### ARMED SERVICES BOARD OF CONTRACT APPEALS

Appeal of	)
Tulsa Mid-West Construction Company, Inc.	) ASBCA No. 53594
Under Contract No. DACW03-95-C-0090	)
APPEARANCE FOR THE APPELLANT:	Mr. Randy C. Barrett Vice President
APPEARANCES FOR THE GOVERNMENT:	Thomas H. Gourlay, Jr., Esq. Engineer Chief Trial Attorney Ralph H. Allen, Esq. District Counsel James W. Cullum, Esq. Engineer Trial Attorney U.S. Army Engineer District, Little Rock

## **OPINION BY ADMINISTRATIVE JUDGE COLDREN**

This appeal was taken from a final decision of the contracting officer partially denying appellant's claims for equitable adjustments for changes and delays in repairing and renovating the gates and frames for the DeQueen Dam in Sevier County, Arkansas. Appellant's claim dated 24 July 2000 included 10 sub-claims (R4, tab AAA). Appellant withdrew its 7<sup>th</sup> sub-claim for miscellaneous items (app. br. at 7). Testimony at the hearing indicated that appellant had hired a consultant to assist it with its claims just prior to the issuance of the final decision of the contracting officer (tr. 48-50). Appellant indicated in its brief that it would present its 8<sup>th</sup> sub-claim for consulting fees for this consultant under subsequent Equal Access to Justice Act proceedings (app. br. at 7).

Of the remaining 8 sub-claims, appellant contends that the replacement seal bar and cap screws were unavailable (sub-claim 1), and that their installation and site conditions for that installation differed from that indicated in the contract (sub-claim 9); that the butterfly valve interfered with the removal of the gates to be renovated (sub-claim 2); that hydrogen sulfide gas delayed the work by creating hazardous conditions for workers (sub-claim 3), caused appellant's tools to corrode (sub-claim 5), and corroded a piston/cylinder used to lift the dam gates (sub-claim 4); and that these problems delayed the work causing frequent trips from the job site to its home base (sub-claim 6), extra Porta Potty rental expenses (sub-claim 10), and unabsorbed overhead expenses. The Government denies that the seal bars and cap screws were unavailable, and claims, that even if they were, that appellant assumed the risk of their unavailability. The Government denies any further recovery is due relating to installation and site conditions. The Government admits that the butterfly valve interfered with the removal of the gates to be renovated but claims that appellant was fully paid for moving the butterfly valve and denies that it caused delay. It also admits that the hydrogen sulfide gas interfered with appellant's work but claims that appellant assumed the risk for the damage to its tools by failing to properly care for them. It also claims that appellant was fully compensated for this problem. It further admits that the lift gate piston/cylinder was damaged and needed repair, admits that this problem caused appellant is not entitled to any unabsorbed overhead for any of its claims because appellant was able to shift its workers to other projects.

A one-day hearing was held on 18 March 2003 in Tulsa, Oklahoma. By Board order, the hearing was limited to entitlement, including the number of days of delay. However, the parties without objection from either party also tried entitlement to certain types of costs. We will also consider these matters.

### FINDINGS OF FACT

#### A. The Contract

1. On 12 September 1995, the Government awarded appellant a fixed price contract in the amount of \$198,870 to repair and renovate 4 gates, gate frames, and bulkheads of the DeQueen Dam in Siever County, Arkansas. The period of performance was 120 days from receipt of notice to proceed (28 September 1995), resulting in a 26 January 1996 completion date. The contract included the standard FAR 52.243-4 CHANGES (AUG 1987); FAR 52.233-1 DISPUTES (MAR 1994); and FAR 52.212-12, SUSPENSION OF WORK (APR 1984) clauses. (R4, tab C)

2. The McQueen Dam had two water conduits, each with an upstream and downstream gate, for a total of four gates. Each gate was to be removed from the dam, lifted to the surface to be worked on, have its hardware removed, be sandblasted, re-painted, and have its hardware reinstalled, and then the renovated gate was to be lowered to be reinstalled in the dam. The next gate would then be worked on. All vertical seal bars on the gates were to be replaced with new ones but the horizontal seal bars were to be re-used. All cap screws were to be replaced with new screws. Work similar to that for the gates was to be performed on the gate frames in place at the bottom of the dam with the cap screws to be replaced but the seal bars reused. (Rule 4, tab C at Drawing No. 10417-306/90, Notes and Instructions) Thus, the critical path on the job was such that each task under the contract had to be completed before the next one could be completed, resulting in project delay equaling task or standby delay (tr. 41).

## B. Seal Bars and Cap Screws

3. The contract states that the new replacement seal bars for the gates and gate frames shall be "FABRICATED FROM BRASS ALLOY ? C22000, ASTM B 36/8 36M, 36 KSI TENSILE STRENGTH." It further states that "[N]EW BRASS ALLOY ? C22000, ASTM B 36/8 36M, 72 KSI TENSILE STRENGTH ALLEN HEAD SCREWS COUNTERSUNK 1/32" below the seal bar surface shall be furnished by the contractor for reconnection of each seal bar." (R4, tab C at Drawing No. 10417-306/90, Notes and Instructions)

4. By a letter dated 22 August 1995 prior to contract award, appellant wrote the Government asking whether alternates could be substituted for the seal bars and cap screws described in finding 3. The letter indicated that the seal bars were not stock items and that a millrun of 20,000 to 30,000 pounds of material had to be specially set up to manufacture the seal bars. It also indicated that the cap screws were not stock items and that round material stock to be used for milling of the cap screws was not available at the tensile strength specified in the contract. (R4, tab G; *see also* tr. 94-95) Appellant's general manager testified that several suppliers told appellant pre-bid that they could furnish the materials for the cap screws (tr. 98-99).

5. On that same date, two bidders faxed the Government requesting a source for the cap screws and seal bars. Government cost engineering indicated that the Government source was a mill that would mill the brass alloy and a machine shop that would complete the manufacturing of these parts for the dam. A dispute arose within the Government as to whether the Government should release the names of these sources because the Government did not wish to vouch that these sources could make the parts. The Government decided on 24 August 1995 not to release the sources prior to contract award. (R4, tab K)

6. As documented in a contracting officer memorandum dated 29 August 1995, the contracting officer telephoned appellant's general manager concerning its low bid of \$198,870 because appellant's bid was substantially higher than the Government estimate of \$120,980. Appellant's general manager discussed the cost elements in appellant's bid. He indicated that it was difficult to get suppliers to provide a fixed price for the cap screws and bar seals due to the fluctuating prices of brass. He also indicated that the only supplier willing to provide a price "had a 14 week delivery time" and a "minimum mill run of 10,000 – 30,000 pounds." He indicated that he had to anticipate liquidated damages in preparing appellant's bid due to the long lead-time required by the suppliers. He also indicated that he had to include in appellant's bid extra costs for machining due to the possibility of damage to the gates and for the fact that the "seals are probably washed out more than indicated." (R4, tab H) Appellant's general manager testified that he could not deny the accuracy of the contents of this memorandum but he could not

swear that the memorandum was 100% accurate, especially the 14-week lead-time from the time of order to delivery of the items (tr. 99-101).

7. On 30 August 1995, the Government telephoned its supplier (Hussey Copper) for the seal bars to update its estimate. This supplier quoted \$2.275 per pound for a minimum order of 6000 pounds (approximately 19 pieces) with a 6-week lead-time. (R4, tab I)

8. In the historical log for this solicitation, a Government procurement employee by telephone responded on 28 September 1995 to a request from appellant's general manager by providing this general manager with the Government's source (Hussey Copper) for its estimate of the costs of obtaining the seal bars and cap screws. Appellant's general manager indicated during this telephone conversation that he was seeking these sources for the bars and screws because the three sources he had contacted would not provide fixed quotes due to fluctuating prices of the brass and estimated 13 to 14 week delivery times for the bars and screws. (R4, tab F at 3)

9. By a letter dated 18 October 1995, appellant notified the Government that the cap screw specification for brass alloy C-22000 ASTM B 36/8 36M, 72 KSI is for a sheet or plate product not a round rod. The letter indicated that the proper specification was ASTM B-134, which is for a 1 5/8" round rod. It pointed out that the lead-time under the B-134 specification was 3 to 4 weeks. In addition, the letter stated that the lead-time for the milling of the seal bars was 13 to 14 weeks. (R4, tab L)

10. By a letter dated 19 October 1995, appellant's general manager notified the Government that appellant had exhausted all manufacturing sources for the material to be used for the manufacture of the seal bars and cap screws. The letter indicated that appellant's only mill source for the seal bars indicated that the lead-time for milling was 13 to 14 weeks. Similar to its 18 October 1995 letter (finding 9), this 19 October letter claimed that ASTM B-134 rather than the B36 material was what should be used to manufacture the cap screws. The letter specifically requested the Government's assistance with these problems. (R4, tab M)

11. Appellant requested that the Government approve a variation in material for the manufacture of the cap screws from ASTM B36 to one previously identified in prior letters (B-134) in a letter dated 13 November 1995. It claimed in the letter that the proposed new material came closest to the KSI rating specified and could be furnished by Olin Brass with a lead-time of 5 to 6 weeks. It also stated that it had only found two sources for the seal bars material, one with a lead-time of 6 to 7 weeks and another with a lead-time of 13 to 14 weeks. The letter also requested an extension to the contract schedule of 120 calendar days. (R4, tab N)

12. By a letter dated 27 November 1995, the contracting officer's representative approved the variation in material for the cap screws, which was Item 1 (B36 to B-134). It denied a similar request for the seal bar materials, which was Item 2, because the proposed new material had a much lower KSI rating and was a softer metal than the one specified. (R4, tab P) A letter dated 11 December 1995 from the contracting officer's representative approved Item 1A, which appears to involve the seal bars (R4, tab Q).

13. On 2 January 1996, the contracting officer issued a cure notice for failure to diligently prosecute and perform the contract because no work had been completed and 80 percent of the performance period had expired. The letter requested that appellant cure this failure to perform diligently within ten days. (R4, tab R)

14. By a letter dated 11 January 1996, appellant replied to the cure notice, claiming that the materials to manufacture the cap screws and seal bars were extremely difficult to find, that appellant had expended a great deal of time and effort to find a source, and that, even after a source had been located, the supplier indicated that delivery would still take six to nine weeks. The letter claimed that a great deal of preparation work had been performed even though no work had been completed at the job site. It then requested a time extension of 145 days to 28 June 1996 due to these material problems, which it claimed were beyond its control. (R4, tab S)

15. The contracting officer responded in a letter dated 29 January 1996 that the Government agreed that the materials were difficult to locate and that lead-times were longer than anticipated; and then stated that that the cure notice was withdrawn, and negotiations would commence to address these issues (R4, tab T).

16. A negotiation memorandum dated 5 February 1996 reflects that the parties agreed to extend the delivery schedule by 145 days due to the problems with the cap screws but at no cost to the Government. It states that "the Government agreed that the cap screws would be more appropriately fabricated under ASTM B 134" and approved appellant's request for a variation in materials from ASTM B36. It further states that appellant's president stated that time was the important matter and appellant would accept the change at no additional cost. (R4, tab V)

17. By a letter dated 19 April 1996, the contracting officer sent appellant a proposed bilateral Modification No. P00005 (R4, tab W). By a letter dated 17 April 1996, appellant furnished the contracting officer a breakdown of the delay costs appellant incurred in searching for the brass materials for the cap screws and seal bars (R4, tab U).

18. The contracting officer revised the negotiation memorandum dated 5 February 1996 on 24 April 1996. The revised memorandum states that Modification No. P00004 (sic) was converted from a bilateral to a unilateral one because appellant would not sign the bilateral one. It also states that 42-56 manufacturing lead-time days as well as the

7 days of administrative processing time should have been included in appellant's bid to obtain the cap screws and, therefore, was not allowable, making only 82 days of the 145 days requested allowable. (R4, tab V)

19. Even though appellant requested an equitable adjustment for costs as well as time for locating the brass materials for making the cap screws and seal bars (finding 17), unilateral Modification No. P00005 states that the specifications were not being changed, that an alternative material of brass alloy C22000, ASTM B-134 could be used for the cap screws, that no change in price was approved, and that the period of contract performance was increased by 82 calendar days to 20 April 1996. The time extension was based solely on the change in material for the cap screws, as the material for the seal bars was not changed or mentioned. (R4, tab Y) Although there is some proof that the ASTM B-134 was more appropriate for the manufacture of the cap screws (finding 16), no witness with personal knowledge testified that it was impossible to manufacture the cap screws from the contractually specified B36 brass. Thus, we are unable to find that the cap screws could not have been made from the B36 brass.

20. By a letter dated 17 April 1996, appellant indicated that its president as well as its general manager spent numerous hours in the period from October through December of 1995 searching for the brass materials for the cap screws and seal bars. The letter states that about the middle of October it realized that these materials were hard to get or unavailable. It also states that it received the first thirty cap screws on 25 March 1996. (R4, tab U) Appellant received the seal bars from its supplier later than the cap screws (R4, tabs AAA, attach. at 1; findings 9, 11).

21. On 24 July 2000, appellant submitted its ten subpart claim in the amount of \$498,167.16 described in the opening paragraph of this opinion (R4, tab AAA). In a final decision dated 5 October 2001, the contracting officer denied all claims involving the seal bars and cap screws (R4, tab A at 1). The decision stated that the denial was based on the fact that both parties had located sources that were available to furnish these items as contractually specified, and that appellant had failed to prove that it was impossible to furnish them. It further provided that appellant requested that the Government pay its costs to locate the materials, that the Government had denied that request, but had instead granted appellant a time extension of 82 days in an attempt to place appellant back on track in performing the contract. (R4, tab A, Findings of Fact at 6)

22. The seal bars on the gate frames were to be re-used as were the horizontal ones on the gates (finding 2). These seal bars to be reused were highly deteriorated and worn (tr. 10, 13). The wear pattern was not consistent and gouges were present (tr. 11). The cap screws were snapping off, apparently due to the wear in the seal bars (tr. 10, 11). The holes in the worn seal bars had to have a great deal of countersinking to get the cap screws recessed (tr. 11, 12). Many holes were too shallow for the screws due to the additional countersinking and wear (tr. 12). Thus, appellant had to custom fit each cap

screw by hand trimming each screw with a saw awl (tr. 12, 13). Appellant's president testified appellant had not been compensated for modifying the cap screws to fit as well as countersinking the bars so that the screws would be recessed (tr. 67). It submitted project records claiming that its crew had worked an additional 4 hours per day on 16 and 17 October 1996, 3 hours on 18 October 1996, and one hour on 19 October 1996 (R4, tab AAA, attach. 1 at 5, 7, 9, 11). The Government admits that appellant incurred additional costs to custom fit each cap screw but claims that it paid for these costs in unilateral modifications 6 and 11 (Answer,  $\P$  1; Gov't br. at 16, 17). We make no finding as to whether additional quantum for this type of quantum is allowable as the hearing was limited to entitlement, including types of quantum.

23. Each gate was to have all of its vertical seal bars replaced (finding 2). The record does not include the drawing for these new seal bars. However, appellant's president testified that the contract prints called for new 12-foot seal bars with holes evenly spaced and in a straight line (tr. 13, 14, 63). On the other hand, the existing seal bars to be replaced were two bars 6 feet long with an additional hole at each end where they joined; the holes on the gates were not evenly spaced or in a straight line (tr. 14-16, 63, 65-66). Thus, the new seal bars had to be custom fitted (*id*.). Appellant took all four gates, one at a time, to a machine shop where the replacement seals were matched up to the existing seals one hole at a time (tr. 15). Appellant's president testified that appellant has not been compensated for this custom fitting of the seal bars on the gates but did receive some monies for the re-threading of the holes (tr. 66). No evidence was presented as to how many days of delay resulted from this effort. The final decision of the contracting officer dated 5 October 2001, vacated as a result of the appeal to the Board, awarded appellant an equitable adjustment of \$4,432 for the additional work, \$5,018 for equipment standby costs, and 28 calendar days of delay for this problem (R4, tab A, Findings of Fact at 7; Gov't br. at 16). This decision indicated that this compensation as well as the 28-day time extension was included in unilateral modification 11 (*id*.). However, unilateral Modification No. P00011 provides bulk equitable adjustment compensation as well as time extensions for several problems, including the side seal bar one, but does not allocate compensation or days of time extension for each separate problem (R4, tab VV). Thus, we are unable to determine that appellant is entitled to any additional time extensions beyond those already awarded in Modification No. P00011 or find any days of compensable delay. We make no finding as to whether additional quantum for this type of quantum is allowable as the hearing was limited to entitlement, including types of quantum.

# C. <u>Relocation of Butterfly Valve</u>

24. On 4 April 1996, appellant discovered a conflict between the butterfly valve and one of the dam's lift gates when appellant tried to lift that gate (tr. 16; R4, tab AAA, attach. 2 at 1). The contract drawings did not show this valve (tr. 16, 17).

25. Appellant recommended to the Government that the valve be rotated 30 to 45 degrees to move it out of the way of the gate (tr. 16, 17). It advised the Government in its daily breakdown that work stopped at noon on 4 April 1996 and that Government advice was needed (R4, tab AAA, attach. 2 at 5).

26. Appellant and its entire crew were on standby until the Government authorized the change so that the conflict could be resolved to enable the work to go forward (tr. 17, 18). Appellant sent its crew home from the job site to Tulsa, Oklahoma, after it did not receive an immediate answer to its problem (tr. 18). It did not remove its equipment because it would have taken 5 hours to bring it back down to the job (tr. 20). No evidence was included in the record as to how long it would take the Government to resolve this problem or that appellant knew or should have known how long it would have to wait for direction from the Government.

27. Approximately a week later, the Government requested an estimate from appellant as well as an estimate of time (tr. 18). Appellant provided that estimate (tr. 19).

28. By a letter dated 19 April 1996, the contracting officer sent proposed bilateral Modification No. P00005 (sic) to the appellant for signature (R4, tab X). Appellant responded that the modification providing appellant \$5,456 plus a time extension of twenty-five calendar days was inadequate (*id*.). Its response provided that appellant requested compensable delays at the rate of \$2,142.40 per 8-hour day per 5-day workweek, commencing from 4 April 1996 (*id*.). It admitted that some deductions should be taken since appellant was able to use some equipment and manpower on other projects and stated that it would continue to do so when possible (*id*.).

29. By unilateral Modification No. P00004 dated 23 April 1996 and received that same day, the contracting officer directed appellant to rotate the low, flow, butterfly valve 45 degrees, and stated that appellant would be paid an equitable adjustment of \$5,456 plus a three calendar day time extension (R4, tab Z). The unilateral change order did not pay any of appellant's costs of waiting for direction to resolve the conflict with the valve and gate (tr. 20-21).

30. Appellant rotated the valve as directed by the contracting officer (tr. 20). It did this work on 2 May 1996 (R4, tabs A, Findings of Fact at 8; AAA, attach. 2 at 1).

31. Appellant was on standby for 19 calendar days from 4 April 1996 when appellant began to standby through 23 April 1996 when the contracting officer directed that the butterfly valve be rotated to eliminate the conflict between the butterfly valve and the lift gate (findings 25, 29). It was also delayed 9 calendar days from 23 April 1996 until 2 May 1996 when the work to rotate the valve was completed.

32. The Government admits that it lacks knowledge as to whether appellant's forces were working on replacement projects during the times this project was delayed but opines that they must have been because appellant's revenue stream during the various delays either remained constant or increased (tr. 132-33). We find that the Government has not demonstrated that it was not impractical for appellant to take on replacement work to occupy its labor forces and equipment.

33. In appellant's equitable adjustment request dated 7 August 1997, appellant states that there appears to be no dispute as to entitlement with regard to the butterfly valve problem with the disagreement being the cost in time and money for correcting that problem (R4, tab YY). In its 24 July 2000 claim, appellant sought an equitable adjustment of \$23,209.07 for direct costs and delay damages as well as a 21-day time extension for this problem (R4, tab AAA, attach. 2).

34. In the final decision of the contracting officer dated 5 October 2001, a 21-day time extension as well as an equitable adjustment in the amount of \$8,946 was awarded for the butterfly problem (R4, tab A, Findings of Fact, at 9). This final decision states that unilateral Modification No. P00011 added \$3,490 and a time extension of 18 calendar days to the contract in addition to the \$5,456 and 3 days extension previously awarded in unilateral Modification No. 4 discussed in finding 29 (*id.* at 8, 9). As previously discussed, unilateral Modification No. P00011 did not award a specific time extension or compensation for this problem but issued a bulk award for several problems (R4, tab VV).

### D. Hydrogen Sulfide Differing Site Condition

35. Hydrogen sulfide is a poisonous gas which is dangerous in a confined space when more than ten parts per million are present (tr. 22, 67). Neither the solicitation nor the contract warned appellant that hydrogen sulfide would be present at the job site (tr. 22).

36. An enormous vacuum is created which pulls air from the bottom of the dam to the top when one of the lift gates is opened. On the other hand, that vacuum is not present when the gates are closed. (Tr. 22-23)

37. On 18 September 1996, one of the gates was lowered so that appellant's employees could work on the seal bars and cap screws (tr. 23; R4, tab AAA, attach. 3 at 8). Appellant's current president and a co-worker were working, wearing safety glasses and shields, when they began having eye irritant problems (tr. 23, 30; R4, tab AAA, attach. 3 at 8). Appellant's president began seeing halos and his eyes burned (tr. 24). He went to the emergency room of the local hospital and then he and his coworker consulted an eye specialist who indicated that the problem was caused by an irritant at the job site (tr. 23, 24, 29-31). They failed to properly store their tools in a toolbox at the bottom of

the dam but instead left them in the open due to the emergency situation with the eye irritant (tr. 29-31, 72, 76).

38. Appellant stopped all work at the job site until it could be determined what caused the problems for its employees and notified the Government of this (tr. 24). It sent all of its employees back to its home base of Tulsa, Oklahoma, until the problem could be resolved (tr. 25).

39. On 24 September 1996, the Government sent one of its employees with test equipment to the job site to determine what the problem was (tr. 24; R4, tab AAA, attach. 3 at 13). Employees of appellant traveled from its Tulsa home base to the project site to assist with those tests and then returned back to its Tulsa home base the next day after assisting with the tests (R4, tab AAA, attach. 3 at 13, 15). The Government determined that the problem was the presence of hydrogen sulfide gas and admitted that appellant's costs to overcome this problem were not covered by the contract (tr. 25, 68-69). At this time of testing, appellant workers discovered that the tools they had left in the open at the bottom of the dam were so corroded that they had to be replaced (tr. 31-32, 39).

40. Over the period from 26 September through 13 October 1996, appellant purchased hydrogen sulfide test monitors and trained its employees on the hazards of hydrogen sulfide and the methods of dealing with those hazards (R4, tab AAA, attach. 3 at 18; tr. 25).

41. On 14 October 1996, appellant returned to the job site from its Tulsa home base bringing fresh air gear to be used while working in a space with the hydrogen sulfide problem (R4, tab AAA, attach. 3 at 20). This fresh air gear was a mask without an oxygen tank (tr. 26).

42. Over the period from 18 September 1996 to 14 October 1996, appellant was on standby for 26 calendar days (findings 37, 38, 41). No evidence was included in the record as to how long it would take the Government to resolve this problem or that appellant knew or should have known how long it would have to wait for direction from the Government. The Government has failed to prove that it was not impractical for appellant to take on replacement work to occupy its labor forces and equipment.

43. On 15 October 1996, appellant installed a large fan at the top of the tower to the dam to replace the vacuum of the open lift gate to cause air movement in the working space (R4, tab AAA, attach. 3 at 22; tr. 26-27). It ran this fan each working day prior to starting work below (tr. 26). It spent an hour to an hour and a half each working day to clear the job site of hydrogen sulfide and to check work site safety (tr. 25, 26). Its employees had to work in the confined space of the dam under hazardous conditions using the fresh air mask that clearly increased the cost of performance (tr. 26-27).

44. On that same date, appellant replaced the tools and equipment damaged by the exposure to hydrogen sulfide (R4, tab AAA, attach. 3 at 22). The damaged equipment included the drill motors for the magnetic motors, the walkie talkies, torque wrenches as well as socket wrenches which were used to install cap screws, eye bolts which were part of the rigging to raise the lift gate, a one inch impact gun, cranks on the buggy lift, and bolts, shackles, and clevises (tr. 27-28).

45. Over time, tools stored in the toolbox were corroded and ruined by the hydrogen sulfide (tr. 32-33, 39). In a similar fashion, the cameras and walkie-talkies deteriorated over time and were replaced near the end of the contract (tr. 73-74).

46. In late November, early December 1996, representatives of the contracting officer visited the project site during a period when appellant was on standby during the period of the cylinder repair to be discussed *infra* (tr. 128-29, 139-40). Appellant's toolbox was not full of tools (tr. 129, 141-42). Rusted tools were lying on the ground in the work area (tr. 129, 141, 153). No evidence was presented as to whether these rusted tools were the damaged ones previously discussed or ones appellant's employees negligently set aside rather than placing them back in the toolbox (tr. 141). Appellant had a tool truck but that truck was locked during the time of the site visit (tr. 142). It was and is possible that appellant placed its delicate tools and replacement tools in that tool truck during the standby period (tr. 142).

47. We find that appellant was not negligent when it left the job site regarding its tools and equipment on 18 September 1996. We also find that tools and equipment corrode over time when working in an environment where hydrogen sulfide is present. Thus, appellant was not negligent with regard to the damaged tools and is entitled to the costs of replacing them due to the presence of hydrogen sulfide.

48. In appellant's claim dated 24 July 2000, appellant seeks its increased costs of \$37,260.15 and 25 calendar days of standby while waiting for a resolution by the contracting officer of the problem of working in a confined space containing hydrogen sulfide (R4, tabs AAA at 2, 3; AAA, attach. 3 at 6; see also YY). Its claim seeks the costs of purchasing and using monitoring equipment, training its employees to work in a dangerous, confined space containing hydrogen sulfide, replacement of equipment and tools corroded by the hydrogen sulfide, a permit required to work in an area with hydrogen sulfide, its employee and equipment standby costs while the problem was being resolved, its extra costs of performing the work under the hazardous conditions of the presence of hydrogen sulfide including running the fan to exhaust the air from the work site each work day, and its *Eichleay* home office expenses for the period of delay (R4, tab AAA, attach. 3 at 1-7).

49. In the final decision of the contracting officer dated 5 October 2001, an overall time extension of 28 calendar days was allowed, as was \$13,038.87 in additional

costs, which is much smaller than the \$37,260.15 sought by appellant (finding 48). This final decision granted appellant costs for monitoring equipment, the hydrogen sulfide permit, training of employees to work with areas contaminated with hydrogen sulfide, extra labor for working in a dangerous work environment as well as for extra air monitoring, but denied the costs of replacing the corroded tools and equipment due to alleged negligence on the part of appellant as well as those for home office standby under *Eichleay*. It further stated that this \$13,038.87 was composed of \$1,132.87 in addition to the \$11,906 and 28-calendar day time extension previously awarded in unilateral Modification No. P00011 (R4, tab A, Findings of Fact at 9-12, 16-18). Unilateral Modification No. P00011 did not specifically award any cost or time for the hydrogen sulfide problem, as it made a bulk award of time and money for various changes and claims without allocation to any specific problem (R4, tab VV).

### E. <u>Piston/Cylinder Problem</u>

50. On 30 October 1996, appellant discovered that the hydraulic cylinder that was used to raise and lower one of the lift gates used to control water flow through one of the dam conduits was rusted and pitted and notified the Government seeking direction (tr. 34-35; R4, tabs A at 12, AAA, attach. 4 at 1, 8). Appellant raised the cylinder to the surface so that the Government could inspect it and decide what to do (tr. 35).

51. Appellant stopped work and was on standby waiting direction from the Government during the period from 31 October through 9 December 1996 (R4, tabs AAA, attach. 4 at 10, 12).

52. By a letter dated 6 November 1996, the contracting officer requested that appellant prepare a proposal to repair the rust damage on the cylinder (R4, tab AA). This letter specifically directed that appellant not start work on any proposed repair to the cylinder until it received a directive from the contracting officer (*id*.). The letter did not contain any direction from the Government to stop work on the project or provide any direction as to whether appellant could demobilize at the job site while it was standing by waiting for contracting officer direction. Appellant replied in a letter dated 18 November 1996 that it had been unable to obtain adequate pricing and delivery information and requested a time extension of a few days (R4, tab BB).

53. On 27 November 1996, appellant submitted a proposal seeking \$80,687.23 plus 272 days of delay for repairing the rusted cylinder (R4, tab CC). At the contracting officer's request, appellant submitted a cost breakdown of this proposal on 4 December 1996 (R4, tab DD).

54. The contracting officer issued unilateral Contract Modification No. P00007 on 6 December 1996 directing appellant to investigate and repair the rusted hydraulic cylinder by honing it to a limit of .004 inches over the standard size for a not-to-exceed

price of \$20,965, that appellant submit an equitable adjustment proposal by 20 December 1996, limited funds for the work to \$7,500 of the \$22,965 until appellant submitted its proposal, and sets a schedule to negotiate the equitable adjustment with a negotiation completion date of 15 January 1997 (R4, tab EE).

55. On 10 December 1996, appellant transported the rusted cylinder to its Tulsa home base for honing (R4 tab AAA, attach. 4 at 13). The next day appellant delivered the cylinder to a machine shop in Tulsa (R4, tab AAA, attach. 4 at 15; tr. 36). The machine shop honed the cylinder from a diameter of 22.004 inches to 22.0165 inches but was unable to remove 3 or 4 pits or small holes (*id*.). These pits would damage the rings of the piston operating in the cylinder, eventually eliminating the seal between these items (*id*.). The cylinder was at that shop until 17 December 1996 (R4, tab AAA, attach. 4 at 14).

56. The contracting officer requested that appellant continue to bore the cylinder to remove these pits and to obtain a new, larger piston to fit the enlarged bore (tr. 36). This piston was to be made with ASTM C-60 metal (*id.*). From 18 December 1996 through 5 February 1997, appellant searched for as well as attempted to obtain pricing for the manufacture of a C-60 piston but was unable to find a manufacturer that would guarantee this oversized C-60 piston (tr. 37; R4, tab AAA, attach. 4 at 16, 18). Appellant notified the contracting officer of these difficulties and sought Government assistance in letters dated 31 December 1996, 15 and 16 January 1997, 4 February 1997, and 10 February 1997; and by telephone on 27 January 1997 (R4, tabs FF, HH, II, JJ, LL, OO). Meanwhile, appellant's equipment was still on site awaiting resolution of this problem (tr. 37).

57. By a memorandum dated 13 February 1997, the chief of the mechanical-electrical section of the Government engineering section determined that the repairs needed for the cylinder and piston were not the fault of the contractor and recommended that the repair of the cylinder and piston be performed by the Tennessee Valley Authority (TVA) (R4, tab PP). By bilateral Modification No. P00008, appellant was directed to return the cylinder to the job site for the price of \$1,435.06 and a two-day time extension (R4, tab RR). Appellant did so.

58. The Government shipped the piston to the TVA (tr. 37-38). The TVA repaired the piston and it was returned to the job site (tr. 38; R4, tab AAA, attach. 4 at 1). Appellant was directed to start work on 15 July 1997 (R4, tabs A at 14, AAA, attach. 4 at 1). The contracting officer stated in his final decision that appellant was on standby from 30 October 1996 through 15 July 1997 (R4, tab A, Findings of Fact at 14). No evidence was included in the record that the contracting officer directed that appellant could demobilize from the job site, granted appellant remobilization time when the piston/cylinder problem was resolved, or that appellant was able to work on other parts of the dam renovation contract.

59. During the period from 30 October 1996 through 15 July 1997, appellant was on 258 calendar days of standby (findings 50, 51, 56, 58). No evidence was included in the record as to how long it would take the Government to resolve this cylinder/piston problem or that appellant knew or should have known how long it would have to wait for resolution of this problem. The Government has failed to prove that it was not impractical for appellant to take on replacement work to occupy its labor forces and equipment (finding 32). By bilateral Modification No. P0008, appellant was paid for 2 days of work to transport the cylinder to the job site for subsequent delivery to TVA (finding 57). Thus, the standby period is reduced to 256 calendar days. In addition, appellant took 2 days to transport the cylinder to a machine shop in Tulsa (finding 55). We further reduce the standby period by these 2 days to 254 days.

60. Appellant's claim dated 24 July 2000 seeks \$323,075.38 plus 280 days of delay due to the rusted cylinder for gate 1 of the dam (R4, tab AAA, attach. 4 at 7; see also YY).

61. The final decision of the contracting officer dated 5 October 2001 granted appellant a time extension of 201 calendar days and \$29,412 (R4, tab A, Findings of Fact at 16). It denied any time extension for the 93 calendar days during the period of 18 November 1996 through 19 February 1997 because the Government claims that appellant was not diligent in responding to its requests for a proposal to repair the rusted cylinder (*id.* at 15). It also denied any recovery for home office overhead under *Eichleay* (*id.* at 15, 16). It further indicated that unilateral Modification No. P00011 had previously provided the 201-calendar day time extension and \$29,412 and that no additional compensation or time was owed (*id.* at 15, 16). Unilateral Modification No. P00011 only provided bulk time and money for various claims and changes but without any allocation to the cylinder/piston problem (R4, tab VV).

#### DECISION

#### I. Seal Bars and Cap Screws

Appellant argues that the contractually specified C22000 ASTM B36 brass seal bars and cap screws were not available requiring appellant to find the alternative material of C22000, ASTM B-134 to obtain the screws and seal bars. It claims 108 compensable days of delay in (a) searching for the originally specified brass seal bars and cap screws, (b) finding as well as ordering the alternative brass material cap screws and seal bars, and (c) having them delivered, less (d) the time originally in its bid for normal lead-time and (e) Government approval of that material.

The general rule is that "the obligation to locate a supplier remains where that sort of obligation has traditionally rested – upon the contractor." *Franklin E. Penny Co. v.* 

*United States*, 207 Ct. Cl. 842, 854, 524 F.2d 668, 675 (1975). Thus, the burden of determining the availability of a product needed for contract performance is ordinarily placed upon the party promising to provide it. *WRB Corp. v. United States*, 183 Ct. Cl. 409, 510-12 (1968). The risk of unavailability would shift to the Government if the Government contributed to or knew of the unavailability of the specified item. *Aerodex, Inc. v. United States*, 189 Ct. Cl. 344, 417 F.2d 1361 (1969); *Logics, Inc.*, ASBCA Nos. 46914, 49364, 97-2 BCA ¶ 29,125, *recons. denied*, 98-1 BCA ¶ 29,483. An example would be where the item was specially designed for the Government so that the Government knew that the manufacturer of the item, and this information was not disclosed to the contractor prior to award. *Logics, Inc.*, ASBCA Nos. 46914, 49364, *supra*.

Appellant argues that it is entitled to an implied warranty of commercial availability because the contract specified a standard material by requiring the use of C22000 ASTM B36 brass. It is true that an implied warranty of commercial availability exists when the contract requires the use of a "standard product" because the use of this term would reasonably mislead a bidder into believing that a "standard product" existed which would meet all of the terms of the contract. *J.W. Bateson Co.*, ASBCA No. 19823, 76-2 BCA ¶ 12,032 at 57,757, *recons. denied*, 77-1 BCA ¶ 12,275; *Thurmont Construction, Co.*, ASBCA No. 13417, 69-1 BCA ¶ 7602. However, the record is clear that the cap screws and bar seals were specialty items not a standard product and appellant knew this (findings 4, 6). Thus, appellant's argument fails and we hold that appellant bears the risk of the problems with regard to the availability of the cap screws and bars seals and deny any compensable delay damages on this basis.

We turn now to the issue of whether appellant is entitled to delay damages because the contract specifications were defective in specifying B36 bar stock brass for the cap screws rather than B-134 round stock brass. At appellant's request, the contracting officer approved the furnishing of the cap screws as being manufactured from B-134 brass as an alternative to being made from the B36 brass specified in the contract (findings 11, 12, 16, 19). In addition, the Government admitted in a negotiation memorandum dated 5 February 1996 that the cap screws "would be more appropriately fabricated under ASTM B 134" (finding 16). The contracting officer in unilateral Modification No. P00005 awarded appellant an 82-day time extension due to the change in materials for the cap screws (finding 19). On the other hand, the delay regarding the cap screws was concurrent with the delay for the seal bars, where no Government fault was shown, as the brass material for these bars was not altered (findings 19, 20). In addition, unilateral Modification No. P00005 denied appellant any of its claimed delay costs for this change in materials for the cap screws (findings 17, 19).

We hold that appellant has not met its burden of proving that it was entitled to delay damages because it was impossible to manufacture the cap screws from the

contractually specified B36 brass (finding 19). Thus, we are unable to hold that appellant is entitled to delay damages when the contracting office permitted appellant to have the cap screws manufactured from B-134 rather than B36 brass.

As to the other claims regarding the cap screws and seal bars, many of the cap screws had to be custom fitted due to the deteriorated condition of the seal bars, gates, and frames (finding 22). The Government has admitted that appellant is entitled to an equitable adjustment for this work but claims that appellant has been fully paid for it in unilateral modifications (*id*.). We are unable to determine whether additional quantum is due appellant because the hearing was limited to entitlement, including types of quantum.

Appellant is also entitled to an equitable adjustment for dealing with the problems of the seal bars being in two six foot lengths rather than one twelve foot length as shown in the contract drawings as well as the irregular pattern of holes rather than the straight line depicted on the drawings. The final decision of the contracting officer, vacated on appeal, states that appellant is entitled to compensation and a time extension for this problem but claims that appellant has been paid in full in unilateral Modification No. P00011. As previously mentioned, this modification grants bulk compensation and time extensions for several problems but does not award specific compensation or time extension for this problem. (Finding 23) We are unable to grant (1) any time extensions beyond those granted in unilateral Modification No. P00011; or (2) any days of compensable delay for lack of proof. We make no determination as to whether appellant is entitled to any compensation beyond that awarded in Modification No. P00011 because the hearing was limited to entitlement, including types of quantum.

# II. <u>Relocation of Butterfly Valves</u>

Appellant claims it is entitled to its home office overhead calculated under the formula set forth in *Eichleay Corp.*, ASBCA No. 5183, 60-2 BCA ¶ 2688 for the period when its employees and equipment were forced to standby awaiting Government direction due to the butterfly valve problem. The Government responds that appellant has to prove that it "suffered a disproportionate allotment of somewhat fixed home office resources and expenses to the delayed project at the expense of the contractor's other projects and opportunities" (R4, tab A, Findings of Fact at 24).

The Court of Appeals for the Federal Circuit in *Charles G. Williams Construction*, *Inc. v. White*, 271 F.3d 1055, 1058-59 (Fed Cir. 2001), set forth the following rules as to when *Eichleay* damages are recoverable:

The "two prerequisites to application of the *Eichleay* formula to recover unabsorbed overhead [caused by government delay are]: (1) that the contractor be on standby and (2) that the contractor be unable to take on other work."

Interstate Gen. Gov't Contractors, Inc. v. West, 12 F.3d 1053, 1056 (Fed. Cir. 1993). "The proper standby test focuses on the delay or suspension of contract performance for an uncertain duration, during which a contractor is required to remain ready to perform." *Id.* at 1058. The second prong -- the contractor's inability to take on outside work -- requires "the government to demonstrate that it was not *impractical* for the contractor to take on *replacement* work and thus avoid the loss." *All State Boiler*, 146 F.3d at 1381 (emphasis added). If both of these requirements are satisfied, the contractor has shown that it had unabsorbed general overhead for which it is entitled to *Eichleay* damages.

We turn to the first of the two factors. It is clear that appellant was forced to standby, awaiting Government direction for the butterfly valve (findings 24 to 26). Because work under the contract was *seriatim*, the contract performance period was extended by the period of the standby as well as by the time to perform the relocation of the butterfly valve (finding 2). The record does not indicate that appellant knew or reasonably should have known when it would receive the direction from the contracting officer to resolve the butterfly valve problem that was stopping the work (finding 26). Thus, the first prong of the *Eichleay* test has been satisfied. The Government has failed to meet its burden to show that it was not impractical for appellant to take on replacement work to occupy its labor forces and equipment (finding 32). Thus, we hold that appellant is entitled to unabsorbed home office overhead in accordance with *Eichleay*.

In accordance with our order limiting this decision to entitlement, we remand this matter to the parties for a determination of the actual costs to relocate the valve as well as the costs of moving appellant's employees from the job site to the home base and back. We also determine that home office overhead is recoverable under *Eichleay* for 19 days of standby (finding 31). The parties shall determine the proper daily overhead rate in order to calculate the damages under *Eichleay*. In addition, we find entitlement to an additional 9 days of time extension (6 more than allowed by the contracting officer) for the relocation of the valve (finding 29-31).

#### III. Hydrogen Sulfide Differing Site Condition

Appellant claims that it is entitled to its unabsorbed home office overhead calculated under the formula set forth in *Eichleay Corp.*, ASBCA No. 5183, *supra*, when its employees and equipment were forced to standby awaiting Government direction due to the hydrogen sulfide problem. The Government responds that appellant has to prove that it "suffered a disproportionate allotment of somewhat fixed home office resources and expenses to the delayed project at the expense of the contractor's other projects and opportunities" (R4, tab A, Findings of Fact at 24).

Under *Charles G. Williams Construction, Inc. v. White, supra*, we hold that appellant was forced to standby for 26 calendar days awaiting Government direction for the hydrogen sulfide problem (findings 37 to 42). Because work under the contract was *seriatim*, the contract performance period was extended by the period of the standby (finding 2). The record does not indicate that appellant knew or reasonably should have known when it would receive the direction from the contracting officer resolving the hydrogen sulfide problem that was stopping the work (finding 42). Thus, the first prong of the *Eichleay* test has been satisfied. The Government also has failed to meet its burden to show that it was not impracticable for appellant to take on replacement work (finding 42). Thus, we hold that appellant is entitled to unabsorbed home office overhead for the hydrogen sulfide delay in accordance with *Eichleay*.

The Government admits that appellant's tools and equipment were corroded and damaged by the presence of hydrogen sulfide but says no costs are due appellant because appellant was negligent in not returning these items to their proper storage place after work was completed each day. Appellant admits and we find that appellant did not properly store its tools and equipment on the day when appellant's employees discovered hydrogen sulfide and went to the emergency room at the local hospital (finding 37). We hold that these actions were reasonable and that appellant can recover for the damage to these initial items.

On a visit to the project site during a period when appellant's employees were standing by, a Government representative discovered rusted tools on the ground and that the tool box was not full of tools (finding 46). However, the Government was unable to establish that these rusted tools were not the originally rusted ones we have just discussed and that appellant's tools were not properly stored in the tool trailer (*id*.). Thus, we hold that appellant is entitled to recover for any later corroded tools and equipment.

We hold that appellant is entitled to an equitable adjustment for its actual costs to monitor the hydrogen sulfide as well as to work under the hazardous conditions of hydrogen sulfide with fresh air equipment, the amount of its *Eichleay* costs for 26 days of standby, 26 days of standby costs for its equipment at the jobsite as well as the cost of moving appellant's forces from the job site to its home base and back, the cost to replace appellant's tools corroded by the hydrogen sulfide, and the cost of the hydrogen sulfide permit as well as the cost of training appellant's employees to work in areas contaminated with hydrogen sulfide.

### IV. Gate Cylinder and Piston

The Government argues that appellant is not entitled to a time extension for the 93 calendar days of delay during the period of 18 November 1996 through 19 February 1997 because appellant was dilatory in responding to its requests for a proposal to repair the

cylinder and its piston (finding 61). However, we find that appellant was reasonably delayed in submitting that proposal because it was unable to find a manufacturer who could provide and guarantee a larger piston due to a need to enlarge the cylinder to remove the rust (findings 56, 57). Thus, appellant was not dilatory and is entitled to this time extension.

Appellant claims it is entitled to its unabsorbed home office overhead calculated under the formula set forth in *Eichleay Corp.*, ASBCA No. 5183, *supra*, when its employees and equipment were forced to standby awaiting Government resolution of the rusted or pitted cylinder problem. The Government responds that appellant has to prove that appellant "suffered a disproportionate allotment of somewhat fixed home office resources and expenses to the delayed project at the expense of the contractor's other projects and opportunities" (R4, tab A, Findings of Fact at 24).

Under *Charles G. Williams Construction, Inc. v. White, supra*, we hold that appellant was forced to standby for 258 calendar days awaiting Government direction for the rusted cylinder problem reduced to 254 calendar days of standby by the 4 days when appellant transported the cylinder from the job site to Tulsa for repairs and then back to the job site so that cylinder could be sent to the TVA (findings 50, 51, 55-59). Because work under the contract was *seriatim*, the contract performance period was extended by the period of the standby (finding 2). The record does not indicate that appellant knew or reasonably should have known when it would receive the direction from the contracting officer resolving the rusted cylinder problem (finding 59). In addition, no proof was provided that appellant was directed to demobilize during the standby period, granted time to mobilize at the end of the standby period, or able to work on other parts of the project during the piston/cylinder problem (finding 58). *P. J. Dick, Inc. v. Principi*, 324 F.3d 1364, 1371, 1373 (Fed. Cir. 2004). Thus, the first prong of the *Eichleay* test has been satisfied.

The Government also has failed to meet its burden to show that it was not impractical for appellant to find replacement work (finding 59). Thus, we hold that appellant is entitled to unabsorbed home office overhead for the piston/cylinder standby period in accordance with *Eichleay*.

In conclusion, appellant is entitled to 254 calendar days of standby during the period of resolution of the rusted lift gate cylinder/piston problem. It is entitled to its equipment costs for this standby period including Porta Potty rental expenses. It is also entitled to its costs to hone the cylinder, transport the cylinder from the job site to Tulsa for repairs, demobilizing and mobilizing its forces at the job site, and its unabsorbed home office overhead in accordance with *Eichleay*.

The appeal is sustained in part and denied in part in accordance with this opinion. The dispute is remanded to the parties for a determination of quantum.

Dated: 14 May 2004

JOHN I. COLDREN, III Administrative Judge Armed Services Board of Contract Appeals

I concur

I concur

MARK N. STEMPLER Administrative Judge Acting Chairman Armed Services Board of Contract Appeals EUNICE W. THOMAS Administrative Judge Vice Chairman Armed Services Board of Contract Appeals

I certify that the foregoing is a true copy of the Opinion and Decision of the Armed Services Board of Contract Appeals in ASBCA No. 53594, Appeal of Tulsa Mid-West Construction Company, Inc., rendered in conformance with the Board's Charter.

Dated:

DAVID V. HOUPE Acting Recorder, Armed Services Board of Contract Appeals