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DIVISION OF OIL & GAS

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July 6, 2007

The Honorable Bart Stupak, Chairman
Subcommittee on Oversight and Investigations
Committee on Energy and Commerce
U.S. House of Representatives
2125 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairman Stupak:

I am in receipt of a June 20, 2007 letter from Chairman John D. Dingell of the Committee on Energy and Commerce which forwarded 13 questions related to my testimony, on May 16, 2007, at the hearing entitled "2006 Prudhoe Bay Shutdown: Will Recent Regulatory Changes and BP Management Reforms Prevent Future Failures?" Per Chairman Dingell's request, I am responding directly to you regarding those questions. The response, in italics, immediate follows the question.

1. Does the build-up of sediment in a pipeline send up a red flag, since bacteria can flourish under sediment and lead to aggressive microbial corrosion?

   Yes. Sediment in a pipeline can cause or contribute to problems, including providing an environment in which corrosion-causing bacteria can grow, creating difficulties with intelligent pigging, and blocking of corrosion inhibitor interface with the pipe wall. The presence of sediment is therefore a red flag for consideration of these issues, and generally calls for measures to remove it and to prevent its build-up.

2. Does the build-up of sediment in the bottom of a pipeline act as a shield which prevents biocide and other corrosion inhibitors from reaching corrosion causing bacteria?

   Yes. Build-up can interfere with the effectiveness of biocides or corrosion inhibitor, which work best on clean pipe.

3. A "Compliance Order by Consent" was issued to BP by the Alaska Department of Environmental Conservation (ADE) in May 2002, which included a requirement for BP to determine sediment levels and to commence pigging certain oil transit lines by September 2002. However, on August 9, 2002, BP asked to eliminate the requirement for pigging these oil transit lines. On August 14, 2002, ADEC sent a letter to BP agreeing to eliminate the requirement for pigging these lines. Why did ADEC agree to eliminate the requirement for maintenance pigging these oil transit lines to remove sediments? Is there documentation to support this decision? Do you agree with this decision?

I answered these questions in my letter of June 5, 2007, and provided copies of the documentation supporting my response. That letter and its attachments are provided as an attachment to this letter.

4. Your testimony states: "The events of 2006 in the Prudhoe Bay Unit taught us that we cannot rely on 'enlightened self interest' to ensure that prudent maintenance practices are carried out." Please explain why, in your view, BP's enlightened self interest allowed their assets to corrode and deteriorate into an unserviceable state – leading to the partial shutdown of the field?

   The State is investigating the exact sequence of events and decisions that led to the final state of BP's Prudhoe Bay Unit assets in 2006. One can surmise, however, that the cost-saving benefits realized in the short-term were an important factor in the initial decisions made regarding routine pipeline maintenance procedures such as pigging, and use of corrosion inhibitor. It is dismaying that appearances seem to indicate what may have begun as a means to short-term budget relief became, in the end, a long-term practice.

5. What specific steps will the Petroleum Systems Integrity Office (PSIO) take to prevent cost cutting from compromising the safety and integrity of the pipelines under your jurisdiction?

   The PSIO will require submittal of Systems Integrity Plans (SIPs) from unit operators, to identify the maintenance programs and quality assurance programs that they will use. The adequacy of those plans will be assessed by the PSIO independent of any cost considerations. Compliance will be determined through self-reporting, and compliance audits and site inspections performed by the PSIO.

6. Please describe the milestones and deadlines for BP Prudhoe Bay's operations with respect to the new quality assurance program led by your Office.

   At this time, firm deadlines have not been established for submittal of BP's System Integrity Plan, a key component of the PSIO quality assurance program for the Prudhoe Bay Unit. The Pipeline and Hazardous Materials Safety Administration (PHMSA) of the U.S. Department of Transportation is considering a Consent Agreement with BP to close the Compliance Orders and Amendments issued in 2006. The significant changes required of BP through the Compliance Orders and Amendments, as well as any that may be forthcoming via a Consent Agreement, will determine to a large extent BP's structure and work processes that will be an integral element of the System Integrity Plan that BP will submit to the PSIO. It is of great value to the quality assurance interests of the PSIO to allow the requirements for those structures and work processes to be fully defined before the Prudhoe Bay Unit System Integrity Plan is required and submitted.

7. Has the State assessed the extent of cost cutting in BP's corrosion protection programs at Prudhoe Bay?

   The State is examining many of the same documents provided to your Subcommittee before, during and after the May 16, 2007 hearing. That examination is continuing.

No conclusions have been reached regarding the extent of cost cutting in BP's corrosion prevention programs at Prudhoe Bay.

8. Was the State of Alaska ever advised of BP's proposals to save money by turning off corrosion inhibitor in its produced water lines? If so, what steps were taken by ADEC?

   The State was not informed of such a proposal. We were told in approximately March of 2003 that supplemental produced water injection systems had been initiated in 2002. See Commitment to Corrosion Monitoring Year 2002 at p. 51. In approximately March of 2004, BP repeated its statement that supplemental produced water corrosion inhibitor injection had been initiated, and that general corrosion rates in the produced water system had fallen. See Commitment to Corrosion Monitoring Year 2003 at p. 49. BP also stated that its corrosion control program "now includes limited inhibitor injection in the PW system at FS-1, FS-3, GC-1, GC-2 and GC-3." Id. at 52. This same information was repeated the following year, see p. 21 of Commitment to Corrosion Monitoring Year 2004. In approximately March 2006, we were also told that "supplemental corrosion inhibition of the PW system will be expanded to FS2 in 2006," see p. 87 of Commitment to Corrosion Monitoring Year 2005. The referenced Corrosion Monitoring reports are available at: http://www.dec.state.ak.us/spar/ipp/nscharter.htm .

9. Booz Allen identified the absence of a process safety management system as a key failing in BP's Prudhoe Bay operations. What specific actions is your office taking to ensure that BP implements an effective process safety management program with respect to pipelines under your jurisdiction?

   The Alaska Occupational Safety and Health (AKOSH) program intends to increase and focus enforcement efforts on oil and gas infrastructure inspections within its jurisdiction to ensure compliance with process safety management (PSM) requirements. These inspections will not be focused solely on BP's Prudhoe Bay operations, but will include those sites as potential enforcement targets.

   In addition, the AKOSH program is working with BP and other companies in the oil and gas industry on a consultative basis. These inspections will also evaluate PSM systems, when applicable, at oil and gas processing facilities to ensure compliance with occupational safety and health standards.

   Under federal regulations adopted by the State of Alaska for process safety management standards (29 CFR 1910.119(a)(2)), "oil or gas well drilling or servicing operations" and "normally unoccupied remote facilities" are not subject to the standards. These exceptions are noteworthy, as several facilities at Prudhoe Bay fall into one of these categories.

10. The Office of Pipeline Safety testified that they will be monitoring BP management incentives to ensure that management does not incentivize decisions which could compromise process safety or corrosion protection. Will the State of Alaska be taking parallel actions with respect to pipelines under its jurisdiction?

The State of Alaska does not have the authority to require information relating to management salaries, contracts, and incentives. The State is a joint signatory to a Letter of Intent with the Office of Pipeline Safety that includes the sharing of information and findings. The State may therefore be informed of such information through that avenue, but does not plan to independently seek the authority to require or engage in those issues.

11. The Federal Occupational Safety and Health Administration (OSHA) asserts that Alaska OSHA has authority to regulate process safety management in the gathering centers and compressed gas operations at Prudhoe Bay. Does Alaska OSHA have process safety management regulations that mirror those of Federal OSHA?

    The State of Alaska's Department of Labor and Workforce Development has adopted the federal OSHA standards (29 CFR 1910.119)d for process safety management pursuant to Alaska Statute 18.60.030(6) and 8 Alaska Administrative Code (AAC) 61.1010(b). Additionally, the State has adopted particular standards beyond those of federal OSHA related to petroleum refining, transportation and handling under 8 AAC 61.1190, and related to petroleum drilling and production under 8 AAC 61.1180. (See Alaska Statute and AAC references, Attachment 2.)

12. Has Alaska OSHA ever conducted a process safety management inspection of the gathering centers and the gas compression center? How many times and on what dates?

    AKOSH has conducted several inspections of the gathering centers and gas compression center at Prudhoe Bay (see spreadsheet, Attachment 3).

13. BP's fire and gas systems in the gathering centers have aged and are in need of a major upgrade. Please describe the PSIO's plans with respect to overseeing process safety management at the gathering centers?

    PSIO defers oversight of fire and gas systems to the Department of Public Safety, Division of Fire Prevention (DFP). The DFP has authority to establish regulations for the design, installation and maintenance of all fire and gas detection, suppression and inerting systems, establishes the adoption of the state building, fire and mechanical codes and conducts fire and life safety plan reviews for all new and renovation construction. Additionally, the DFP conducts fire and life safety facility inspections based on hazard risk to life safety.

    The DFP agrees that the fire and gas detection systems in the Gathering Centers have aged and are in need of upgrading. The DFP identified this fact through trend analysis of system failures that resulted in numerous halon discharges, false alarms and system "down time." The DFP determined that fire and gas detection system obsolescence resulted in the non-availability of replacement parts and the need of to upgrade some facilities and cannibalize older systems for parts, specifically in Gathering Center 1 (GC-1).

In response the DFP reviewed BP's maintenance practices, procedures and documentation, and found that BP's self-monitoring of its maintenance program needed improvement. BP revamped its maintenance system, increased its manpower pool of certified fire and gas technicians and conducted its own risk analysis of the system.

As a result, BP developed a test bed for advanced technology in the late 1990s with implementation of a pilot project, the new Autronica Fire and Gas system, at GC-1. This led to an expansion of the system throughout GC-1 in 2005.

Gathering Center 2 (GC-2) and 3 (GC-3) have not been updated. Maintenance is becoming more difficult for the same reasons as it did at GC-1 prior to its fire and gas detection/suppression upgrade. BP has verbally acknowledged this but has committed no funding for the engineering required to effect upgrades, nor has it established a timetable for upgrades by which it holds itself accountable. As a stop gap measure, obsolete CP 250 fire panels are being replaced piecemeal with new Detronic Notifier panels, where possible in the facilities.

As long as BP can continue to keep the fire and gas systems of GC-2 and GC-3 working and maintained, as specified by state regulation, the DFP cannot mandate but only suggest that the system be upgraded. The authority of the PSIO will be evaluated to determine if additional action by BP in this regard can be pursued.

In addition to the DFP's efforts regarding fire and gas suppression systems, the Department of Labor and Workforce Development/AKOSH is targeting oil and gas infrastructure in Alaska for compliance with process safety management standards. The gathering centers are included in this targeting focus.

Thank you for the opportunity to provide additional information in response to your questions, and for the opportunity to appear before the Subcommittee.

Sincerely,

Jonne Slemons
Petroleum Systems Integrity Office Coordinator

Enclosures:

1) Letter from J. Slemons to Ch. B. Stupak, June 5, 2007 and attachments:
    a) October 16, 2006 Fredriksson/ADEC Letter to Hon. Joe Barton
    b) August 9, 2002 Campbell Letter to L. Miner/ADEC
    c) August 14, 2002 Miner/ADEC Letter to G. Campbell
    d) November 26, 2002 Conrad letter to C. Leonard/ADEC
    e) March 25, 2003 Bronson Letter to J. Mach/ADEC
    f) April 3, 2003 Hutmacher/ADEC Letter to J. Fritts

g) October 13, 2006 Gaynor Letter to Snowdon, Knauer
h) February 13, 2002 Phillips Letter to M. Barnes
i) January 31, 2002 Conrad Letter to C. Leonard/ADEC, with attachments
j) October 19, 2002 Campbell E-mail to Phillips, Blankenship, Conrad
k) September 16, 2002 Jacobsen E-mail to Phillips, with attachments
l) November 18, 2002 Phillips Letter to M. Barnes
m) October 1, 2001 Campbell Letter to R. Watkins, with attachments
n) "Redacted Interim Report of Investigation" by Garde and Clifford
o) "GPB Leak Detection Summary 10-13-2002"
p) October 18, 2002 Bruchie E-mail to Neill
q) Excerpt, "Commitment to Corrosion Monitoring, Year 2002"
r) Excerpt, "Commitment to Corrosion Monitoring, Year 2003"
s) Excerpt, "Commitment to Corrosion Monitoring, Year 2004"

2) Alaska Statute and Administrative Code Citations provided in response to Question 11.

3) Inspection Spreadsheet referenced in Question 12.

cc (w/enclosures):
The Honorable Sarah Palin, Governor, State of Alaska
The Honorable Ted Stevens, Senator, U.S. Senate
The Honorable Lisa Murkowski, Senator, U.S. Senate
The Honorable Don Young, Representative, U.S. House of Representatives
The Honorable Joe Barton, Representative, U.S. House of Representatives
The Honorable Ed Whitfield, Representative, U.S. House of Representatives
Vice Admiral Thomas J. Barrett, USCG (Ret.), Deputy Secretary, U.S. Department of Transportation
Stacey Gerard, Chief of Pipeline Safety, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation
Commissioner Thomas Irwin, Alaska Department of Natural Resources
John Katz, Director, Alaska Governor's Office, Washington, D.C.
Christopher Knauer, U.S. House of Representatives