VIA FACSIMILE ONLY (202) 314-6482

Allan Behsore National Transportation Safety Board 490 L'Enfant Plaza East, S.W. Washington, D.C. 20594-2000

Dear Mr. Beshore:

As requested, I am providing you with IMCO's proposed recommendations and conclusions to assist you in the preparation of your final report on the June 10, 1999, Olympic Pipeline rupture and explosion. At the outset, I would like to thank you for allowing IMCO to participate in your investigation as an interested party. This has been a very difficult three years for Frank and I, personally, and for our company. We continue to be outraged and frustrated as Olympic and Equilon attempt to deflect blame from their own reprehensible conduct in this tragic event.

We expected to have our day in court in April 2002, to prove that we had done nothing wrong. However, our insurance company, based on <u>their</u> risk analysis and for economic reasons, and against our express wishes, agreed to participate in settlement of the wrongful death claims, and deprived us of an opportunity to clear our name. Now, we have been told that Olympic's claims against IMCO will be tried in one of the federal court cases, but that trial is not scheduled to start until 2004! Hopefully, the NTSB's final report will resolve some of the key factual issues, and convince Olympic to dismiss their claims against IMCO.

The NTSB draft reports have been shared with the experts retained to assist us in the civil matters. They were asked to provide you with feedback on a variety of issues, and I trust that you have reviewed whatever they have submitted on IMCO's behalf, and, as appropriate, will incorporate that information into your final report. As was the case with Mr. Whaley, if you want to contact any of our experts, please let me know, and I will assist you in setting up a teleconference. In addition to the expert feedback, I feel that you have generally taken my comments into consideration. However, there is still information in the Water Treatment Factual Report that is misleading and inaccurate, and should be clarified or omitted from you final report.

A. Mark Graham's Testimony that IMCO Struck Olympic's Pipeline Should Not be Included in the NTSB's Final "Factual" Report.

A couple of months ago, I wrote to you concerning the deposition testimony of electrician Mark Graham. As you may recall, Mr. Graham was first deposed in the wrongful death case two years ago. At that time, he testified that he saw an IMCO excavator hit the Olympic pipeline, and that IMCO's superintendent ordered that the damage be covered up. We were obviously shocked and confused by this dramatic testimony, since no one from IMCO, Barrett Consulting Group, or anyone else on site had any recollection of such an event occurring. In fact, Mr. Graham's own co-worker, Ken Zangari, who was working at his side on the date and time that the damage allegedly

occurred testified that the events described by Mr. Graham never happened. The operator and superintendent allegedly involved in this incident took polygraphs at the request of U.S. Department of Transportation investigators. While we were not provided with the results of these polygraph tests, we were told, off the record, that they had passed.

Our attorneys had an opportunity to complete Mr. Graham's deposition in March 2002. At that time, he retracted each and every significant allegation. Specifically, in June 2000, Mr. Graham stated that he saw IMCO damage the pipe. In March 2002, he admitted that he didn't see anything; he heard something, but saw nothing. In June 2000, Mr. Graham testified that the noise he heard was that of metal hitting metal. In March 2002, he admitted that he could not tell if the sound he heard was metal hitting steel or metal hitting ductile iron or something else. In June 2000, Mr. Graham testified that he knew that the pipe IMCO hit was the gas pipeline. In March 2002, he admitted that he doesn't know what was hit; it could have been just about anything. In June 2000, Mr. Graham testified that the excavator that hit the pipeline was located just outside the door of the pump house. In March 2002, he drew a diagram depicting the location and angle of the excavator that allegedly damaged the pipeline. The diagram was marked as an exhibit to his deposition. Based on Mr. Graham's graphic representation of the location of the excavator and the area of excavation, it would have been physically impossible for that excavator to have hit the gas pipeline and caused the gouges found in the ruptured section of pipe.

In addition to Mr. Graham's retraction on these critical points, we have also learned that he was a methamphetamine addict around the time that he was working on the Dakin-Yew project, and that none of his co-workers considered him to be honest or trustworthy. A copy of Mr. Graham's March 2002 testimony was provided to you, and I previously wrote to you to point out some of these blatant inconsistencies. Nonetheless, the latest version of the Water Treatment Plant Factual Report continues to give an air of legitimacy to Mr. Graham's earlier testimony. For example, on page 6 of that report, it is stated that, "an electrician working for an electrical subcontractor to IMCO on the project reported that he witnessed the pipeline being struck by a backhoe operated by an IMCO employee during the project." This is very misleading. Not even Mr. Graham would now state that he witnessed anything. His story now is that he heard something, and the sound he heard sounded like metal hitting metal. In addition, the single impact that he heard is entirely inconsistent with the extensive damage found in the ruptured pipeline segment. The NTSB Material Laboratory Factual Report identified approximately 30 separate gouge marks. Obviously, these were not caused by a single strike.

At best, the NTSB can only state that Mr. Graham has provided inconsistent and conflicting statements, which have no probative value.

B. There is No Corroborative Evidence to Support Graham's Story.

Mr. Graham's claim that IMCO patched the damaged pipe with mastic coating is similarly contradicted by the NTSB's own investigation. The Materials Laboratory Report identifies compacted dirt. The NIST's "Analysis of Samples Removed from a

Damaged Pipeline," clearly states that, "The specimens [removed from the pipe] appear to be comprised of soil containing sandy mono- and poly-mineralic grains, clay, and mica cemented by calcium carbonate that appears to be in the form of mineral calcite." There was no evidence that mastic, or any other material, was used to patch the pipe at or near the rupture location.

The Water Treatment Plant Factual Report refers to the testimony of an IMCO laborer as supporting Mr. Graham's testimony that IMCO hit the gas line. I assume that the laborer you are referring to is John Muder. It is my understanding that Mr. Muder's deposition transcript was forwarded to you by our attorney. If you read that transcript, it is clear that the incident that Mr. Muder was referring to involved IMCO hitting a ductile iron water line, and not a steel gas line. IMCO has acknowledged hitting a couple of water lines on this project. In fact, given the number of water lines in the area, and given the relatively shallow depths of these lines, some damage is not unexpected. On at least one occasion, the water line that we hit was not even shown on our construction plans. However, each and every time that we hit a water line (or any other utility line), we immediately notified the utility owner, consistent with IMCO's crisis management protocol.

Further, the statement in the Water Treatment Factual Report that the IMCO laborer "recalled IMCO hitting a pipeline on the project in the same vicinity as that reported by the electrician" is simply wrong. Mr. Muder stated that the damage to the ductile iron pipe occurred to the north of the pumphouse near the intake lines. Mr. Graham testified that the damage occurred just south of the pumphouse, near the stem risers for the discharge line. This is not the same vicinity – it is at least 50 feet away. You accurately report that the laborer "reviewed photographs of Olympic's ruptured pipeline and stated that he was certain that it was not the pipeline that had been repaired." However, by then, the issue is already hopelessly muddled.

Given the retraction of all relevant issues in Mr. Graham's story, <u>and</u> in light of the fact that Mr. Graham's testimony is not corroborated by any other witness or by the evidence, I once again ask his testimony be omitted from the NTSB report. Mr. Graham's testimony is not credible and does not belong in a "factual" report.

C. Olympic's Inspectors were Over-Worked, Untrained, and Unsupervised.

The report already states that both the City of Bellingham and IMCO performed excavations in the general vicinity of the rupture in 1993 and 1994. The implication is that the damage occurred sometime during that period. However, it is impossible to say, with any degree of certainty, whether the damage was caused by the City, IMCO, or Olympic. Jim Cargo, Olympic's construction supervisor testified that, when he first saw the rupture location, he was "concerned because I was the last one in there that welded a pup in there and I was thinking, gee whiz, what if something went wrong there." Cargo Dep., p. 74. Mr. Cargo could not remember when this work was performed, but it should be noted in your final report that Olympic, itself, had performed excavations in the general vicinity of the rupture.

We know that, during the construction of the Dakin-Yew project, the City's engineer, Barrett Consulting Group, was on site each and every day, monitoring and inspecting IMCO's work. We also know that Olympic inspectors were <u>not</u> present during the majority of the excavation in their right-of-way in 1993 and 1994. While they were aware of work in the Olympic right-of-way, a conscious decision was made to not have an inspector on site each and every day. The two inspectors assigned to the north end of the pipeline have admitted to being over-worked, untrained, and unsupervised. However, despite these spotty inspections, the Olympic inspectors were on site during excavation for installation of the 24" discharge line in July 1994, and during the August 1994 excavation referenced by Mr. Graham. Neither the Barrett engineers nor the Olympic inspectors recall IMCO ever hitting the gas pipeline.

D. Based on Internal Inspection Data and Reports, Olympic Knew or Should Have Known of Damage to their Pipeline No Later than May 1996.

Regardless of who damaged the pipeline, Olympic's engineering department knew or should have known of damage to their pipeline when they received Tuboscope's internal inspection report in May 1996. Our attorney filed for Summary Judgment on this issue, and the Court was very close to ruling that, as a matter of law, Olympic knew of this damage in May 1996. While we did not submit expert affidavits in support of that motion, IMCO's experts will testify that Olympic knew of damage to the pipe in 1996, and did nothing about it. This conclusion is supported by the following facts:

- X Tuboscope ran an internal inspection tool through Olympic's line in 1991, and found no damage in the area that ultimately ruptured.
- X Tuboscope ran a similar internal inspection tool through Olympic's line in 1996 (after the Dakin-Yew project), and found three "flaws" or defects in the area that ultimately ruptured.
- X Olympic was aware of the Dakin-Yew project, and thus, knew that there was excavation in the vicinity of the pipeline in 1993 (for potholing of the Olympic pipeline and water lines in the immediate area) and in 1994 (for construction).
- X Olympic knew that the defects were neither "mill/mechanical" nor "wrinkle/bend" because these defects did not show up in the 1991 inspection. Both "mill/mechanical" flaws and "wrinkle bends" occur or prior to original installation. By definition, they are not flaws that could be caused by third-party damage.
- X Based on the information that Olympic did have, they prepared a Dig Sheet for the exact area that ultimately ruptured.
- X Without visually inspecting, there was no way for Olympic to know whether or not the defects were corrosion or gouges.
- X If the defects were gouges, then Olympic would have been required to repair their pipe.
- X If Olympic had visually inspected as planned, they would have discoverd "long, deep, ugly" gouges and would have immediately shut down the pipeline for repairs.

- X For some unknown reason, the dig was cancelled, and Olympic cannot establish any credible basis for this cancellation.
- X Key Olympic personnel continue to invoke the 5th Amendment, and as a result, we may never know why this dig and visual inspection was cancelled.

E. Olympic's Acts and Omissions on June 10, 1999, Turned a Relatively Small Release into a Huge, Catastrophic Spill.

IMCO's experts will testify that the release from the Olympic pipeline on June 10, 1999, would have been relatively small, and absorbed by the surrounding ground, but for Olympic's defective pipeline design and negligent pipeline operation. Instead of a spill of 250,000 gallons, our experts will testify that, had Olympic acted as a reasonably prudent pipeline operator, the spill could have been limited to 25,000 gallons. This conclusion is based on the following facts:

- X Olympic did not have a check valve installed to the south of Whatcom Creek. Such a check valve would have prevented the drain-down of approximately 125,000 gallons (based on Olympic's own calculations after the rupture).
- X Olympic did have a block valve located less than ½ mile from the rupture, but for some unexplained reason, never closed that valve.
- X Olympic restarted their pumps twice after the rupture, forcing an additional 79,000 gallons through the rupture (again, based on Olympic's own calculations).
- X Olympic failed to detect the leak for more than an hour, ignoring "pages and pages" of alarms.
- X Olympic failed to follow their own operating procedures for abnormal operating conditions, and operated the pipeline "blind" after their computers allegedly crashed.
- X Key Olympic personnel continue to invoke the 5th Amendment, and as a result, we may never know what happened in the control room on June 10, 1999.

If the pipeline had been properly designed and prudently operated, this spill would have been contained and not migrated downstream. Had OPL responded promptly (as opposed to failing to report the rupture until 1 ½ hours after it occurred), the local authorities would have had time to clear the area before any explosion occurred.

F. The Uncommanded Closure of the Mainline Block Valve at Bayview Resulted in Cyclical Stress and Damage to the Pipeline, which Ultimately Caused the Rupture.

The mainline block valve at Bayview closed, uncommanded, 59 times in the six months prior to the rupture and explosion. Each time that the block valve closed, a pressure surge traveled back up the line (and through Bellingham), followed by a "deadhead"

pressure surge, causing stress and damage to the pipe. At areas where the pipe had been previously damaged, this pressure cycling caused cracks to grow and expand. Uncommanded block valve closures create an abnormal operating condition, yet Olympic did nothing to remedy the problem. It was not a question of whether the pipeline would rupture, but when. On June 10, 1999, after the sixtieth uncommanded block valve closure at Bayveiw, pressure built in the pipeline until the pipe ruptured at its weakest point, Whatcom Falls Park.

G. Olympic May Have Blown Up their Own Pipeline.

Olympic claims that, based on a report prepared by their consultant, Stoner & Associates, the pressure in the pipeline at the time of rupture never exceeded MAOP (maximum allowable operating pressure) or MASP (maximum allowable surge pressure). The reason that they are so concerned about this issue is because if the pressures did exceed the maximum allowable pressure, then Olympic blew up their own pipe. The fact that the pipe was damaged is then irrelevant. Our expert, Ray Whaley, reviewed the Stoner Report, and concluded that Stoner is missing a critical piece of information that minimizes the significance of that report. Specifically, Olympic has been unable to produce its pressure logs from Ferndale Station. According to Olympic, the paper at the on-site pressure gage had not been replaced, so there is no record of the pressures at Ferndale at the time of the rupture. This is the first time that anyone can remember these records not being available. We suspect that the records were destroyed because the pressures recorded showed that Olympic did, in fact, blow up their own pipeline.

Conclusions

In light of the above-information, we do not think that there is any factual basis for stating that IMCO had any responsibility for the June 10, 1999, rupture and explosion. IMCO was one of several parties who performed excavation work in the general vicinity of the rupture. Of all the parties performing excavation work, none were subject to the same daily scrutiny as IMCO; our work was supervised and controlled by the City's inspector/engineer, Tom Franklin of Barrett Consulting. Further, Olympic inspectors were present during both excavations involving the 24" discharge line. The Olympic inspectors were aware of the location of their pipeline, and could have taken that opportunity to visually inspect their line. They chose not to do so. After construction was completed, Olympic learned of "anomalies" in the area that ultimately ruptured. Again, Olympic had notice of damage to their pipeline, they prepared a dig sheet to visually inspect the anomalies, and they chose not to follow through with the dig and visual inspection.

The gouging of the pipeline is one of many factors contributing to the rupture and explosion. However, the identity of the party causing the damage is not relevant in light of the actions subsequently taken by Olympic. (1) They knew about construction activities in the pipeline right-of-way between 1993-95. (2) Olympic knew that flaws were identified in the area of those construction activities in 1996 that were not present in 1991. (3) Olympic engineers prepared a dig sheet in 1996 and provided that dig sheet to

their construction department to visually inspect the flaw. (4) For unknown reasons, the visual inspection did not occur. (5) If Olympic had inspected, they would have found long, deep, ugly gouges in the section of pipe that ultimately ruptured. (6) If they had found those gouges, they would have immediately shut down the pipeline, and replaced the damaged section. Compounding Olympic's decision to not visually inspect were a variety of factors, each of which contributed to the rupture and explosion. These factors include: the improperly operating relief valve; design issues with Bayview Products Terminal; problems with Olympic's SCADA system; Olympic operators' failure to respond to leak detection alarms; failure to close block valves; and restarting the Ferndale pumps.

The gouges, themselves, did not cause the rupture. The pipe ruptured because of the cyclical stress caused by the sixty uncommanded block valve closures at Bayview. Without those stresses, the crack related to the gouge would not have grown, and the pipeline would never have ruptured.

Other than the fact that IMCO performed work in the area of the rupture, the only thing tying IMCO to the damage is the testimony of Mark Graham. As discussed in detail above, Mr. Graham's story is inconsistent and unreliable, and should not be included in the NTSB's "factual" report.

If you have any questions about any of the above, or if you want to contact any of IMCO's experts, please give me a call. Thank you again for allowing me to participate as an interested party in the NTSB investigation.

Sincerely yours,

Patti Imhof, Vice President IMCO General Construction