

PERRY & HAAS

ATTORNEYS AT LAW

2300 Frost Bank Plaza | P.O. Box 1500 | Corpus Christi, Texas 78403
Telephone (361) 880-7515 | Telecopier (361) 887-9507
www.perryhaas.com

May 27, 2009

Silvia Murphy, Attorney-Advisor
Division of Mineral Resources
Office of the Solicitor
U.S. Department of the Interior
1849 C Street, N.W.
Washington DC 20240

Via e-mail to Silvia.Murphy@sol.doi.gov

Re: Kenneth Abbott/BP Atlantis Threat to GOM Environment

Dear Ms. Murphy:

Thank you very much for taking the time to participate in our long telephone conversation on May 19, 2009. We very much appreciate the fact that Mr. Saucier, Mr. Domangue, Ms. Moser, and Mr. Herbst were available on the phone and participated as well.

The purpose of this letter is to restate in writing our concern that the BP Atlantis Project presently poses a threat of serious, immediate, potentially irreparable and catastrophic harm to the waters of the Gulf of Mexico and its marine environment, and to summarize how BP's conduct has violated federal law and regulations.

Threat to the Gulf of Mexico Environment

We are at the beginning of hurricane season in the Gulf of Mexico. A major hurricane may very well require a shutdown and restart of Project Atlantis. Shutdowns and startups are well understood in the industry as the most potentially dangerous portions of operations and require access to critical documents which, for BP Atlantis, do not exist. This requires urgent action to prevent a catastrophe.

We have provided MMS with detailed documentation that BP does not have and does not maintain "as-built" drawings for critical subsea equipment; its primary engineering contractor does not have such documents. Critical documents which are necessary for the safe operation and maintenance of the Project, but which do not exist, include "as built" documents for piping and instrument diagrams ("P&IDs") and safety

shutdown systems logic (“SSS logic”) diagrams. P&IDs which accurately detail the piping and instrument systems for the project and are vital to both shutdown and start up. “As-built” P&IDs do not exist except for isolated documents. Likewise, earlier stage, “approved for design” P&IDs do not exist except for isolated documents. Eighty-five percent of subsea P&IDs have no engineering approval of any kind. BP document management has refused to provide BP operations with P&IDs because they are incomplete and their accuracy is unknown. Without completed P&IDs, shutdown and start up operation procedures cannot be verified; hazard analyses (HAZOPs) required to assure safe equipment and procedures, cannot be performed reliably.

Safety shutdown systems, designed to automatically shut down critical operations if needed, are equally vital. Complex, computerized logic systems receive data inputs reflecting temperature, pressures, flow rates, valve settings and dozens of other parameters from hundreds of inputs throughout the project and, in emergencies, are to issue instantaneous electronic directives which can shut down systems, including wellheads located more than a mile below the surface of the sea. Many SSS logic diagrams are not in “as built” status but are listed as “needing up-date.” Attempting to operate with SSS logic paths which are not finally approved “as-built,” and which may be inaccurate, is an invitation to disaster.

Hurricane season is also likely to create maximum stress on thousands of welds, many of which must contain oil and gas under high pressures far beneath the surface of the sea. Yet, thousands of critical welds cannot have been properly inspected for compliance with welding specifications because the welding specifications were never finalized and because inspection requirements were never finalized. Over 95% of welding specifications have no final engineering approval. Inspection requirements likewise have no engineering approval.

From our conversation on the phone, we understand that MMS is already aware that undersea manifolds have been leaking and that major flow lines must already be replaced. Failure of this critical undersea equipment has potentially catastrophic environmental consequences. At the time of Hurricane Dennis, in 2005, Atlantis’ sister platform, BP Thunder Horse, nearly sank due to an improperly installed check valve system. Weld failures on Thunder Horse manifolds were found requiring major equipment replacement. The same pattern of preventable failure is underway on BP Atlantis.

Internal BP documents characterize the situation as having the potential for “catastrophic operator errors,” stating that “hundreds if not thousands” of documents are unavailable or incomplete. All of these items are of critical importance to the safe and proper functioning of a system which handles oil and gas flows thousands of feet beneath

the surface of the sea under extreme pressures and temperatures. BP Atlantis is currently the deepest moored floating production facility in the world. The extreme depth of Atlantis operations (greater than 7,000 ft.) poses exceptional challenges from engineering, construction, operational and maintenance standpoints. While design documentation shortcuts are unacceptable for any engineering project, the accuracy and detail of Atlantis subsea engineering and design is especially vital to safe operations and protection of the environment. Yet, BP management has rejected requests by its own employees to remedy the unsafe situation because of the estimated multi-million-dollar cost involved.

The threat to the marine environment of the Gulf of Mexico is immediately present; it threatens a catastrophic event which could dwarf the Exxon Valdez or Alaskan pipeline spill disasters. We urge MMS to act.

Violations of Statutes and MMS Regulations

The P&IDs and other documents which BP does not have are required by MMS regulations. 30 C.F.R. §§ 250.903 (a)(1) and 250.905(j) both directly require maintenance of “as built” documents for the life of the project. In addition, 30 C.F.R. §§ 250.800(b)(1) and 250.901(a)(10) both incorporate by reference API RP [American Petroleum Institute Recommended Practice] 14J “Recommended Practice for Design and Hazards Analysis for Offshore Production Facilities.” That document outlines minimum necessary safety documentation, including P&IDs and logic diagrams, needed to perform the required hazard analysis and *which is to be maintained for the life of the project* (API RP 14J, Appendix A.2 [“REQUIRED INFORMATION” including P&IDs to “be maintained throughout the life of a facility . . .”).

The suggestion made during the telephone conference that “as built” documentation is to be maintained only for the “platform” and not for the subsea portions of the project does not appear in the regulations. No language in the regulations so indicates. Each of the four sections cited and API RP 14J all explicitly deal with both surface and subsurface structures and appurtenances as well as those which traverse from one element to the other. None limit the obligation to maintain documents to “surface” or “platform.” The failure to have and maintain “as built” P&IDs and other documents is not only highly dangerous; it is a clear violation of MMS regulations.

BP Atlantis is also in violation of regulations because major portions of the project do not have the required engineering certifications. As discussed above, 85% of the subsea P&IDs have no engineering approval of any kind, in direct violation of the

requirement that the structure be built to a “certified” engineering design, and that BP so certify. Sec. 250.905(j).

The total number and percentage of critical documents never receiving engineering approval is breathtaking, over 90% in many critical sectors.

Subsea Systems (DC-1 Only)

Sector No.	Total	IFD	IFC	As-Blt	Not App	% Not App
30 Subsea Systems (wellheads, manifolds, flowlines and risers)	1,266	27	86	101	1,052	83%
31 Wellheads	22	0	0	0	22	100%
32 Trees	570	1	9	1	559	98%
33 Manifolds	161	5	4	0	152	94%
34 Pipelines/Flowlines	2,383	1	108	0	2,274	95%
35 Controls	1,351	14	36	36	1,265	94%
36 Umbilical	454	2	201	56	195	43%
37 Risers	750	0	1	80	669	89%
38 Installation	219	0	14	0	205	94%
TOTALS	7,176	50	459	274	6,393	89%

Finally, BP is in violation of regulations for failure to comply with the API RP 14J, the recommended practice for hazard analysis. Compliance with this industry standard is both required and is an explicit pre-condition to start of production. 30 C.F.R. § 250.800. Subsection (a) prohibits commencement of production without MMS

approval of the production safety system for the project; subsection (b)(1) requires that the production safety system comply with API RP 14J.

The P&IDs which BP does not have are part of the “minimum” safety and environmental information which must be “developed and maintained for all facilities” and provide “the basis for hazards analysis, developing operating procedures, for training personnel and for implementing” other elements of the safety and environment programs. (API RP 14J, p. 31). They are necessary to perform the API RP 14J hazard analysis which is required to begin production. API RP 14J, Appendix A.2 [“REQUIRED INFORMATION” includes “process flow diagrams and P&IDs”].

API RP 14J explains that P&IDs provide the definition of the system which is the basis of the hazards analysis:

“Detailed P&IDs should show equipment and interconnecting lines, including relief, vent and drain systems. These drawings should include all control valves and controllers, manual valves, check valves, pressure relief valves and safety shutdown sensors. Set points of pressure relief valves and maximum allowable pressure ratings of piping systems should also be shown. Utility systems, line numbers, valve types and individual instrument tag numbers should be indicated.” (Sec. 6.4.3).

14J explains that the formal hazard analysis is done during the detailed design phase of the project (7.3(3)), “after P&IDs are complete.” HAZOP “requirements include a complete set of process flow diagrams, P&IDs, ...” (API RP 14J, p. 39 and Appendix A.2).

P&IDs are required again during the “PRE-START-UP REVIEW” to assure that piping is routed and valved according to the P&IDs.” (API RP 14J 6.5)

Thus, P&IDs and hazards analysis are not only regulatory requirements, they are two of the critical foundations for eliminating potential hazards from the project design, and for maintaining safe operations after start-up. Without these documents and the engineering precautions they represent, BP Atlantis is a catastrophe in waiting.

BP’s Criminal Record

BP’s long record of criminal as well as civil violations heightens concern that excessive cost-cutting will result in catastrophe. BP’s record includes (but is not limited to) these violations:

- BP's environmental crimes resulted in 15 deaths and hundreds of injuries in the Texas City Refinery explosion of 2005, for which BP had paid a \$50 million fine as part of a federal felony plea. Both before and after this massive explosion, safety-related violations have averaged one death per year (in addition to the 15 in March, 2005) in this refinery for nearly 10 years.

- BP's criminal negligence in Alaska resulted in the largest oil spill ever on the North Slope from BP's corroded, unmaintained pipelines across the frozen tundra, leading to a \$20 million criminal fine. This was one of two major BP spills in 2006, following a \$1.4 million fine for safety violations in 2005, and other fines for safety violations and violations of leak detection standards in 2002 and 2003. Three years earlier, in 2000, it had paid \$15 million for dumping hazardous materials onto the Alaska North Slope and promised never to do it again.

- This year BP entered a consent decree for almost \$175 million resulting from its violations of an earlier Clean Air Act consent decree in 1991.

- In 2007, BP agreed to pay over \$300 million in fines and penalties from its manipulation of the propane market.

- Also in 2007, BP was fined for leaking underground storage tanks in Michigan.

- In 2000, BP paid a fine for unlawfully polluting the Allan River in Scotland.

- Also, in 2000, BP paid \$32 million under the False Claims Act for underpayment of royalties on federal and Indian leases.

DOI and MMS Have Duty and Authority to Act

The Submerged Lands Act specifically provides:

for the suspension . . . of any operation . . . , **including production**, . . . if there is a threat of serious, irreparable, or immediate harm or damage to life (including fish and other aquatic life), . . . or to the marine, coastal, or human environment"

Such a threat exists as the result of BP's conduct. The only way to protect the Gulf of Mexico marine environment from this potential for catastrophe is to halt production through this platform until the massive safety failures related to Project Atlantis are rectified.

On behalf of our client, Mr. Kenneth Abbott, we request that DOI and MMS take immediate action to halt production and protect the marine environment. We also request that we be notified of whatever decision DOI and MMS make on this request.

Very truly yours,



David L. Perry

DLP:sbd

cc (via Federal Express overnight delivery):

The Honorable Ken Salazar
Secretary of the Interior
U.S. Department of the Interior
1849 C Street, N.W.
Washington DC 20240