Citation and Notification of Penalty

To:
Halliburton Energy Services
and its successors
3199 D Road,
Grand Junction, CO 81504

Inspection Site:
35191 Hwy 160,
Bayfield, CO 81122

Inspection Number: 531179
Inspection Date(s): 06/25/2012 - 08/01/2012
Issuance Date: 12/19/2012

The violation(s) described in this Citation and
Notification of Penalty is (are) alleged to have
occurred on or about the day(s) the inspection was
made unless otherwise indicated within the description
given below:

This Citation and Notification of Penalty (this Citation) describes violations of the Occupational Safety and Health Act of 1970. The penalty(ies) listed herein is (are) based on these violations. You must abate the violations referred to in this Citation by the dates listed and pay the penalties proposed, unless within 15 working days (excluding weekends and Federal holidays) from your receipt of this Citation and Notification of Penalty you mail a notice of contest to the U.S. Department of Labor Area Office at the address shown above. Please refer to the enclosed booklet (OSHA 3000) which outlines your rights and responsibilities and which should be read in conjunction with this form. Issuance of this Citation does not constitute a finding that a violation of the Act has occurred unless there is a failure to contest as provided for in the Act or, if contested, unless this Citation is affirmed by the Review Commission or a court.

Posting - The law requires that a copy of this Citation and Notification of Penalty be posted immediately in a prominent place at or near the location of the violation(s) cited herein, or, if it is not practicable because of the nature of the employer's operations, where it will be readily observable by all affected employees. This Citation must remain posted until the violation(s) cited herein has (have) been abated, or for 3 working days (excluding weekends and Federal holidays), whichever is longer.

Informal Conference - An informal conference is not required. However, if you wish to have such a conference you may request one with the Area Director during the 15 working day contest period. During such an informal conference you may present any evidence or views which you believe would support an adjustment to the citation(s) and/or penalty(ies).
If you are considering a request for an informal conference to discuss any issues related to this Citation and Notification of Penalty, you must take care to schedule it early enough to allow time to contest after the informal conference, should you decide to do so. Please keep in mind that a written letter of intent to contest must be submitted to the Area Director within 15 working days of your receipt of this Citation. The running of this contest period is not interrupted by an informal conference.

If you decide to request an informal conference, please complete, remove and post the Notice to Employees next to this Citation and Notification of Penalty as soon as the time, date, and place of the informal conference have been determined. Be sure to bring to the conference any and all supporting documentation of existing conditions as well as any abatement steps taken thus far. If conditions warrant, we can enter into an informal settlement agreement which amicably resolves this matter without litigation or contest.

**Right to Contest** — You have the right to contest this Citation and Notification of Penalty. You may contest all citation items or only individual items. You may also contest proposed penalties and/or abatement dates without contesting the underlying violations. **Unless you inform the Area Director in writing that you intend to contest the citation(s) and/or proposed penalty(ies) within 15 working days after receipt, the citation(s) and the proposed penalty(ies) will become a final order of the Occupational Safety and Health Review Commission and may not be reviewed by any court or agency.**

**Penalty Payment** — Penalties are due within 15 working days of receipt of this notification unless contested. (See the enclosed booklet and the additional information provided related to the Debt Collection Act of 1982.) Make your check or money order payable to “DOL-OSHA”. Please indicate the Inspection Number on the remittance.

OSHA does not agree to any restrictions or conditions or endorsements put on any check or money order for less than the full amount due, and will cash the check or money order as if these restrictions, conditions, or endorsements do not exist.

**Notification of Corrective Action** — For each violation which you do not contest, you must provide **abatement certification** to the Area Director of the OSHA office issuing the citation and identified above. This abatement certification is to be provided by letter within 10 calendar days after each abatement date. Abatement certification includes the date and method of abatement. If the citation indicates that the violation was corrected during the inspection, no abatement certification is required for that item. The abatement certification letter must be posted at the location where the violation appeared and the corrective action took place or employees must otherwise be effectively informed about abatement activities. A sample abatement certification letter is enclosed with this Citation. In addition, where the citation indicates that **abatement documentation** is necessary, evidence of the purchase or repair of equipment, photographs or video, receipts, training records, etc., verifying that abatement has occurred is required to be provided to the Area Director.

**Employer Discrimination Unlawful** — The law prohibits discrimination by an employer against an employee for filing a complaint or for exercising any rights under this Act. An employee who believes that he/she has been discriminated against may file a complaint no later than 30 days after the discrimination occurred with the U.S. Department of Labor Area Office at the address shown above.

**Employer Rights and Responsibilities** — The enclosed booklet (OSHA 3000) outlines additional employer rights and responsibilities and should be read in conjunction with this notification.

**Notice to Employees** — The law gives an employee or his/her representative the opportunity to object to any abatement date set for a violation if he/she believes the date to be unreasonable. The contest must be mailed to the U.S. Department of Labor Area Office at the address shown above and postmarked within 15 working days.
(excluding weekends and Federal holidays) of the receipt by the employer of this Citation and Notification of Penalty.

**Inspection Activity Data** – You should be aware that OSHA publishes information on its inspection and citation activity on the Internet under the provisions of the Electronic Freedom of Information Act. The information related to these alleged violations will be posted when our system indicates that you have received this citation. You are encouraged to review the information concerning your establishment at www.osha.gov. If you have any dispute with the accuracy of the information displayed, please contact this office.
NOTICE TO EMPLOYEES OF INFORMAL CONFERENCE

An informal conference has been scheduled with OSHA to discuss the citation(s) issued on 12/19/2012. The conference will be held at the OSHA office located at 7935 East Prentice Avenue, Suite 209, Greenwood Village, CO 80111 on ________________ at ________________. Employees and/or representatives of employees have a right to attend an informal conference.
CERTIFICATION OF CORRECTIVE ACTION WORKSHEET

Company Name: Halliburton Energy Services
Inspection Site: 35191 Hwy 160, Bayfield, CO 81122
Issuance Date: 12/19/2012

List the specific method of correction for each item on this citation in this package that does not read “Corrected During Inspection” and return to: U.S. Department of Labor – Occupational Safety and Health Administration, 7935 East Prentice Avenue, Suite 209, Greenwood Village, CO 80111

Citation Number _____ and Item Number _____ was corrected on ____________________________
By (Method of Abatement): ______________________________________________________________________________________

Citation Number _____ and Item Number _____ was corrected on ____________________________
By (Method of Abatement): ______________________________________________________________________________________

Citation Number _____ and Item Number _____ was corrected on ____________________________
By (Method of Abatement): ______________________________________________________________________________________

Citation Number _____ and Item Number _____ was corrected on ____________________________
By (Method of Abatement): ______________________________________________________________________________________

Citation Number _____ and Item Number _____ was corrected on ____________________________
By (Method of Abatement): ______________________________________________________________________________________

Citation Number _____ and Item Number _____ was corrected on ____________________________
By (Method of Abatement): ______________________________________________________________________________________

I certify that the information contained in this document is accurate and that the affected employees and their representatives have been informed of the abatement.

Signature __________________________ Date __________________________

Typed or Printed Name __________________________ Title __________________________

NOTE: 29 USC 666(g) whoever knowingly makes any false statements, representation or certification in any application, record, plan or other documents filed or required to be maintained pursuant to the Act shall, upon conviction, be punished by a fine of not more than $10,000 or by imprisonment of not more than 6 months or both.

POSTING: A copy of completed Corrective Action Worksheet should be posted for employee review.
Citation and Notification of Penalty

Company Name: Halliburton Energy Services
Inspection Site: 35191 Hwy 160, Bayfield, CO 81122

Citation 1 Item 1 Type of Violation: Serious

Section 5(a)(1) of the Occupational Safety and Health Act of 1970: The employer did not furnish employment and a place of employment which were free from recognized hazards that were causing or likely to cause death or serious physical harm to employees in that, employees were exposed to struck-by hazards:

a) On or about June 25, 2012, Halliburton Energy Services did not ensure that employees were protected from struck-by hazards while performing purging operations on a 16 inch pipeline. Nitrogen was being introduced into a pig launcher vessel attached to the pipeline at high pressure. The 16 inch trap isolation valve was left in the closed position which led to a fast build-up of nitrogen in the vessel above the maximum allowable working pressure. The vessel ruptured due to over-pressurization.

The following deficiencies were found with this process:

1. The hazards associated with the process and equipment were not effectively evaluated and addressed.

2. Procedures for performing purging operations were not followed nor was there a verification or oversight process in place to ensure that all valves in the entire process (from pumping unit to receiver) were in the proper positions prior to initiating the purging process.

3. An effective system was not used to monitor, verify and record the pressure in the pig launcher vessel and the pipeline during purging.

4. Effective communication methods between all affected parties were not established and utilized for the purging process.

Abatement Note: Among other methods, feasible and acceptable abatement methods to correct these hazards during purging operations would be to follow ASME B31.8-2010 sections 845 and 850 as well as 49 CFR 192. Other more specific methods include but are not limited to:

1) Modify and improve written operating procedures for pipeline purging, pigging and similar
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Company Name: Halliburton Energy Services
Inspection Site: 35191 Hwy 160, Bayfield, CO 81122

operations to include but not be limited to a detailed list of specific valve opening and closing locations, the sequence of which valves to open and close and the inspection of each location to ensure it is in the proper position.

2) Implement a verification, inspection and oversight process for purging and pigging operations to ensure that all operating procedures are followed properly and valves and other critical components are in the proper positions and at appropriate settings.

3) Train all affected employees and contractors who will be performing purging and pigging operations on new procedures.

4) Establish clear and consistent communication methods for purging and pigging operations to be reviewed and coordinated with all affected parties.

5) Ensure that appropriately designed and sized overpressure protective devices/systems are provided, installed and set up properly for this type of equipment. The overpressure protection system must inspected, tested and maintained so it will function effectively in the event of an over-pressure situation.

6) Ensure that gauges used to monitor pressure in the system during purging and pigging are properly designed and suited for the system under the conditions of use.

7) Perform process hazard analysis on this system and similar systems and equipment to identify potential failure modes and preventative measures for these.

Abatement Note: Abatement certification and documentation are required for this item (see enclosed "Certification of Corrective Action Worksheet").

Date By Which Violation Must be Abated: 02/07/2013
Proposed Penalty: $7000.00

See pages 1 through 4 of this Citation and Notification of Penalty for information on employer and employee rights and responsibilities.
Citation and Notification of Penalty

Company Name: Halliburton Energy Services
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David Nelson
Area Director
INVOICE /
DEBT COLLECTION NOTICE

Company Name: Halliburton Energy Services
Inspection Site: 35191 Hwy 160, Bayfield, CO 81122
Issuance Date: 12/19/2012

Summary of Penalties for Inspection Number 531179
Citation 1, Serious $7000.00
TOTAL PROPOSED PENALTIES $7000.00

To avoid additional charges, please remit payment promptly to this Area Office for the total amount of the uncontested penalties summarized above. Make your check or money order payable to: “DOL-OSHA”. Please indicate OSHA’s Inspection Number (indicated above) on the remittance.

OSHA does not agree to any restrictions or conditions or endorsements put on any check or money order for less than the full amount due, and will cash the check or money order as if these restrictions or conditions do not exist.

If a personal check is issued, it will be converted into an electronic fund transfer (EFT). This means that our bank will copy your check and use the account information on it to electronically debit your account for the amount of the check. The debit from your account will then usually occur within 24 hours and will be shown on your regular account statement. You will not receive your original check back. The bank will destroy your original check, but will keep a copy of it. If the EFT cannot be completed because of insufficient funds or closed account, the bank will attempt to make the transfer up to 2 times.

Pursuant to the Debt Collection Act of 1982 (Public Law 97-365) and regulations of the U.S. Department of Labor (29 CFR Part 20), the Occupational Safety and Health Administration is required to assess interest, delinquent charges, and administrative costs for the collection of delinquent penalty debts for violations of the Occupational Safety and Health Act.

**Interest:** Interest charges will be assessed at an annual rate determined by the Secretary of the Treasury on all penalty debt amounts not paid within one month (30 calendar days) of the date on which the debt amount
becomes due and payable (penalty due date). The current interest rate is one percent (1%). Interest will accrue from the date on which the penalty amounts (as proposed or adjusted) become a final order of the Occupational Safety and Health Review Commission (that is, 15 working days from your receipt of the Citation and Notification of Penalty), unless you file a notice of contest. Interest charges will be waived if the full amount owed is paid within 30 calendar days of the final order.

**Delinquent Charges:** A debt is considered delinquent if it has not been paid within one month (30 calendar days) of the penalty due date or if a satisfactory payment arrangement has not been made. If the debt remains delinquent for more than 90 calendar days, a delinquent charge of six percent (6%) per annum will be assessed accruing from the date that the debt became delinquent.

**Administrative Costs:** Agencies of the Department of Labor are required to assess additional charges for the recovery of delinquent debts. These additional charges are administrative costs incurred by the Agency in its attempt to collect an unpaid debt. Administrative costs will be assessed for demand letters sent in an attempt to collect the unpaid debt.

[Signature]

David Nelson  
Area Director  

[Signature]

Date  

12/19/12
Halliburton Energy Services
SAFETY NARRATIVE

Inspection Number  531179

COVERAGE INFORMATION: This company works in many states and uses materials and tools from around the world.

NATURE AND SCOPE: This was a fatality investigation from a pipeline rupture. The scope was comprehensive for all companies involved.

Check Applicable Boxes and Explain Findings:

☐ Complaint Items
☐ Referral Items
☐ Accident Investigation Summary & Findings
☐ LEP
☐ Planned Inspection
☐ Follow-up Inspection

NATURE AND SCOPE – UNUSUAL CIRCUMSTANCES (Mark X and explain all the apply:)

☐ None
☐ Denial of entry (see denial memo)
☐ Delays in conducting the inspections: The large number of companies of whom all but one were represented by council.
☐ Strikes
☐ Jurisdictional Issues
☐ Trade Secrets: BP and Halliburton requested that the files be marked confidential
☐ Other

OPENING CONFERENCE NOTES: All companies involved with inspection and investigation were given at least one Opening Conference. The logistics of the case were such that more than once the investigation was halted while a company was afforded an OC. The reason was a fatality and the purpose was to find any flaws in program or procedure to be fixed so as to not have this situation occur
again. The scope was comprehensive in all cases.

The aspects of a WA were explained and at times adjusted due to large numbers of interested parties and legal council concerns. Video, measurements, programs, plain view, multi-employer, interviews, and participation were all explained and discussed.

**COMPLIANCE PROGRAMS**
(engineering controls, PPE, regulated areas, emergency procedures, compliance plans, etc.)

*Some of the BP sites are eligible and fall under PSM standards*

Address any relevant compliance efforts regarding potential health hazards covered by the scope of inspection.

**PERSONAL HYGIENE FACILITIES AND PRACTICES**
(showers, lockers, change rooms, etc.)

Are any required by OSHA health standards?

- [ ] Yes  
- [x] No

What Standards:

**HAZARD COMMUNICATION PROGRAM**

Written Program (complete)

- [x] Yes  
- [ ] No

MSDS's (all)

- [x] Yes  
- [ ] No

Labeling (adequate)

- [x] Yes  
- [ ] No

Training (complete)

- [x] Yes  
- [ ] No

Copy of MSDS's/Program attached

- [ ] Yes  
- [x] No

Comments:

**ACCESS TO EXPOSURE & MEDICAL RECORDS**

**FIRE PROTECTION AND EVACUATION PROCEDURES**
SYSTEMS SAFETY AND EMERGENCY RESPONSE

RESPIRATOR PROGRAM

LOCKOUT TAGOUT / ELECTRICAL SAFE WORKPRACTICES: The LOTO program for the site comes into play with the incident. It is believed that the program for this work was correctly addressed by the LOTO done at the scene of the incident.

FIRST AID

ELECTRICAL SAFE WORKPRACTICES

EXPOSURE CONTROL PLAN

LABORATORY STANDARD

ERGONOMIC PROBLEMS

☐ Yes  ☒ No
If yes, complete items 1 and 2 below.

1. Lifting (10% or more similarly exposed employees injured)
   a. Total # of employees exposed to job:
   b. Total # of cases for job:

2. CTD's (10% or more similarly exposed employees have CTD's; 5% or more CTS cases)
   a. Total # of employees exposed to job:
   b. Total # of cases for job:

Other significant injury/illness trends

☐ Yes  ☒ No
If yes, explain:

EVALUATION OF EMPLOYER'S OVERALL SAFETY AND HEALTH PROGRAM

General Industry:  
☐ Yes  ☐ No  Employer has a Safety & Health Program
☐ Yes  ☐ No  Written
☐ Yes  ☒ No  Copy Attached
Construction Industry:

☐ Yes    ☐ No  Accident Prevention Program

☐ Yes    ☐ No  Written

☐ Yes    ☐ No  Copy Attached

Evaluation of Safety and Health Program
(0=Nonexistent 1=Inadequate 2=Average 3=Above average)

☐ 3 Written S&H Program

☐ 3 Communication to Employees

☐ 2 Enforcement

☐ 3 Safety Training Program

☐ 3 Health Training Program

☐ 3 Accident Investigation Performed

☐ 3 Preventive Action Taken

Comments:

CLOSING CONFERENCE NOTES:

Were any unusual circumstances encountered such as, but not limited to, abatement problems, expected contest and/or negative employer attitude? If yes, explain below:

☐ Yes    ☐ No  All parties were very cooperative for investigation

19. Closing Conference Checklist ("x" as appropriate)

☐ No Violations Observed

☐ Gave Copy Employer Rights

☐ Reviewed Hazards and Standards

☐ Discussed Employer Rights/Obligations

☐ Encouraged Informal Conference

☐ Offered Abatement Assistance

☐ Discussed Consultation Programs
A closing conference was held at the BP offices on Aug 1, 2012. The OSHA 3000 pamphlet was gone over and discussed till there were no further questions of me. This was a conference call, with all phone and in persons listed in casefile. The investigation was in the position of being very active on all parties part, with metallurgical testing and other interviews being done. The facts as were known at that time were considered in the discussion as to possible citations. The abatement and abatement dates for such possible citations were discussed. The assorted company programs, policies, and records were requested from the parties. I left several pieces of literature and departed the site.

Michael L. Kelly