

BP's Ineffective Corrosion Monitoring Program on the North Slope of Alaska

**Analysis provided by *BPCONCERNS.com*
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I. PURPOSE:

This analysis is the first in a series of reports and exposes which will be developed and posted by *BPCONCERNS.com* to identify and reveal publicly, errors, miscalculations, and when appropriate, allegations and evidence of intentional violations and neglect by BP and others in the oil industry.

II. THE PLAYERS:

BP, formerly known as British Petroleum, is a major multinational oil company that posted record annual profits for 2005 at \$19.3 billion up 25 per cent compared with 2004. BP is the majority owner of the Trans Alaska Pipeline, as well as the majority owner and operator of the North Slope of Alaska. BP in Alaska is known as BP Alaska Exploration Inc. or "BPAX" but will be identified in this analysis as "BP". Also, for the purposes of this analysis, the state agency responsible for oversight of BP in Alaska is the Alaska Department of Environmental Conservation, Division of Spill Prevention and Response, which will be identified merely as "ADEC."

III. SUMMARY:

In late 2001, Coffman Engineers Inc. was placed under contract by ADEC to review the BP North Slope Corrosion Monitoring program and provide a report. *BPCConcerns.com* recently discovered that Coffman-Engineers issued two reports to ADEC. The initial Coffman report was highly critical of BP and was reportedly suppressed by ADEC due to extreme pressure by BP to do so, and the second report, reportedly heavily edited and revised at BP's direction, is the "official" report that the Alaska state agency, ADEC acknowledges. In Section VIII we will compare details in the two reports.

IV. RECENT HISTORY:

As reported extensively in the national media over the past several weeks, the flawed BP corrosion program has allowed the largest spill ever on the North Slope to occur, spilling in excess of 267,000 gallons. Even by BP's own reluctant admission, this spill was caused by internal corrosion.

How did this massive spill occur, especially in light of the recently exposed detailed Coffman report that warned the State of Alaska in 2001 of inadequate BP corrosion monitoring and control? Why didn't ADEC act then? The study and subsequent report was to be prepared and provided to ADEC by the aforementioned independent third-party entity, Coffman Engineers¹. Few people, outside select DEAC and BP personnel, realize

there were actually two Coffman Engineers reports issued to ADEC but only one was made public. Why was the first Coffman report suppressed?

V. TWO CONFLICTING COFFMAN REPORTS:

Coffman Engineers did indeed produce an initial, well-researched, complete but succinct eleven page report, almost devoid of ambiguity, including significant but not burdensome details, footnotes, and references. For the purposes of this analysis it will be identified as the "First Coffman Report."² This "First Coffman Report" identified numerous deficiencies with BP's North Slope corrosion monitoring program. The second report was heavily edited and revised with direct BP influence and for the purpose of this analysis, is identified as "BP Revised Second Report." The "BP Revised Second Report" was reduced from the original eleven pages to eight pages, a number of key problems that were identified were redacted, and major expository evidence was "revised" that were identified in the earlier "First Coffman Report."

VI. BP EXPRESSED DISSATISFACTION TO ADEC:

In a previously unreleased BP document, "BP Response to Coffman Final Draft" dated November 2001, BP displays a show of power and influence over Alaska regulators, by first dismissing and degrading the results documented in the "First Coffman Report" and then pressuring ADEC to make the extreme revision of the Coffman Engineers "First Report" to make it less "negative." It has been alleged that ADEC Director Larry Dietrick complied with BP's demands without question.

BP demanded that Coffman Engineers, Inc. dilute the most damning comments, remove whole negative sections of the report, and revise the entire report, as BP noted, "The whole tone of the report [First Coffman Report] seems extremely negative ... and "[presents] very few positive references." BP went on to quietly upbraid ADEC Director Larry Dietrick for the report, "It would be more appropriate if the report was worded as a request for more information and suggested actions or options to be investigated." ADEC was extremely compliant to BP's demands and allegedly intimidated Coffman Engineers to rewrite the report with BP's changes incorporated.³

VII. ADEC CALLS FOR DRASTIC REVISIONS OF REPORT AT BP'S REQUEST

The following conflicting findings in the two reports demonstrate the duplicity of BP and the danger of the alleged complicity of ADEC Director Mr. Dietrick with Mr. Mach. Please see excerpts from the Coffman "First Report" (blue heading) and the corresponding revised findings in the "BP Revised Report" (red heading). All comments are verbatim from the two reports unless cited otherwise.

VIII. COMPARISON OF THE TWO REPORTS

EXECUTIVE SUMMARY EXCERPT from “First Coffman Report”:

BPXA [BP Exploration Alaska] stated intent to ‘report openly, good or bad ...’ the results of its corrosion management programs. However the reporting style makes it difficult to develop a qualitative understanding of the basis for their corrosion strategy. Program results have been reduced and factored; conclusions are hard to report without making inferences with regard to the underlying reasoning or strategy. The metrics chosen to report results make comparison to industry peers difficult to quantify. No discussion of the underlying program strategy is included other than to say, ‘Our corporate goals are no accidents, no harm to people and no damage to the environment.

EXECUTIVE SUMMARY EXCERPT, from corresponding section in the “BP Revised Report”:

BPXA has demonstrated a clear commitment to corrosion control. BPXA has developed a comprehensive program of monitoring and inspection.

EXECUTIVE SUMMARY EXCERPT from “First Coffman Report”:

*The actual magnitude of the corrosion increase is not reported and subsequent damage to the pipe wall due to increased corrosivity is not quantified.
External corrosion inspection levels are not consistent with the relative risk of an internal vs. external corrosion event.
No differentiation between weight loss and pitting corrosion are discussed.
No statistics on the extent of corrosion defects were reported.
Without knowing the baseline corrosion trend within its production system it is difficult to judge the effectiveness or value of the [corrosion] inhibition program.
Lastly, the [BP] Work Plan required a summary overview of ongoing structural concerns [pipeline structural integrity]. Structural issues beyond corrosion were not addressed in either the report or the presentation.*

EXECUTIVE SUMMARY EXCERPT, from corresponding section in the “BP Revised Report”:

All of the comments from the “First Report” (directly above) were struck from the “BP Revised Second Report” so there are no corresponding comments.

EXCERPT FROM BODY OF “First Coffman Report”:

While the BPXA report and presentation materials were an initial attempt to meet the expectations outlined in the Commitment to Corrosion Monitoring plan, it does not provide the information necessary for detailed technical analysis. (Emphasis added)

Corresponding section in the “BP Revised Report”:

The BPXA report and presentation materials were a positive step towards meeting the expectations outlined in the Commitment to Corrosion Monitoring plan.

EXCERPT FROM BODY OF “First Coffman Report”:

With the exception of corrosion under insulation the report does not discuss risk assessment protocols or risk based inspection.

Corresponding section in the “BP Revised Report”:

It is clear that a form of risk based resource allocation is used by BPXA

EXCERPT FROM BODY OF “First Coffman Report”:

BPXA reports its inspection results for internal corrosion as ‘percent of inspection increases’. Unfortunately only the percentage of inspections which show increases in damage is reported; not the magnitude of the wall loss.

Corresponding section in the “BP Revised Report”:

Deleted from BP Revised Report.

EXCERPT FROM BODY OF “First Coffman Report”:

Reportedly, these issues [problems with corrosion inhibitor and manpower reduction] have been rectified and they expect to be back on-track in 2001.

Corresponding section in the “BP Revised Report”:

The problem was identified and these issues have been addressed, and they expect to be back on track in 2001.⁴

EXCERPT FROM BODY OF “First Coffman Report”:

BPXA should include the results of smart pig runs if smart pig runs were made
(Emphasis added)

Corresponding section in the “BP Revised Report”:

If smart pig runs were made then inclusion of the results would be useful⁵
(Emphasis added.) This is more misleading semantics. Please see footnote 3 and 4 for further information.

EXCERPT FROM BODY OF “First Coffman Report”:

*Does BPXA pig every non-common carrier pipeline of suitable diameter?
Are there plans to install/reconfigure EOA pipelines for smart pigs?
Are baseline smart pig runs performed on newly commissioned lines?
How are lines selected for smart pigging and what is the recur frequency of inspection?
What were the service categories of the lines inspected and how did this inspection data compare to that gathered by other inspection techniques?*

Corresponding section in the “BP Revised Report”:

If maintenance pigging is a part of the corrosion mitigation effort, then discussing the pigging intervals and program details for various services would be useful.

EXCERPT FROM BODY OF “First Coffman Report”:

The reporting style and corrosion metrics used in the subject report makes it difficult to develop a qualitative understanding of the basis and underlying strategies employed by BPXA. The BPXA report was comprehensive in scope but lacked sufficient data for a technical analysis.⁶ (See footnote 6 for explanation of why the phrase “comprehensive in scope” was used.)

Corresponding section in the “BP Revised Report”:

The BPXA report and presentation demonstrates a proactive commitment to mitigate corrosion of non-common carrier pipelines and were a positive step towards meeting the expectations outlined in the Commitment to Corrosion Monitoring plan.

EXCERPT FROM BODY OF “First Coffman Report”:

Structural issues were not discussed and need to be included in future reports. Pipeline sagging due to support member frost-jacking, wind induced vibration, subsidence, and snow loading in pipelines already at risk due to pipe-wall thinning need to be addressed.

Corresponding section in the “BP Revised Report”:

*BPXA reports no current structural issues or concerns in the 2000 report.*⁷ (Emphasis added)

Section IX. CONCLUSIONS:

BP obviously influenced the DAEC to dilute the original Coffman Report to improve the “tone” with “positive” comments and removal of the “negative” to portray BP’s corrosion efforts in a more favorable light. Unfortunately, this also removed the very points that might have prevented the current spill and future spills. Especially troublesome is the revelation that BP and ADEC have been completely informed and aware of the potential for internal corrosion leaks since at least 2001. We should not be surprised that the recent spill occurred and we should expect more as this system ages and BP continues to reduce costs and manpower.

SECTION X. RECOMMENDATIONS:

- 1 An independent audit by the State of Alaska to examine the documents referenced in this *BPCONCERNS.com* analysis:
 - a. All Coffman Engineers Inc. submittals to ADEC.
 - b. All documents, notes, diaries, emails or other communications related to this issue held by Larry Dietrick, ADEC Director.
 - c. All documents, notes, diaries, emails or other communications related to this issue held by BP personnel that communicated with Larry Dietrick, ADEC Director.
2. Self disclosure by the ADEC to the United States Environmental Protection Agency and cooperation with any and all Investigators including Federal Criminal Investigators on this issue.

-Analysis by Glen Plumlee, former BP Analyst

¹ Coffman Engineers Inc. analysis of BP Corrosion Monitoring of Non-Common Carrier North Slope Pipelines – 2000 Commitment to Corrosion Monitoring – ADEC Contract No. 18-6000-02

² This “First Coffman Report” can be found in ADEC historical documents, under the ADEC title of Coffman Engineers, November 2001 Final Draft, Contract No. 18-6000-02.

³ The ADEC and BP documentation described in this analysis can be requested, and received, typically free of charge, by using the Alaska State version of the Freedom of Information Act, that is, if the originals have not been “inadvertently” destroyed or lost by the agency in question. In the near future a link and examples of past, successful freedom of information requests submitted by concerned Alaska citizens will be provided on this site free to be used as a guide as needed. We will also include U.S. Federal Freedom of Information Act request examples, information, and links.

⁴ Please notice the revision of the phrase, “Reportedly have been rectified” used in the first report that was changed in the BP revised report to read, “The problem was identified and issues have been addressed.” The first report implied that although reportedly the problem had been rectified it was still in question by Coffman Engineers. In the second revised BP the wording was softened and states that the “issues” (not “problems”) were “addressed” (not “rectified”) indicating that they may have misled regulators in earlier BP reports and presentations. Semantics of this sort are very typical in oil industry reports and white papers.

⁵ The words “should” and “shall” have very precise definitions in the oil industry regulations and standards. The phrase “would be useful” indicates an afterthought and not even a recommendation. That is not what Coffman Engineers originally had in mind when they used the word “should”. It was meant as a recommendation. This is well understood in oil industry documentation.

⁶ Again, this is a common technique in oil industry and popularly called “cover ‘em up with paper”, therefore the qualifying statement by Coffman Engineers, that BP provided a “comprehensive report” but it still “lacked sufficient data.” This was a generous and respectful way for the author of the report to notify BP that the ploy to turnover large amounts of documents but no real data had not influenced his findings.

⁷ The use of the word “current” allows a future escape from responsibility. Using “current” is another word device used in the oil industry to provide cover if future problems do occur, e.g., total failure of a pipeline due to the snow load, wind, subsidence, etc. described in the “First Coffman Report.”