicable deletion criteria listed in CPL 02-00-025. The area offices may also delete any establishment that has had an inspection where exposures to grain handling hazards have been fully evaluated within the current year or any establishment where during the previous three (3) fiscal years no serious violations were cited or a subsequent inspection documented employer efforts to abate all serious hazards. In the event an establishment meeting these criteria is not deleted, the decision shall be documented and the reasons for including it shall be stated.

c. **Cycle Generation.** A random number table will be applied to create the first inspection cycle of five or more establishments. Subsequent cycles will be created in the same way until the expiration of the LEP or until all establishments on the list have been assigned to a cycle. Whenever the area office becomes aware of a previously unknown establishment in one of the identified SIC/NAICS, that establishment shall be added to the master list for inclusion in the next inspection cycle.

3. **Site Specific Targeting (SST).** Targeted establishments which also appear on the most current SST list will undergo a DART/DAFWII evaluation. The evaluation of the establishment’s DART and DAFWII rates shall be made in accordance with the current OSHA directive related to Site-Specific Targeting inspections. The SST directive usually selects for inspection all workplaces with a DART rate or a DAFWII case rate at or above selected criteria for the Primary List. If the evaluation shows that the site has DART/DAFWII rates below the SST cut points, the inspection will be conducted focused on only the hazards related to grain handling; otherwise the grain handling inspection should be done concurrently with the SST plan. If this is not possible, the SST plan inspections have priority and are to be conducted prior to NEP/LEP inspections.

B. **Complaints, Referrals and Fatalities/Catastrophes.** Complaint, referral, fatality, catastrophe and follow-up inspections will be handled according to the Field Operations Manual (FOM). Un-programmed inspections of establishments identified will be expanded to include the issues addressed by this program. An inspection scheduled under this LEP does not necessarily need to be inspected by the compliance personnel making the original observation.
Every complaint or referral for any operation where there exists the potential for serious hazards associated with grain handling must be handled as follows:

1. Based upon the information provided, all potential grain handling related establishments brought to the attention of the area office must be handled in accordance with the procedures outlined in the FOM. The Area Director may initiate a referral or complaint inspection based on the information provided.

2. Whenever a Compliance Safety and Health Officer (CSHO) observes or receives information of work operations where the potential for grain handling related hazards exists, the CSHO must follow the procedures below. The procedures apply whether or not a violation is observed, and also apply when information is received through phone calls alleging a hazard, referrals (including media or other agency referrals), reports from other staff, from the general public, etc.
   a. Document the status and condition of the work operation as far as they are known, noting any serious hazard(s). Documentation must be maintained by the area office in case of denial of entry.
   b. Note the location of the work site and the name and address of the employer(s) performing the operation.
   c. Provide the Assistant Area Director or Area Director with the information. Based upon the information provided, all potential grain handling related work sites will be handled in accordance with existing agency procedures for referrals and for employee complaints.

IX. Inspection Procedures

A. Inspections will be conducted in accordance with CPL 02-00-051, *Enforcement Exemption and Limitations under the Appropriation Act*, and shall be conducted in accordance with provisions of the FOM.

B. All inspections will comply with guidelines established in OSHA Instruction CPL 02-01-004, *Inspection of Grain Handling Facilities*, and will include an evaluation of the employer's efforts at adopting protective measures and its efforts toward the abatement of hazards relating to grain handling, especially combustible dust, engulfment hazards and machine guarding and lockout related hazards.

C. Unprogrammed events such as fatalities, catastrophes, complaints, follow-up inspections and referrals shall be scheduled for inspection in accordance with existing procedures outlined in the FOM. When possible, a single inspection will be conducted to address the unprogrammed event as well as to conduct an inspection described in this program for establishments selected.
D. When an inspection is not conducted because the employer has refused entry, a warrant shall be sought in accordance with procedures in the FOM.

E. CSHOs will evaluate combustible dust related hazards and collect samples for analysis in accordance with the Combustible Dust National Emphasis Program, OSHA Instruction CPL 03-00-008.

X. CSHO Training and Protection.

A. CSHOs are required to wear appropriate PPE and avoid fall, machine guarding, and other hazards as described in Seattle Regional Instruction, PER 04-00-001, Ch. 1, Region X Internal Safety & Health Program.

B. CSHOs shall attempt to avoid entering grain bins to collect evidence unless absolutely necessary, and shall NEVER enter grain storage bins that pose an engulfment hazard or potential atmospheric hazard. CSHOs will contact their AD or AAD to consult with them prior to entering any bins or confined spaces.

C. When inspecting grain handling related activities under this LEP, whenever possible at least one CSHO assigned should have received the OSHA Training Institute (OTI) Grain Handling course or equivalent training and experience.

D. Safe collection of dusts for lab analysis shall be collected and shipped in accordance with the instructions in the Combustible Dust National Emphasis Program, OSHA Instruction CPL 03-00-008.

XI. Program Evaluation.

A. This LEP will be evaluated in accordance with the guidelines in Appendix A of CPL 04-00-001, Procedures for Approval of Local Emphasis Programs and Experimental Programs.

B. The Area Director will be asked to provide input concerning special problems that may have surfaced during the year; recommendations to improve the LEP; and recommendations to renew or not renew the LEP.

C. The Office of Federal and State Operations (FSO) shall review the input and prepare an evaluation to be submitted to the Regional Administrator for review by November 15 of each year. On the approval of the Regional Administrator, the evaluation report will be submitted to the Directorate of Enforcement Programs no later than November 30.
XII. OIS Recording

A. Inspections, unprogrammed activities and compliance assistance activities that are targeted as a result of this LEP will be coded as “GRAIN.”

B. Where hazards associated with combustible dusts are investigated, enter the NEP code “DUSTEXPL.”