U.S. OFFICE OF SPECIAL COUNSEL

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The Special Counsel

September 21, 2007

The Honorable Robert M. Gates Secretary United States Department of Defense 1000 Defense Pentagon Washington, D.C. 20301-1000

Re: OSC File No. DI-07-2724

Dear Mr. Secretary:

The United States Army Corps of Engineers (USACE) serves the Armed Forces and the nation by providing vital engineering services in support of national interests. As part of its mission, USACE has been tasked with providing critical hurricane and flood protection to the recently-devastated city of New Orleans. My office has received serious allegations which cast doubt on the integrity of costly pumping equipment installed in three main structures by USACE and its ability to protect New Orleans from further flooding. A failure of the pumping equipment to function properly during a time of flooding may be yet another catastrophic event for New Orleans, a city still recovering from Hurricane Katrina.

The information provided demonstrates that in an effort to meet time-sensitive deadlines, and to avoid government imposed damages and instead earn financial incentives, the contractor, Moving Waters Industries¹ (MWI), along with USACE, are likely responsible for installing defective pumping equipment that has been largely untested. Therefore, pursuant to my responsibilities as Spécial Counsel, I am referring to you a whistleblower disclosure that employees at the Department of the Army, USACE, Mississippi Valley Division, New Orleans District, New Orleans, Louisiana, are responsible for a violation of a law, rule, or regulation, gross mismanagement, a gross waste of funds, and a substantial and specific danger to public safety.

The whistleblower, Ms. Maria E. Garzino, who has consented to the release of her name, alleged that: (1) the costly pumping equipment at three "outfall gated canal closure structures," which is part of the flood protection design to protect New Orleans, was inherently flawed due to poor pumping and hydraulic system designs; (2) pumping equipment that had previously malfunctioned under favorable contractor testing conditions, and subsequently shown to be

² The three "outfall canal gated closure structures" are large and crucial components needed to protect New Orleans from flooding.



¹ MWI, based in Deerfield Beach, Florida, was awarded a \$26,606,383 federal government contract to install a pumping system in New Orleans: Contract No. W912P8-06-C-0089, Emergency Procurement for Temporary Pumps for Three Outfall Canals.

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defective, was knowingly installed by USACE employees and (MWI) personnel; and (3) USACE employees and MWI personnel circumvented contract requirements related to contract modifications and notifications at the expense of public safety and proper contract oversight.

Although it appears that new non-hydraulic, direct drive pumps were installed this summer at the outfall canal gate closure structures by two additional contractors, Patterson and Fairbanks-Morse, to complement MWI's forty hydraulic pumps, Ms. Garzino stated that there is still an erroneous assumption that MWI's hydraulic pumps are operational. If the ability to pump water is lost at the outfall canal gate closure structures during a time of heavy rain or flooding, the risk to public safety remains high. Ms. Garzino's disclosures are described in greater detail in the attached report. Accordingly, I am referring this information to you for an investigation of these allegations and a report of your findings.

If true, given the hardships suffered by the people of New Orleans, and the billions of tax payer dollars spent on post-Katrina recovery, the United States Government can ill afford to take unnecessary risks with public safety due to faulty pumping equipment and lack of proper government oversight of the MWI contract; a situation that indeed raises serious issues of public safety and government oversight.

The U.S. Office of Special Counsel (OSC) is authorized by law to receive disclosures of information from federal employees alleging violations of law, rule, or regulation, gross mismanagement, gross waste of funds, an abuse of authority, or a substantial and specific danger to public health or safety. 5 U.S.C. § 1213(a) and (b). As Special Counsel, if I find, on the basis of the information disclosed, that there is a substantial likelihood that one of these conditions exists, I am required to advise the appropriate agency head of my findings, and the agency head is required to conduct an investigation of the allegations and prepare a report. 5 U.S.C. § 1213(c) and (g).

After a review of the information provided, I have concluded that there is a substantial likelihood that the information Ms. Garzino provided discloses a violation of law, rule, or regulation, gross mismanagement, a gross waste of funds, and a substantial and specific danger to public safety. Consequently, I am referring this information to you for an investigation of and appropriate action regarding Ms. Garzino's allegations and a report of your findings within 60 days of your receipt of this letter.

By law, the report must be reviewed and signed by you personally. Should you delegate your authority to review and sign the report to the Inspector General, or any other official, the delegation must be specifically stated and must include the authority to take the actions necessary under 5 U.S.C. § 1213(d)(5). Without this information, I hasten to add that the report may be found deficient. The requirements of the report are set forth at 5 U.S.C. § 1213(c) and (d). A summary of § 1213(d) is enclosed. As a matter of policy, OSC also requires that your investigators interview the whistleblower as part of the agency investigation whenever the whistleblower consents to the disclosure of his or her name.

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In the event it is not possible to report on the matter within the 60-day time limit under the statute, you may request in writing an extension of time not to exceed 60 days. Please be advised that an extension of time is normally not granted automatically, but only upon a showing of good cause. Accordingly, in the written request for an extension of time, please state specifically the reasons the additional time is needed. Any additional requests for an extension of time must be personally approved by me.

After making the determinations required by 5 U.S.C. § 1213(e)(2), copies of the report, along with any comments on the report from the person making the disclosure and any comments or recommendations by this office will be sent to the President and the appropriate oversight committees in the Senate and House of Representatives owing to the requirements set forth in 5 U.S.C. § 1213(e)(3).

Unless classified or prohibited from release by law, a copy of the report and any comments will be placed in a public file in accordance with 5 U.S.C. § 1219(a).

Please refer to our file number in any correspondence on this matter. If you need further information, please contact Catherine A. McMullen, Chief, Disclosure Unit, at (202) 254-3604. I am also available for any questions you may have.

Sincerely,

Scott J. Bloch

Enclosures

cc: The Honorable Pete Geren Secretary of the Army



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REPORT OF DISCLOSURES REFERRED FOR INVESTIGATION OSC FILE No. DI-07-2724

I. SUMMARY

Maria E. Garzino, Civil Engineer, United States Army Corps of Engineers (USACE), has disclosed serious allegations concerning the pumping equipment manufactured and installed by Moving Waters Industries (MWI). The equipment at issue was installed at three outfall canal structures located on 17th Street, Orleans Avenue, and London Avenue, New Orleans, Louisiana. Specifically, Ms. Garzino alleges that the pumping equipment is defective and largely untested as a result of unauthorized contract modifications improperly agreed upon by USACE at the expense of government oversight and public safety. A failure of the pumping equipment to function properly during a time of flooding would be yet another catastrophic event for New Orleans, a city still recovering from the devastating effects of Hurricane Katrina.

The allegations, detailed below, indicate that USACE employees allowed costly pumping equipment, which were inherently flawed due to poor pumping and hydraulic system designs, to be installed without proper testing. Ms. Garzino further alleges that USACE employees and MWI personnel circumvented contract requirements in an effort to complete the task, all at the expense of public safety and proper contract oversight.

II. THE INFORMATION DISCLOSED

Ms. Garzino, who has consented to the release of her name, is a mechanical and civil engineer working at USACE, Construction Operations, Contract Administration Branch, Los Angeles, California. She has worked for the United States Department of Defense for 16 years, including nine years as a USACE engineer. From March to September 2006, Ms. Garzino was detailed to USACE New Orleans District, and served as Team Leader of Pumping Systems Installation. Thus, Ms. Garzino had direct oversight responsibility regarding the pumping equipment installed at the three outfall canal closure structures.

On January 27, 2006, MWI was awarded the contract for the emergency procurement for temporary pumps of three outfall canals. Based on the information provided by Ms Garzino, the total cost for each pumping equipment unit is slightly over \$750,000, plus an additional cost of about \$350,000 for spare parts. The total amount of the contract award was \$26,606,383.

Under the terms of the contract, MWI was to receive an incentive payment of \$5 million if the work was completed prior to hurricane season. For each complete pump system (hydraulic motor, pump, drive unit, discharge elbow, and discharge piping) delivered timely, MWI would

¹ The three "outfall canal closure structures" are large and crucial components needed to protect New Orleans from flooding.

receive an incentive payment of \$9,800, per pump, per calendar day. The maximum amount of the incentive for the 17th Street Canal and London Avenue Canal pump systems was \$1,764,000 for each structure. The maximum incentive for the Orleans Avenue Canal was \$1,470,000. The contract also included penalties for late delivery of the pumping equipment, specifically for each pump delivered after 104 calendar days from the issuance of the purchase order, MWI was to pay USACE \$1,700, per day, per pump.

MWI was required to deliver 34 pump assemblies, 34 discharge pipe assemblies, 37 drive units, and all material associated with the hydraulic piping needed to connect the pump assemblies to the drive units. In addition, MWI was to provide all pumping equipment necessary to ensure fully operational emergency pumping systems at each of the outfall canal closure structures. MWI was responsible for placing the pump assemblies on the pump platforms, and the drive units on the engine platforms as well as fabricating and installing the hydraulic pipe on the hydraulic pipe support structures. MWI was obligated to provide all necessary labor and ancillary equipment/materials necessary to connect the fabricated hydraulic piping line to the pump assemblies and drive units and to bring the pumping equipment on line and ensure that it was fully operational.

The 17th Street closure structure was to have 12 complete pumps installed, the London Avenue closure structure was to have 12 complete pumps installed, and the Orleans Avenue closure structure was to have 10 complete pumps installed. Ms. Garzino also stated that MWI was to provide six additional pumps, which were to be delivered and installed at the 17th Street closure structure.

In April 2006, Ms. Garzino traveled to the MWI manufacturing and testing facility to observe the testing of the pumping equipment. This trip was originally scheduled to take only three days. However, due to "extremely severe and troublesome pumping equipment failures," Ms. Garzino's trip lasted 28 days. The deficiencies and problems with the pumping equipment remained unresolved.

Upon her return to New Orleans, Ms. Garzino raised grave concerns about the integrity of the pumping system. She specifically reported that the design of the pumping system's hydraulic system was flawed. Ms. Garzino reported that the failure rate for the pumps was a catastrophic 50%. She reported that, with a "very likely probability," if the pumps were needed due to a storm, "we could expect a 100% failure rate before [the pumping equipment] could make it through even one hurricane event." See Attachment 2, Garzino Memorandum of Record, April 23, 2007, p. 2. She also emphasized that during the MWI testing she witnessed "...the more the pumping equipment was run, the more it experienced catastrophic failures of the pump assemblies and the hydraulic systems components." Photographs included with this Report of Disclosure provide additional documentation of these failures. Ms. Garzino also witnessed hydraulic fluid lines bursting thirty feet in the air as a result of overheating and metal shavings from the defective pumping gears contaminating the hydraulic fluid lines. She also described gears "blowing up," even under MWI-favorable conditions, as a result of the defective design. See Attachment 2, Garzino Memorandum of Record, dated April 23, 2007, p. 5. See also

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Attachment 5, Declaration of Maria E. Garzino, executed October 13, 2006, in Los Angeles, California, including photographs.

Significantly, in late July 2006, Ms. Garzino worked with USACE personnel, including James St. Germaine, USACE Senior Project Manager in New Orleans, to address needed contract modifications to remedy design defects, and others, including repairing the drive units to prevent air from being sucked into pumps causing them to blow up. Ms. Garzino reported that immediately after she returned to Los Angeles, scheduled meetings were canceled and that "absolutely no further work was done, nor requested by the TFG [Task Force Guardian] pump team, to complete [the work]." Ms. Garzino alleges she was misled by USACE into believing that USACE was going to address properly the pumping equipment problems. Ms. Garzino stated that, during this time period, the media had already been informed that the pumps were operational.

Although USACE appeared to be upgrading the pumping system capacity by changing and upgrading gears, and adding pumps from reputable contractors, Ms. Garzino believed that it is an incorrect assumption that the MWI pumps will operate as intended. She asserted that performance testing has not been completed to measure whether the pumping systems will function.

Ms. Garzino further alleges that modifications in testing requirements were being made without the approval of Cynthia A. Nicholas, USACE TFG Contracting Officer. These modifications included substantially reducing and eventually eliminating infield load testing requirements. During this period, USACE employees appear to have been focused on meeting time-sensitive deadlines instead of getting the task completed properly. Time pressures appear to have been placed on them by government officials, including the agency, and the media to have the pumps operational before hurricane season.

On May 3, 2006, Ms. Garzino formally notified Ms. Nicholas, in writing, that MWI's pump equipment, including the pump assemblies and drive units, which were arriving in the field and being installed daily, were not capable of fulfilling their function as intended by the original contract requirements. She asserted that the pumps were defective, and would fail in the event of a hurricane. See Attachment 4, Garzino Memorandum of Record, "Defective Equipment Supplied by MWI – Pumping Equipment Not In Accordance With Contract Requirements," May 3, 2006.

Ms. Garzino informed Ms. Nicholas that the pumping equipment was incapable of being turned on and used for prolonged periods of time, such as in the event of a hurricane. She stated that her assertion was based on events witnessed at the MWI pumping equipment testing site at the manufacturer's facility from April 7 through May 1, 2006. Those tests and events

were documented by Ms. Garzino and USACE Quality Assurance personnel, in the following reports:

- Listing of Pump Assemblies That Have 'Seen' the Testing Tank (actually pumped water) Failures/Successes – 4/6 thru 4/26
- Listing of Drive Units Failures/Successes 4/6 thru 4/26
- Florida Trip 4/07 to 4/16 MWI Testing Report No. 1
- Florida Trip 4/17 to 4/23 MWI Testing Report No. 2
- Florida Trip 4/24 to 4/30 MWI Testing Report No. 3
- QA Shop Inspection Report #6 (4/11), #7 (4/12), #8 (4/12), #9 (4/13), #10 (4/14), #11 (4/15-17), #12 (4/18), #13 (4/19-20), #14 (4/21), and #15 (4/21)
- OA-TFG- Reports for 4'25, 4/26, and 4/27

Ms. Garzino stated that these reports document the failures of the hydraulic pumps and consequently the need for full "load" (performance) testing of all pump assemblies, per the contract. Ms. Garzino specifically informed Ms. Nicholas that the load testing requirement had been eliminated, and that:

"... less than 25% of all pump assemblies have been load tested (leaving potentially 75% not load tested), and, of the eight (8) pump assemblies that have been load tested, one has only been run for a few minutes at best and one other was run at 1/3 operating pressure (the hydraulic oil barely got warm enough to register). Of the remaining six (6) pump assemblies actually undergoing load testing (actually pumping water), three (3) – 50% - have experienced catastrophic failure. Of note, these three failed pump assemblies have also been the pump assemblies that have the most run time on them – leading me to the logical conclusion that, barring some extraordinary anomaly, the more you run them, the more likely catastrophic failures will occur."

See Attachment 4, Memorandum of Record, "Defective Equipment Supplied by MWI – Pumping Equipment Not In Accordance With Contract Requirements," addressed to the Ms. Nicholas, May 3, 2006, p. 2.

In response to continuing concerns raised by Ms. Garzino, USACE conducted a Technical Review lead by Brigadier General Robert Crear, Department of the Army. After approximately a two-week investigation, General Crear issued a Memorandum of Record entitled "MVN² Outfall Canal Pump Report," dated June 4, 2007. General Crear's report, however, pointedly states the investigative team "... did not interview Maria Garzino nor had enough time to properly address all of her technical concerns in her memorandum (which include all of the inspection reports at MWI). The [team] arrived on a Friday and then provided a report by Saturday night." As such, the validity of any investigative results are called into question.

² MVN - Mississippi Valley New Orleans District

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Furthermore, on May 23, 2007, the Government Accountability Office (GAO) briefed Senator Mary L. Landrieu, Chairwoman, Ad Hoc Subcommittee on Disaster Recovery, in response to her formal request for information about the capacity of the pumping equipment in New Orleans. Both the GAO and General Crear's reports indicate that there were problems with the MWI pumps, but that there were pressures to meet installation deadlines prior to hurricane season.

During the summer of 2007, new non-hydraulic, direct drive pumps were installed at the outfall canal closure structures by two contractors, Patterson and Fairbanks-Morse, to complement MWI's hydraulic pumps. However, Ms. Garzino believes that there is an erroneous assumption that MWI's hydraulic pumps are fully operational and, hence, the risk to public safety remains high. Even so, the installation of new pumps to augment MWI pumps does not negate the serious issues surrounding USACE's decisions to install faulty pumping equipment without meeting adequate performance testing requirements and contract modifications.

Ms. Garzino has presented information that, if true, reflects that USACE employees are responsible for a violation of a law, rule or regulation, gross mismanagement, a gross waste of funds, and a substantial and specific danger to public safety.

III. THE SPECIAL COUNSEL'S FINDINGS

Given Ms. Garzino's apparent expertise regarding the matters disclosed, the documentation and details provided, and her first-hand knowledge of the incidents described, I have concluded that there is a substantial likelihood that the information she provided to the Office of Special Counsel discloses violations of law, rule, or regulation, gross mismanagement, a gross waste of funds, and a substantial and specific danger to public health.

As stated in the cover letter, I have included with this Report of Disclosure documentation, including Ms. Garzino's declarations and reports provided to USACE employees, such as photographs taken of MWI pumping equipment failures when Ms. Garzino visited the MWI manufacturing and testing facility.

Requirements of 5 U.S.C. § 1213(d)

Any report required under subsection (c) shall be reviewed and signed by the head of the agency¹ and shall include:

- a summary of the information with respect to which the investigation was initiated;
- (2) a description of the conduct of the investigation;
- (3) a summary of any evidence obtained from the investigation;
- (4) a listing of any violation or apparent violation of law, rule or regulation; and
- (5) a description of any action taken or planned as a result of the investigation, such as:
 - (A) changes in agency rules, regulations or practices;
 - (B) the restoration of any aggrieved employee;
 - (C) disciplinary action against any employee; and
 - (D) referral to the Attorney General of any evidence of criminal violation.

In addition, we are interested in learning of any dollar savings, or projected savings, and any management initiatives that may result from this review.

Should you decide to delegate authority to another official to review and sign the report, your delegation must be specifically stated.