

**U.S. Department of Labor**

Board of Contract Appeals  
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**Issue Date: 05 January 2007**

CASE NOS.: 2003-BCA-1  
2004-BCA-2

In the Matter of:

Wu & ASSOCIATES, INC.,  
Appellant

Contract Number: AE-11793-01-20

For the Appellant: Sean T. O'Meara, Esquire  
Archer & Greiner

For the Contracting Officer: Vincent C. Costantino, Esquire  
Office of the Solicitor of Labor

**DECISION AND ORDER**

Introduction and Background

These consolidated appeals by Wu and Associates, Inc. ("Wu" or the "Contractor") are from two final written decisions of the Contracting Officer ("CO") dated May 13, 2003 (2003-BCA-1)(GX 2, AF-1, B1-B7) and October 5, 2004 (2004-BCA-2)(GX 34, AF-II, B2-B14) largely denying Wu's various claims pertaining to the construction of the nonresidential U.S. Department of Labor ("DOL") Job Corps Center in Wilmington, Delaware (the "Project"), under Contract No. AE-11793-01-20 (the "Contract").<sup>1</sup> The fixed price contract, which was awarded on September 28, 2001, was for construction for \$5,875,000 of an approximately 38,000 square

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<sup>1</sup> References to Government or Contracting Officer's exhibits are designated "G-"; Appellant's exhibits, "A-"; the Appeal File pertinent to 2003-BCA-1, "AF-I"; the Appeal File pertinent to 2004-BCA-2, "AF-II." Both AF-I and AF-II have been admitted into evidence as G-1 and G-33, respectively. "Government," "DOL," and "CO" are used synonymously, unless it is apparent from the context that particularity is intended. . "Appellant," "Contractor," and "Wu & Associates, Inc." or "Wu" are likewise used synonymously, unless it is apparent from the context that particularity is intended. Raymond Wu, President, and Kirby Wu, Vice President and Project Manager for Wu were the principals and operatives for Wu, and for convenience are included as alter egos within the meaning of "Wu," unless the context otherwise requires.

foot building to be used for Job Corps training. (GX 6, AF-I, E1-4) Numerous change orders incorporated into 28 Modifications increased the Contract amount to more than \$7,351,451.19. (GX 298).

The claims submitted to the CO were divided into a "Phase I Claim" dated August 23, 2002, in the amount of \$1,293,168.80, and a "Phase II Claim" dated March 24, 2004, in the amount of \$4,015,873.75. By a Final Decision dated May 13, 2003, the CO allowed \$189,082.52 relating to Change Order #17 with respect to the Phase I Claim, and by Final Decision stipulated by the parties to have been dated October 5, 2004, the CO allowed \$28,638.90 with respect to the Phase II Claim. (G-2, G-34)

On January 24, 2003, Wu appealed the first CO decision relating to Phase I, which denied Change Order Requests ("COR") 1, 2, 10, and 12, but deferred decision on most of the claims. On May 29, 2003, Wu appealed the second CO decision dated May 13, 2003, relating to the deferred claims, which denied most of the claims, but allowed \$289,082.52 for the initial suspension of work from October 17, 2001, until May 30, 2002. That appeal was docketed as 2003-BCA-2, but was subsequently dismissed without prejudice on September 2, 2003, at the parties' request, because Wu was preparing additional claims.

Wu's Request for Equitable Adjustment-Phase II ("REA") submitted March 24, 2004, which totaled \$4,015,873.75, was denied by the CO on October 12, 2004, except for \$28,638.91, appealed and docketed on July 21, 2004 as 2004-BCA-2. It was consolidated subsequently with 2003-BCA-1 for hearing and disposition. Wu's claims before this Board include claims for breach of contract for withholding superior knowledge by the Contracting Officer vital to Wu's bidding and performance of the contract, breach of contract on various other grounds, including cardinal change to the contract, failing to issue the Notice To Proceed ("NTP") in a timely manner, bad faith failure to cooperate with Wu during performance of the Contract, and defective specifications, as well as alternative claims for equitable adjustments under the "Differing Site Conditions," "Changes and Changed Conditions," and "Changes" Clauses of the Contract, for differing site conditions, recovery of multiple and various delay claims, including extended office and field overhead, lost profits, legal and consultant fees, and interest pursuant to the Prompt Payments Act ("PPA"), Contract Disputes Act ("CDA"), and other. Most of the disputed Change Order Requests (COR's) have been separately resolved by agreed settlement.

The record developed before this Board establishes that DOL and its agents made a series of seriously misguided and costly decisions in an effort to expedite construction of the Project and have sought to transfer virtually all of the blame and the costs to Wu. The Board finds, however, that DOL breached its contract with Wu in multiple ways and has erroneously denied claims for costs and other recovery of losses sustained as a consequence by Wu. The credibility of a number of DOL's witnesses was questionable, while the testimony of Kirby Wu, Wu's primary witness, was generally credible because of his demeanor, his background, qualifications, and experience, the logic, consistency, insight, precision, and directness of his testimony, and his personal knowledge and impressive mastery of detail regarding Wu's performance under the contract and interactions with DOL and its agents.

DOL denies that it withheld or failed to disclose material information or that there was a breach of contract because of defective specifications, bad faith failure to cooperate, late payments, and contends that if any such problems occurred they were of insufficient dimension to cause a breach of the Contract. DOL contends that Wu's slow progress was primarily due to its failure to staff the job adequately, to coordinate the trades and subcontractors working on the Project, and to prosecute its work timely. DOL also contends that Wu did not seek further information or investigate as it should have before bidding the Contract, or take steps to mitigate any damages after it had entered the contract and learned of the environmental contamination, the need for remediation, and remediation process.

The Board has considered the pertinent record, including the extensive testimony adduced during three weeks of hearing conducted between August 29 and October 21, 2005, in Wilmington, Delaware, and Washington, D.C., documents in evidence, and the arguments of the parties at the hearing and as presented in their prehearing, post hearing, and reply briefs, in making its findings and conclusions which are set forth below. The Findings of Fact and Conclusions of Law which relate to the Appellant Contractor's claims related to liability and entitlement for breach of contract and differing site conditions are considered initially, and separately in the first part of the decision, from the delay claims and quantum issues, considered in the second part.

#### CO's Final Decisions and Wu's Appeals

The CO's Final Decision dated May 13, 2003, addressing Change Order Request ("COR") #17 totaling \$1,293,168.80, a claim by Wu for Delay Damages, Extended Office Overhead and Cost overruns attributable to the substantial delays in starting the project from September 28, 2001, when the Contract was awarded, to June 30, 2002, when Wu began construction pursuant to the full Notice to Proceed ("NTP"). (GX 2) Change Order No. 17 involved claims by Wu for \$180,000 relating to increased cost to replace the masonry subcontractor, \$535,447.65 for Extended Overhead and Interest from 9/28/01 through 6/30/02, \$559, 917.51 for Lost Profits, \$5,000 for Legal Fees, and \$12,803.65 for Performance and Payment Bonds and Insurance (1%), totaling \$1,293,168.80. The CO's decision also addressed Wu's revised claim dated October 31, 2002, which adjusted the certifications pertinent to the claims and added certain change orders, all but five of which have been settled or withdrawn.

The CO declared that COR's 1, 8, 9, and 10, which related to the Health & Safety Plan, Additional Consulting Services for Health and Safety Plan, Contractor's Pollution Liability Insurance, and Provide Survey for Inconsistencies of Contract Documents, respectively, had been paid pursuant to negotiated Modifications Nos. 2 and 3. The pending claims pertained to Time Extensions and Delay Damages, which the CO declared Wu had not quantified, and so the claims were denied by the CO because they did not constitute claims under FAR Section 52.233.1, and for lack of specificity. In pertinent part that FAR provision defines a claim as seeking the payment of money in a sum certain.

In her decision the CO recited as background, in pertinent part, that the bid form required a 60 day bid guarantee from the date of issuance of a bid, and that DOL's award to Wu on September 28, 2001, was within the bid guarantee period. After the insurance and bonds were

submitted, DOL purportedly “took a reasonable amount of time to issue a partial Notice to Proceed date of October 29, 2001.” In this regard, the CO recited, “During this time, it was discovered that there were some environmental issues that would limit Wu’s ability to perform some functions on the construction site and this was the reason for the partial NTP. The work that Wu was able to perform was administrative functions and mobilization of its job site trailer. At the time, the environmental issues were not expected to cause a significant delay...The main environmental issue consisted of a remedial action plan that took a substantial amount of time to be processed through the State Government. These issues were finally resolved and a full NTP was issued on May 29, 2002. Wu immediately started its initial operations to proceed with the project.” The Board’s findings are inconsistent with the CO’s narrative in material respects.

The CO denied Wu’s claim for loss related to replacement of the original masonry contractor which backed out of the project when it was delayed. The stated reason for the denial was Wu’s estimated cost of the masonry work, and the quotes Wu received from masonry subcontractors as cost or pricing data substantially exceeded the subcontract amounts of both the original and replacement masonry subcontractors.

The CO limited compensation to Wu for extended home office overhead to the 212 days between the “initial NTP on October 29, 2001,” and the full NTP on May 29, 2002. The CO denied compensation for the month prior to the initial NTP or the month after the full NTP, because DOL was held to have taken a reasonable time to review Wu’s bonds and prepare a NTP before October 29, 2001, and, after the full NTP was issued, Wu had commenced typical start up actions, and had already accomplished such start up actions as the job site trailer, utility hookups, and shop drawing submittals. The CO declared that the savings from such early start up actions were admittedly hard to quantify, but were deemed to offset Wu’s allegedly slow start after the full NTP was issued.

The CO compensated Wu in the amount of \$1,325 per day for 212 days delay, after reducing the 2002 Overhead pool under the Eichleay formula from the claimed \$1,022,525 to \$885,066 by amounts related to legal fees incurred for claims against the Government, excessive rent paid to a related entity, nonwork related vehicle expense, unreasonable education expenses, entertainment expenses, and contributions, and reallocating the allowable overhead for the first half of the year through June 30, 2002. DOL then extrapolated a daily Eichleay rate for the assumed duration of the project in arriving at an offered amount of \$1,325 per day for the suspension period totaling \$280,900, less the \$100,000 amount paid as compensation in a previous modification. Total Home Office Overhead thus paid was \$180,900. Wu’s claim of accrued interest of \$7,634.16 within the Home Office Overhead claim was reduced to \$6,310.42 calculated under the Contract Disputes Act (CDA) formula from receipt of certified claim to receipt of anticipated payment.

The CO denied Wu’s claim for lost profits in the amount of \$559,917.51 under the express exclusion in FAR Sub Part 42.1302 pertaining to Suspension of Work. The CO denied Wu’s claim for \$5000 in legal fees as duplicative of such costs in Wu’s Home Office Overhead pool and under the prohibition in FAR Section 31.205-47 against such costs incurred in connection with claims against the Federal Government. The CO denied Wu’s claim for

\$12,803.65 for Performance and Payment Bonds and Insurance, subject to recalculation based on 1% of the amount allowed in the Final Decision, or \$1,872.10.

Wu's Request for Equitable Adjustment-Phase II ("REA") submitted March 24, 2004, totaling \$4,015,873.75, was denied by the CO on October 5, 2004, except for \$28,638.91. Wu appealed and the appeal was docketed on July 21, 2004, as 2004-BCA-2. It was consolidated subsequently with 2003-BCA-1 for hearing and disposition.

In order to simplify understanding of the Board's recitation of the events involved in this case, the Board has identified the main participants and the chronology of significant events as follows:

### Contract Parties and Participants

John Steenbergen Contracting Officer and a Chief of the DOL's Division of Acquisition and Assistance, involved with the Project from inception until he retired in December 2001. He denied involvement in the contract administration portion of the Project. (Tr. 1721-22)

Brenda Williams Contracting Officer involved with the Project at least from solicitation of bids in 2001 and continuing during and after construction of the Project. The Final Decisions of the Contracting Officer were issued over her signature, and Wu's correspondence to the Contracting Officer were directed to her.

Robert O'Malley Contracting Officer's Technical Representative ("COTR") from inception through construction of the Project

Monica C. Gloster Signed as Contracting Officer two partial NTP's addressed to Raymond Wu, and dated October 30 and December 20, 2001, respectively (G-7, G-10)

Wu & Associates, Inc. (Wu) General Contractor for Project

Raymond Wu President of Wu & Associates, Inc., principal manager of bid process through second partial notice to proceed

Kirby Wu Vice President, and Project Manager for WU after Jan. 2002

Bob O'Reilly An employee of Arch Design, a Wu related entity, who helped manage the Project for Wu

P.B. Dewberry            Engineering and technical support to DOL generally and CO particularly under contract with DOL with respect to Job Corps Center construction projects. Banks was its Project Manager for this Project, and as such was responsible for oversight of the General Contractor, Wu, and day-to-day operations of the Project. Dewberry was responsible for the selection of the Architect/Engineer (Tevebaugh) and environmental consultant (EA). (Tr. 74-76)

Chi Chiu                    Director Program Development, Deputy Program Director for Dewberry operations in providing engineering support services to DOL Office of Job Corps; long term employee of prior Job Corps contractor of DOL from 1989-2000, which was purchased by Dewberry; claimed comprehensive “cradle to grave” jurisdiction over Project, design and construction team (Tr. 1337-38); had long term professional association with COTR O’Malley

Mark Banks                Project Manager for Dewberry

Ron McIntyre             Regional Project Manager, Dewberry, and successor to Mark Banks as Project Manager in 2004

McKissick & McKissick    Contractor with DOL for contract management of Job Corps contract and Project

Robert Laubenheim    A senior advisor to DOL contracts personnel; employed by McKissack & McKissack; described himself as basically as an extension of the CO, performing essentially the same duties as CO and staff at DOL; involved with Project since October or November 2002; analyzed Wu’s claims for DOL; drafted the CO’s Final Decisions in this case.

Tevebaugh & Associates    Served as Architect/Engineers for the Project under contract with DOL; prepared all Project plans and designs; prepared no plans or specifications for environmental remediation prior to bid

James Tevebaugh        President and chief operating officer of Tevebaugh

Robert Reid                Architect and principal of Tevebaugh; Project Manager charged with oversight of Project; had no experience with new construction on contaminated sites (Tr. 74-76)

Sundari Balakrishnan     Project Manager for Tevebaugh

EA Engineering, Science, & Technology, Inc. (“EA”) Environmental engineering firm retained by Tevebaugh under contract; represented by Reitenbach; engaged to test and evaluate contaminated soils and water at the Project site and participate in remediation as necessary; acted as liaison among interested parties, including DNREC. (Tr. 34-36, 38)

Carl Reitenbach Environmental specialist employed by EA; liaison with DNREC

State of Delaware Owner of Project site; environmental jurisdiction over Project

Ted Nutter Property Manager for State of Delaware, Division of Facilities Management (DAS/DFM), technical owner of Project site

DNREC Delaware Department of Natural Resources and Environmental Control; state agency charged with oversight of implementation of Voluntary Environmental Cleanup Plan (also referred to as part of the Delaware Environmental Control Group)

Lynn M. Krueger Primary representative of DNREC/Site Investigation and Restoration Branch (DNREC/SIRB) in dealings with DOL and its contractors

SIRB Site Investigation and Restoration Branch, DNREC

USTB Underground Storage Tank Branch, DNREC

Wirtz Delaware Environmental Program Manager, Krueger’s superior

Qore Property Sciences (Qore) Prepared Phase 1 Environmental Site Assessment (ESA) dated Aug. 6, 1999

Duffield Associates Prepared Geotechnical Evaluation for proposed Project dated May 2000 (G-212), prior to demolition of existing abandoned industrial building on Project site, and environmental supervisor of Project during construction and implementation of Remedial Action Plan

BATTA Prepared Tier 1 report related to removal of 20,000 gallon underground storage tank (UST) which had contained heating fuel oil #6 in 1997

ECG Industries, Inc. (ECG) Contractor with DOL under sole source SBA demolition contract awarded Feb. 7, 2000, upon request of Tevebaugh

for removal and disposal of asbestos containing materials, lead paint, partial demolition of abandoned building on site, clearing and grading site, site utilities, removal of underground storage tank and appurtenant soils contaminated by leaked hydrocarbons to be done in accordance with DNREC requirements; removal of contaminated soils and water during construction. (G-224; Tr. 1632-34)

Ten Bears Environmental, L.L.C. Wu's environmental consultants who prepared Health and Safety Plan pursuant to Change Proposal Request from Tevebaugh to Wu; provided hazardous materials monitoring and training and other environmental services for Wu on the Project

### Chronology of Significant Events Affecting Project

- Oct. 1997 Phase 1 ESA by Tetra Tech referenced by Qore, but not seen by Reitenbach
- Aug. 8, 1999 Environmental assessment by Qore discovered no closure of prior UST, environmental threats, or visible contamination, but recommended additional environmental assessments; unoccupied industrial building present on site; Qore later filed Finding of No Significant Impact (FONSI) (G-209, 210; Tr. 1344-47)
- May 2000 Geotechnical Evaluation for proposed Project by Duffield Associates, Inc. (prior to demolition of existing warehouse facility on site). (A-31) Report consisted of 13 pages, table of contents, 2 page Executive Summary, four small descriptive appendices, including a one page Appendix B "Test Boring Logs (6). (G-212) Report stated under Conclusions and Recommendations: "All contractors interested in bidding on phases of this work which involve subsurface conditions should be given full access to this report so that they can develop their own interpretations of the available data." (G-212 at 13) Draft test boring logs with locations given to Tevebaugh April 5, 2000, for further review by BATT. (G-212 at 2-3)
- October 18, 2000 CBD Announcement soliciting Project construction contract; bid opening indefinitely postponed by DOL because of the need for soil testing required by Delaware; pre-bid meeting attended by Wu, others; bid postponed indefinitely without reason. (G-232; Tr. 197-99, 1635-37) Chiu said because BATT tank removal disclosed need to know more about contaminated soil situation. (Tr. 1366)

- November 27, 2000 BATTA filed closure report re disposition of UST and soils, recommended further investigation of soils; jurisdiction shifted to SIRB in DNREC; closure not effected because BATTA not certified by DNREC, and its involvement with Project ceased (G-214; Tr. 1363-64) Tevebaugh hired EA for environmental services at Chiu's direction.
- May 2000 Demolition of existing building at site and Project site preparation by ECG apparently occurred after May 2000, but prior to Solicitation for Bids or April 12, 2001
- Jan. 24, 2001 DNREC advised Nutter by letter, copies to Reid and BATTA, that USTB had referred the UST site to SIRB following review of BATTA report of Oct. 31, 2000, and posed options of VCP or additional investigation without SIRB oversight, and recommended VCP.
- March [7], 2001 Meeting in Dover: DOL, DAS/DFM, Krueger's first involvement with Project
- March 20, 2001 Reitenbach explained options by letter to Reid including Facility Evaluation, whose purpose was to collect data for preliminary risk assessment, warning of possible additional investigations, and recommending VCP to minimize delays. Reid forwarded letter to CO Steenbergen, copy to Banks, with explanation that letter was response to Banks' inquiry whether DOL was required to follow VCP.
- April 11, 2001 Tevebaugh letter to O'Malley recommending bid be canceled until closure of environmental issues. (A-12(e); Tr. 1673-74)
- April 12, 2001 Site inspection by Krueger, her Technical Advisory Group, and Tevebaugh, who walked the site, described as relatively flat except for the stack, and observed people living on the site, obvious demolition, chunks of concrete and asphalt, PAH's (hydrocarbons) (Tr. 832-33)
- May 4, 2001 Reitenbach submitted to Tevebaugh proposed work scope for Facility Evaluation, risk assessment, responding to DNREC's requirement for additional sampling and analysis.
- May 24, 2001 Reitenbach for Tevebaugh submitted Facility Evaluation Work Plan, characterized by Krueger as similar to a remedial investigation, describing broad based first round sampling to DNREC/SIRB pursuant to Delaware's Hazardous Substance Cleanup Act to be completed August 15, 2001.

May-June 2001 Unusual Meeting, Steenbergen, O'Malley, Chiu, Williams, others, Steenbergen's office regarding republication of notice of construction phase of Project in CBD (Commerce Business Daily); Steenbergen understood until bid opening that contaminant problem was restricted to area around UST, and Project could be bid. (Tr. 1639-45, 1670-71, 1678-80)

July 16, 2001 Reitenbach provided Tevebaugh, Banks at Dewberry, Nutter at DAS/DFM, a preliminary summary of analysis of soil and groundwater samples, and advised that DNREC was likely to require Remedial Investigation, risk assessment, and VCP, typically taking a year and a half. Banks testified it was pretty much Greek to him. (Tr. 2237)

July 20, 2001 Wu's Request for Clarification to Reid asking whether "soil Boring Log" available, because no subsoil information in specifications. (A-30; Tr. 201-02) Tevebaugh supplied Executive Summary from Geotechnical Report. Wu submitted additional Request for Clarification, whether the general contractor would be responsible for the removal or abatement of the contaminated soil. (A-31; Tr. 203).

July 25, 2001 Strategy meeting in Dover, Delaware, attended by Tevebaugh, Reitenbach, Banks, Chi Chiu, Nutter, but not DNREC, to compress timing of Remedial Investigation and Risk Assessment (RI/RA), including briefing by Reitenbach regarding EA's findings, and DNREC procedures for approval of VCP and Risk Assessment. (G-236)

July 2001 At second pre-bid conference, in response to Raymond Wu's query why job had been postponed seven or eight months, Banks responded that there were some environmental issues. Pressed further by Wu, Banks responded that the environmental issues had been taken care of and "It's not in your bid." (Tr. 200) Thereafter Wu prepared a bid.

July 27, 2001 Wu's Request for Clarification or RFI #25 relating to "Addendum No. 1 – Duffield Associates Executive Summary," which referred to petroleum in some soils, and lack of provisions in specifications for contaminated fill removal or its extent and lack of provisions in drawings and/or specifications for underground vapor venting system and stating assumption that General Contractor would not be responsible for those items.

- Aug. 3, 2001            Response to Wu's Request for Clarification by Tevebaugh, "The contractor shall not be responsible for any contaminated fill removal or underground vapor venting."
- Aug. 5, 2001            Reitenbach memorandum providing agenda to Tevebaugh, Banks, for August 7, 2001, meeting with DNREC to compress schedule, limit scope of risk assessment by excavating and disposing of 3000 cubic yards of surface soils from open space areas at an estimated cost of \$200-300,000 for removal, disposal, and sampling. (A-18; Tr. 98-103) Reitenbach's proposed schedule compression from November 15, 2002, to December 21, 2001, described by Reitenbach, who suggested paving areas and soil removal to expedite remediation as "challenging but doable," but admitted he did not know what remedial action would be necessary, but knew that DNREC's approval of the RIFS would be essential. (A-18; Tr. 98-103)
- Aug. 7, 2001            Meeting attended by Krueger, Dewberry, Banks, Nutter, DFM, DOL, Delaware Job Corps, (not Chiu, Tr. 1410-11) considered findings of the Facility Evaluation and ways to compress schedule to four months, despite Krueger advice of 7-12 months would be more realistic, documented in Aug. 13, 2001, letter from Krueger advising of cooperation, but not commitment to "aggressive" schedule because of uncontrolled factors. Imminence of bid opening on Aug. 16, 2001, apparently was not discussed, per Krueger.
- Aug. 13, 2001            Krueger received VCP application from Nutter, DFM (A-24; Tr. 833, 841) Krueger explicitly advised Tevebaugh and Reitenbach by letter that proposed schedule was "very ambitious"; that DNREC-SIRB would cooperate, but warned of particular issues identified at the August 7 meeting that could affect the schedule, because the oversight and review process, outlined in detail, was complex and depended upon such variables as the quality of submittals, voluminous data and explanation, technical and legal reviews by numerous personnel, possibility of public comments and the need for a public hearing, very short response times, and the need to maintain quality of review and oversight to protect human health and the environment.
- August 14, 2001        Reitenbach advised Tevebaugh and Banks that Krueger had not approved his method of assessing surface water; data was still under review; that the work plan outlining the investigative process in the RI/FS was to be submitted to DNREC on August 17, 2001.

Nutter sent revised VCP application to Krueger

- Aug. 16, 2001            Wu's bid submission/bid opened; bid guaranteed for 60 days
- August 17, 2001        Elaborate environmental investigative and review process began.
- August 24, 2001        Krueger advised Nutter by letter, copies to Tevebaugh, Banks, and Reitenbach, of significant unresolved issues previously warned about which were adversely affecting schedule, including defective RI/FS Work Plan submitted, as revised, on August 17, 2001. Krueger also advised Nutter that all BATTAs related to project were invalid, because BATTAs were not certified by DNREC. (A-28; Tr. 842-43)
- August 30, 2001        Meeting reported by Banks, copy to O'Malley, attended by representatives from Tevebaugh, Paragon Engineering, Dewberry, Reitenbach, at which there was discussion of "the many nuances of the review process, highlighting many of the potential pitfalls that could cause delay" in DNREC's review process, and how to mitigate the potential for delay. The report included restated "Proposed Schedule" providing for submission of RI/FS Work Plan on August 17, its approval on August 24, completion of joint RI/FS Review on September 10, Construction Contract Award on September 22, DNREC's issuance of Proposed Plan of Remedial Action on September 24, and Interim Remedial Action, Start Construction Notice to Proceed, and DNREC's final Plan of Remedial Action all on October 17, 2001. (A-29; Tr. 120-21) Banks recorded "Center Concerns" as "Timing for obtaining the required approvals from DNREC and the impact on the construction award." Reitenbach identified additional sampling as primary cause of delay, as well as review process.
- Sept 14, 2001            O'Malley advised CO's that DNREC had not accepted DOL's test results, required more testing, had not accepted Remedial Action Plan or Final Work Plan; that Banks, Architect/Engineer (A/E), and consultants had persuaded DNREC to allow certain limited construction after certain documents were submitted; recommended contract award Sept. 30, 2001, after acceptance of Work Plan, and Notice to Proceed (NTP) no later than Nov. 20, 2001.
- Sept. 24, 2001        Krueger letter to Nutter describing constraints on construction prior to completion of final remedial action plan, and unresolved issues.

- Sept. 28, 2001 Contract awarded to Wu provided for substantial completion in 300 days, full completion in 356 calendar days. (GX-208, AF1, E-1; Tr. 248-49)
- Oct. 5, 2001 Wu resubmitted insurance and bonds as corrected.
- Oct. 30, 2001 DOL issued partial NTP effective by its terms on October 31, 2001, over signature of Monica C. Gloster, Contracting Officer, addressed to Raymond Wu, instructing Wu to commence with specified Administrative functions of Project only. (G-7)
- Nov. 14, 2001 Partnering Meeting or preconstruction conference; chain of command discussed; exhortation to start job as soon as possible; Krueger said not ready to start because environmental issues had to be addressed as she detailed. Krueger spoke to Wu, who wanted to know her role, what were the contamination problems, because this was when first he had heard about environmental issues. (Tr. 217-19) O'Malley, contrary to his normal practice with big projects, was represented at the Partnering Meeting by Banks (G-8; Tr. 2669-72, 2675)
- Dec. 20, 2001 DOL issued second Partial NTP over signature of Monica M. Gloster, specifying limited actions which could be taken by Contractor. (G-10)
- Jan. 2002 Kirby Wu assumed responsibility for Project from Raymond Wu; CO Steenbergen retire
- May 29, 2002 DOL issued full NTP to Wu.
- May 30, 2002 Wu received full NTP requiring Substantial Completion by March 26, 2003.
- June 17, 2002 DOL issued Change Directive No. 5 directing Wu to procure Pollution Liability Insurance and to provide on site environmental site monitoring. (A-274)
- June 27, 2002 O'Malley letter to Nutter notifying that DNREC accepted Proposed Plan of Remedial Action and published Final Plan of Remedial Action dated May 2002; declared DOL financial responsibility fulfilled per Memorandum of Agreement between Delaware and DOL; declaring remaining remedial action to be the responsibility of State, and requesting State's procurement strategy and funding plan within 15 days. (G-28)
- July 1, 2002 Wu started construction pursuant to full NTP

July 8, 2002 Wu notified CO by letter that contamination encountered and stop work order issued pursuant to Health and Safety Plan, and requested handling instructions. (A-86)

Oct. 31, 2002 Wu submitted Phase I claim dated Aug. 23, 2002, as revised, for \$1,293,168.80

Dec. 4, 2002 CO's letter allowing \$189,082.52 re Change Order #17, but denied COR's 1,2,10,12, and deferred the rest re Phase I Claim and allowing \$28,638.90 re Phase II Claim

Jan 24, 2003 Wu appeals CO's first decision re Phase I Claim, 2003-BCA-1

May 13, 2003 CO Williams' first written final decision treating COR #17, \$1,293,168.80 for delay damages, extended office overhead and cost overruns, Sept. 28, 2001 to June 30, 2002, and Wu's revised claim dated Oct. 31, 2002

May 29, 2003 Wu appeals CO's second May 13, 2003, decision re deferred claims, which denied most claims but allowed \$189,082.52, 2003-BCA-2 (dismissed without prejudice Sept. 2, 2003, at parties' request)

Mar. 24, 2004 Wu submitted REA-Phase II claim dated Mar. 24, 2004, for, \$4,015,873.75

July 21, 2004 Wu appealed CO's Final Decision dated Oct. 15, 2004, 2004-BCA-2

Oct. 5, 2004 Second written final decision of CO Williams denying REA-Phase II

Oct. 25, 2004 Substantial Completion recognized

#### Issues

Wu alleges that DOL breached the Contract by failing to disclose superior knowledge, failing to issue the Notice to Proceed in a timely manner, acting in bad faith, failing to act in good faith, issuing defective specifications, and making a cardinal change to the contract. As its remedy for these breaches, Wu seeks to recover certain direct costs, home office overhead, extended field overhead, lost profits, interest, consultant fees and attorneys' fees. Alternatively, Wu seeks compensation under the Changes, Changes and Changed Conditions, and Differing Site Conditions clauses of the Contract.

### Findings of Fact

Wu & Associates, Inc. (Wu) is an experienced general contractor specializing largely in construction of government buildings. Raymond Wu, Wu's President, testified that he had been involved in numerous projects involving asbestos and lead paint contamination and hazardous material where the contract specifications would identify the kind of contamination and manner of handling the hazardous material. In such cases he would subcontract the lead paint or asbestos abatement process based upon the specifications and drawings. Raymond Wu testified that Wu had refused to bid where other contaminants were involved because of special licensing and liability insurance requirements, so that Wu had never contracted for a job involving soil contaminated by hazardous material. (Tr. 195-97)

DOL wanted to get Project built which had already been delayed for a year or year and a half. There was no indication by DOL to the bidders regarding contamination of the construction site other than the reference to the Executive Summary of the Duffield Report regarding the geotechnical issues on the eve of the bid after inquiry by Wu as a potential bidder. There were no specifications in Contract dealing with pollution. Wu asked whether it would be responsible for any contaminated fill removal or underground vapor venting. DOL assured Wu upon inquiry that any environmental problems had been taken care of and that they were not part of the Contract under bid. DOL conceded it could not justify the absence of specifications, but insisted that Wu had notice which negated that omission. (Tr. 31)

Dealing with the onsite pollution problem cost DOL more than \$3.3 million, separately, in excess of the nominal amount originally estimated. Yet DOL contends that notwithstanding the existence of site contamination and requirement for remediation, Wu should have completed performance of the Contract essentially within the same amount of time as was originally specified in the Contract, 300 calendar days until Substantial Completion, 356 days until Final Completion.

The project site was owned by the State of Delaware; EA was the environmental engineering consultant under contract with Tevebaugh, the Architect/Engineer for the project under contract with DOL; Dewberry was the engineering support contractor under contract with DOL. (Tr. 74-76)

### Carl Reitenbach

Reitenbach was employed by AIG Consultants at the time of the hearing. (Tr. 34) EA had been retained by Tevebaugh Associates ("Tevebaugh") to provide environmental work investigation and remediation if necessary. (Tr. 35). He had degrees as a Bachelor of Science in Environmental Science, 1982, and a Master's in Civil Engineering, 1990, had been employed since 1989 and in the winter of 2000 and first ten months of 2001 by EA Engineering, Science, and Technology, in New Castle, Delaware ("EA"). He had started work in the environmental field in 1984.

Most of Reitenbach's professional environmental engineering work involved responses to contamination and the investigation of its extent, sometimes in relation to construction. (Tr. 36) A quarter of his work was in Delaware; he was familiar with Delaware environmental regulations; he knew people at the Delaware Environmental Control Group, referred to as DNREC (Delaware Department of Natural Resources and Environmental Control). He became involved with the Wilmington Job Corp site in early 2001. (Tr. 38) He was thus professionally well qualified, a good historian, and a credible witness.

Reitenbach had prepared EA's Facility Evaluation Work Plan for the Project site which referred specifically to a number of prior environmental studies related to the Project site. Those studies to which he referred were the August 6, 1999, Phase 1 Environmental Assessment or ESA by Qore Property Sciences, which he had reviewed; the October 1997 Phase 1 Environmental Site Assessment by Tetra Tech, which he had not seen, but which had been referred to in the Qore report; a May 2000 Geotechnical Evaluation for the proposed Wilmington Job Corps Center by Duffield Associates; and a July 2000 BATTA Tier 1 report related to removal of a 20,000 gallon UST (underground storage tank) which had contained heating fuel oil #6. (A-1; A-3; A-7 at 4-6; Tr. 40-42, 46-47)

The Qore report attributed information regarding replacement of a 20,000 gallon UST in 1974, with a requirement for subsequent monitoring and reporting to DNREC, because of associated contaminated soil, to Ted Nutter who was the property manager for the State of Delaware which owned the Project site. (A-3 at 17; Tr. 50-52) The Qore report declared that "the seven (7) recognized environmental conditions identified for the subject property pose a relatively high threat to the site. Therefore, we believe that additional environmental assessments are warranted." (A-3 at 19; Tr. 52) The 1999 date of the report preceded the demolition and Project site preparation by ECG Industries, Inc. (ECG) under contract with DOL.

The concerns identified by Qore included the property's long history of commercial industrial activity and increased potential for the presence of unknown environmental concerns such as contaminated soils, though no evidence of contamination from industrial activity had been identified visually during the site visit; the site was an out-of-service RCRA small quantity generator with an unknown compliance history; limited quantity of leaking petroleum products from machinery within the building; fluorescent fixtures, hydraulics, and transformers possibly containing PCB's; an active leaking underground storage tank (LUST) site that had not been granted closure by DNREC; compliance requirements related to the replacement UST; the unregistered status of a 10,000 gallon tank whose removal was undocumented; and a site assessment report revealing that six LUST sites were within 0.125 mile, which included the subject property and two adjoining properties, a SWLF and five RCRA small generator sites within 0.125 miles. (A-3 at 18-19)

The Qore report to which Reitenbach had referred in preparing his report indicated, [prior to demolition of the building on site and site preparation by ECG,] "Reconnaissance of the subject property did not reveal visually and physically observed indications of pits, ponds, lagoons, stained soil, stressed vegetation, non-natural solid waste disposal (landfilling activity), unidentified substance containers, septic systems, and AST's on the subject property." In

addition to suspect PCB containing equipment, "Reconnaissance of the subject property did reveal visually and physically observed indications of storage, use or disposal of hazardous substances and petroleum products, which included stained pavement within the building from machinery, hydraulic elevators, and the LUST site. Due to the type of business that was conducted on the subject property, there is a high potential that soils may be contaminated from chemicals used in the manufacturing operations." Nutter, the real property manager for the State of Delaware, Division of Facilities Management, had reported that the previous business that occupied the building on the property, which had been vacant since 1995, was a textile manufacturing company, and that there was a past environmental concern related to contaminated soil determined upon removal of the LUST in 1974. (A-3 at 16-18)

The BATA report of October 31, 2000, reflected an investigation requested by DNREC due to a former heating oil tank leak on the Project property which included eight soil borings and six groundwater samples to test for contaminated soil or groundwater near the tank field and surrounding area. The investigation disclosed high molecular weight hydrocarbons from the leaky heating oil tank, and the recommendation indicated that the hydrocarbons would come under the jurisdiction of DNREC's Site Investigation and Restoration Branch (SIRB) and would be regulated under the Hazardous Substance Cleanup Act (HSCA). The report recommended further investigation at the site under DNREC's SIRB branch to quantify the Petroleum Hydrocarbons at the property in the soil and groundwater. A copy of the BATA report was sent to Bob Reid at Tevebaugh. (A-6; Tr. 58)

In a report dated November 27, 2000, also considered by Reitenbach, BATA recorded removal of the 20,000 underground storage tank containing heating fuel oil #6 by ECG and Design Contracting Inc. in accord with technical specifications prepared by BATA and approved by Tevebaugh. BATA recommended partial closure for the site and further investigation by geoprobe samplings of soil and groundwater, and indicated that a work plan for a Tier 1 limited site investigation would be forwarded to DNREC. (A-5; Tr. 60-61)

By letter dated January 24, 2001, with copies, *inter alia*, to Reid and BATA, DNREC advised Nutter that the Underground Storage Tank Branch had referred the UST site to the Site Investigation and Restoration Branch (SIRB) following review of the BATA report of October 31, 2000, to allow needed additional investigation of contaminants outside the jurisdiction of the UST Branch. The letter noted that options for the site had been discussed in a conference with DNREC-SIRB representatives, DOL, Reid of Tevebaugh, and representatives of BATA, and follow up conversations with Reid and BATA. The options consisted of entering the site into the DNREC-SIRB's Voluntary Cleanup Program (VCP) or performing the additional investigation without SIRB oversight, and recommended the former. (A-12)

Reitenbach explained the options to Reid in a letter dated March 20, 2001, noting that the purpose of the Facility Evaluation was to collect enough data to support a preliminary risk assessment, warning that under either option additional environmental investigations could be required, and recommending the VCP be undertaken in order to minimize delays inherent in the process. Reitenbach's letter was forwarded to then Contracting Officer John M. Steenbergen by Reid with a copy to Mark Banks and an explanation that Reitenbach's letter was in response to Banks' "inquiry as to whether [DOL] must follow the [VCP] through DNREC." It expressly

recommended that the VCP be undertaken because the additional investigation would be approved by DNREC, within a quicker timeframe, especially with respect to sampling, and the chance for additional delays would be minimized. (A-12(a); Tr. 63-67) Reitenbach testified that because, under the VCP, as opposed to investigation without state oversight, the scope of the additional investigation that would be conducted would be approved by DNREC, the chance for additional delays, for example, from the imposition of additional sampling requirements, would be minimized. (Tr. 66-67)

At a meeting on April 10, 2001, reported by Reid, with copy to O'Malley, attended by Banks and other representatives of Dewberry, Reitenbach of EA, Nutter and another representative of the State of Delaware DAS/DFM, James Tevebaugh and Reid for Tevebaugh, Richard Toler for DOL [for the Job Corps, A-14],<sup>2</sup> and DNREC-SIRB, it was resolved that a decision by DOL and DAS whether to enter into the VCP should await further testing by EA, and preparation of a Work Plan, together with additional review and recommendations by DNREC, related to petroleum based contamination on the site. (A-13; Tr. 69-71)

On May 4, 2001, in response to a letter from DNREC, and because DNREC had requested more samples than originally proposed to delineate the extent of contamination better, Reitenbach submitted to Tevebaugh a detailed proposed work scope and cost estimate of \$23,825 for time and materials to conduct additional sampling and analysis for the Facility Evaluation in relation to the Project site. The proposal was accepted by Tevebaugh on May 21, 2001. (A-35; A-15; Tr. 72-73, 79)

A meeting was held on May 10, 2001, reported by Banks with copy to O'Malley, and attended by James Tevebaugh, Reitenbach, Tiller and Nutter for State of Delaware DAS/OFM, only Toler for DOL Job Corps, Banks as Project Manager, and Dider for Dewberry, the purpose of which was to develop a strategy to respond to DNREC/SIRB regarding the additional samples and to establish a "Plan for Resolution." The State of Delaware DAS/OFM as owner, which was disposed to cooperate with DNREC/SIRB, and DOL as tenant indicated that they were familiar with VCP requirements, but were concerned with entering into any VCP agreement without knowing the levels of what contaminants were on the site. It was agreed that EA would provide DNREC/SIRB a chance to review informally its work plan and sampling locations, "as a means to evaluate the risk and timing for the start of further construction prior to entering into the VCP," and, following review of data generated by EA, DOL, DAS/OFM and DNREC/SIRB would evaluate the need for further investigation and/or remediation. (A-14)

On May 24, 2001, Reitenbach as Project Manager for EA prepared and submitted on behalf of Tevebaugh the "Facility Evaluation Work Plan" for the Project site to Lynn M. Krueger (Krueger) of DNREC-SIRB. The Work Plan described the first round sampling program to be conducted by EA in order to evaluate the Site under the Hazardous Substance Cleanup Act. It was based in part on the result of the prior studies of the Project site, and awareness that some prior sampling had been done, and recommended locations for testing of surface soil *inter alia* near the area planned for child care center, where ash and slag had been observed, near a former

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<sup>2</sup> Chi Chiu identified Richard Toler [misspelled in the transcript as Toeller] as a regional project manager with the Department of Labor, Job Corps in the Philadelphia office. Chiu testified that Job Corps personnel were involved in the operation of the center, but were not involved in the construction. (Tr. 1429-30)

transformer pad, and upgrade from the former LUST, as well as other places. The scope of the planned soil sampling went beyond the possible contamination caused by the LUST, and included surface and subsurface soil as well as groundwater. A significant concern was subsurface soil that might be impacted with Poly aromatic or Poly-nuclear Aromatic Hydrocarbons derivative from petroleum, but also volatile organic compounds, semi-volatile organic compounds, pesticides, PCB's, metals, cyanide, and other contaminants. (A-7; Tr. 81-86)

The schedule for the report showed completion by August 15, 2001, and Reitenbach was aware that there was general urgency to complete the evaluation, but not necessarily that bid opening was scheduled for August 16, 2001. The evaluation would not include any cleanup or remediation activities that might be required by disclosures in the evaluation. (A-7; Tr. 86)

Reitenbach provided Tevebaugh, with copies to Banks and Didier at Dewberry and Nutter and Tiller at DAS/DFM with a preliminary summary of the analytical results from the soil and groundwater samples by memorandum dated July 16, 2001. Applicable Human Health Uniform Risk-Based Remediation Standards (URS) were exceeded in samples collected from groundwater, surface soil, and subsurface soil. Consequently, Reitenbach advised that DNREC was likely to require a Remedial Investigation including a risk assessment whose scope would have to be negotiated with DNREC, who would probably require a VCP application and agreement before additional work were done. The cost would range from \$10-20,000, if additional sampling were not required. Contaminants in the soil samples and groundwater samples included semi-volatile organic compounds and metals, but pesticides, PCB's and cyanide were not significant problems. Reitenbach testified that previous remedial investigations and risk assessments with which he had been involved had taken a year and a half, and that initially he had discussed what could be done to compress the schedule with Tevebaugh and Banks. He also testified that DNREC had been cooperative but pushing for a VCP agreement to cover their costs of oversight. (A-16; Tr. 87-90)

At a meeting in Dover, Delaware, on July 25, 2001, reported by Banks, which was attended by Tevebaugh, Reitenbach for the first part of the meeting, Toler for DOL, Nutter and Tiller for Delaware, and Chi Chiu and Mark Banks for Dewberry, but not any representative of DNREC. The participants focused on Delaware's plan for responding to Reitenbach's letter of July 16, 2001, and the timing of the required action for the Remedial Investigation and Risk Assessment. The discussion followed a briefing by Reitenbach regarding EA's findings and procedures required for DNREC approval of the VCP and Risk Assessment, normally a six step process taking four to six months. Negotiations with Delaware resulted in agreement that the response would combine three of the usual six steps in order to eliminate approximately thirteen weeks of processing time, and agreement by EA to develop a work plan illustrating the requisite commitment to public safety and a proposed Risk Assessment plan adaptable to circumstances that might arise. (A-17; Tr. 91-92)

Reitenbach testified that such process takes time, because of a combination of mechanical and bureaucratic factors typically affecting the six step risk assessment process. That process would involve completion of the site investigation, completion of the risk assessment, negotiations with the State of Delaware to establish the appropriate format for the risk assessment, completion of the risk assessment, completion of a Remedial Action Plan, a process

involving three separate deliverables with three separate work plans to be submitted. Reitenbach testified that DNREC had been amenable to combining some of those steps into a three step program. (Tr. 92-93)

Reitenbach described the July 25, 2001, meeting as concerned with how to get DNREC to give the required approvals in a shorter time. In subsequent discussions of timeframes with DNREC, Reitenbach testified that DNREC indicated that it would not hold up approvals and review times but promised nothing with respect to specific timeframes. (A-17; Tr.93-94)

By letter dated July 30, 2001, Nutter wrote Wirtz, Krueger's supervisor at DNREC-SIRB, providing a summary of the analytical results for the soil and ground water samples collected at the Project site. The results showed varied contamination, but suggested that "this site is not grossly contaminated." Nutter requested a meeting to chart an expedited process to avoid construction delays. (A-17(a))

By memorandum dated August 5, 2001, copy to Banks, Reitenbach provided Tevebaugh with an agenda for the August 7, 2001, meeting with DNREC, including a typical schedule of the steps for evaluating a site under the VCP, which could take eighteen months or more, strategies for compressing the schedule, which consolidate or omit certain normal steps in the process, and suggestions for interim remedial actions which might limit the scope of the risk assessment and feasibility study by excavating and disposing of surface soils from the areas planned as open space or recreational areas, which could not be covered, notwithstanding the high costs of \$200-300,000 for removal, disposal and sampling for 3000 cubic yards of soil. (A-18; Tr. 98-103)

The proposed agenda compared two schedules, month by month from an August 15, 2001, submission of a Facility Evaluation Report to DNREC through DNREC's issuance of a Certificate of Completion of Remedy on November 15, 2002, with the proposed schedule compression shortening the process from a normal expected remedial completion date of November 15, 2002, to December 21, 2001, which necessitated assuming the site characterization to be complete, beginning with the Remedial Investigation Work Plan which would include the risk assessment on August 31, 2001, and which Reitenbach described as "challenging but doable." Reitenbach suggested that the quickest remedial action would involve paving areas or removing soil from specific exposed or unpaved areas, such as the Child Center playground, the disadvantage being cost. Reitenbach viewed soil removal, which had been being discussed, as something likely to happen, but testified that, although he did not know what remedial action would be necessary, DNREC approval of the Remedial Investigation Feasibility Study would be essential. (A-18; Tr. 98-103)

The presentation to DNREC scheduled on August 7, 2001, and referred to in Reitenbach's memorandum took place, and participants included three DNREC-SIRB representatives, Tevebaugh, Nutter, Reitenbach, and DOL representatives, O'Malley, Toler, Metzbar, DOL/DE, and a representative of DOL Secretary's office. (A-17; Tr. 104) In response to an e-mail request to DNREC-SIRB on August 8, 2001, requesting confirmation of DNREC-SIRB's ability to meet the revised schedule presented at the August 7, 2001, meeting, Krueger, as Project Officer, advised Nutter by letter dated August 13, 2001, copy, *inter alia*, to Tevebaugh and Reitenbach, that the proposed schedule did not specify dates for certain milestones, and was

“very ambitious.” Notwithstanding, she stated that DNREC-SIRB would “continue to make, the remediation and oversight of the Delaware Job Corps Site a priority,” but warned that, “[a]s discussed during the meeting on August 7, 2001, there are several issues that may affect the revised schedule that has been presented,” and identified those issues. The gist of the letter was that the oversight and review process, which was outlined in detail, was a complex one dependent upon such variables as the quality of submittals, voluminous data and explanation, technical and legal reviews by numerous personnel, possibility of public comments and need for a public hearing, and recognition that the proposed schedule requires very short response times rather than the normal significantly more extended processes. It also pointed out that a VCP Agreement had not been signed, and that the Project would be a priority, “while still maintaining the quality of review and oversight required at all HSCA sites that is needed to protect human health and the environment.” Her unmistakable signal was that, as a practical matter, the schedule was unrealistically short. (A-22)

Reitenbach described Krueger as indicating at the August 7 meeting that it was “an aggressive schedule and that meeting that schedule would be highly depend[ant] upon the, you know, quality of the reports that were prepared. That there would still have to be, you know, a technical and legal review, and that they would do the best they can, and all of those may impact the schedule.” Reitenbach knew that there were imminent deadlines related to the construction contract, but testified that he was not cognizant of the specifics of the ongoing bidding process, including that the bid opening was scheduled on August 16, 2001. (A-22; Tr. 105-08) Because of that pressure, he was engaged in a vigorous response and follow up process with DNREC of which he kept Tevebaugh and Banks apprised. (A-20; A-21; Tr. 108-11)

The VCP application as revised was sent to Krueger at DNREC by Nutter on August 14, 2001. Reitenbach was so informed, though he did not recall receiving the letter, which did not show a copy to him. (A-24; Tr. 118) In an e-mail to Tevebaugh and Banks dated Tuesday, August 14, 2001, Reitenbach advised that Krueger had not given approval of his method of assessing surface water; that the chemist was still reviewing the data for acceptability or need for more data, and that he, Reitenbach, would contact the chemist and surface water specialist for guidance, but that the process was on the expedited schedule to submit to DNREC the work plan for the Remedial Investigation Feasibility Study (RI/FS) on Friday, August 17. The work plan would outline the investigative process to be undertaken in the RI/FS. Reitenbach was going on vacation the next week, but expected work to start on the RI/FS. (A-22(a); Tr. 115-17) Thus an elaborate review process was just beginning the day after the bid opening on August 16, 2001, and there is no evidence that this fact was disclosed to the bidders.

By letter dated August 24, 2001, Krueger advised Nutter, with copies, *inter alia*, to Tevebaugh, Banks, and Reitenbach, of significant unresolved issues already adversely affecting the schedule, particularly issues of which DNREC had warned relating to the quality of the documents submitted for review and the number of revisions that might be required. A problem had risen at the outset with the RI/FS Work Plan submitted August 15, 2001, for review prior to formal submittal on August 17, in a wrong format, and the revised submittal on August 17 did not address all of the required information. The deficiencies were noted as they were recognized in accordance with the August 8 agreement, rather than after the completed review, and certain review personnel were noted as unavailable. (A-28; Tr. 118-19)

Krueger advised Nutter that DNREC had determined that all the data from Batta relating to the Project was invalid, and therefore should not be referred to. The Work Plan identified people and pathways, but did not spell out the methods for the risk assessment that would be used. The risk assessment needed an evaluation of the groundwater to determine if there were any preferential pathways to control potential contact. There was no potentiometric map for groundwater sample locations, no boring logs evaluating the soils to show where the temporary wells were set at what depth, and there had been no determination of the extent of groundwater contamination identified in one well being contaminated and appearing to be down gradient. Krueger reiterated DNREC's willingness to cooperate while maintaining the quality of review and oversight required. Reitenbach testified that the revision and resubmission had occurred while he was on vacation, and that he had no recollection of whether a second revision had been submitted or how extensive it might have been. (A-28; Tr. 118-19)

Banks' report of the August 30, 2001, meeting, copy to O'Malley, to evaluate the preliminary design of the proposed Child Development Center to establish a compressed schedule for evaluating the data generated by surface and ground water samples from the Site, identified as participants two representatives from Tevebaugh, two from Paragon Engineering, three from Dewberry, including Banks as Project Manager. Reitenbach, who was not listed as a participant, was described as explaining the findings of "the survey" and the basis for the compressed schedule allowing construction to begin on October 17, 2001. (A-29; Tr. 120-21)

Banks noted that there was discussion of "the many nuances of the review process, highlighting many of the potential pitfalls that could cause delay" in DNREC's review process. Though no representative of DNREC was identified as present, Banks noted that there was discussion of how to mitigate the potential for delay, and that DNREC agreed on priority support, but emphasized the importance of quality submittals. The report restated the "Proposed Schedule" which provided, *inter alia*, for submission of the RI/FS Work Plan on August 17, its approval on August 24, completion of joint RI/FS Review on September 10, Construction Contract Award on September 22, and DNREC's issuance of a Proposed Plan of Remedial Action on September 24, begin Interim Remedial Action, Start Construction Notice To Proceed, and DNREC's issuance of the final Plan of Remedial Action all on October 17, 2001. (A-29; Tr. 120-21)

"Center Concerns" were described by Banks as "Timing for obtaining the required approvals from DNREC and the impact on the construction award. Reitenbach described additional sampling required to delineate the contamination as "the number one thing" that could cause delay, and review or preparation and review cycles of the documents, as being discussed. Reitenbach left EA for another job in mid-October 2001, but by that time DNREC had advised EA that additional sampling would be required, and he believed the soil sampling had been conducted by the time he left. (A-29; Tr. 120-21)

By letter to Nutter dated September 24, 2001, four days before the construction Contract was signed, Krueger responded to a letter relating to the prospective commencement of construction activities on the Site prior to a Final Plan of Remedial Action being issued for the Project site. Noting that the RI/FS Work Plan addresses the risk assessment of future users of the

site, construction workers, and children in the childcare center area, Krueger requested clarification as to where surface soil (12-18 inches) would be removed to prevent potential exposure to the soils. Krueger disagreed with the suggestion that no further investigation was required for Zone One where “construction” was scheduled to begin, noting discussion at length with EA on the issue. Krueger sought clarification with respect to the meaning of “construction” and “Subsurface work” in relation to construction tasks, which included mobilization, site survey, grading and shallow trenches for footers, listed in the September 13 letter, which also stated that “no subsurface work is required for the initial construction activities.” (A-38; Tr. 122-23)

Krueger’s response identified problems with the timing of proper ground water sampling and construction of wells, and unexplained early start and early finish dates. It gave detailed instructions and limitations regarding all proposed construction activities, possible interaction with ongoing investigation of the groundwater, and required that EA personnel be on site at all times during excavation and trench activities for health and safety and environmental oversight, as well as briefing of all site workers on health and safety issues prior to commencement of activities each day. It required that potentially contaminated soils excavated be stockpiled on site, covered, pending soil characterization; that all excavations and utility trenches be backfilled with imported clean materials from approved off-site sources. (A-38; Tr. 122-23)

In Krueger’s response DNREC granted conditional approval for the mobilization of plans/equipment, site surveys, grading and shallow trenches for footers at the Site with the understanding that no final remedy for the site had been selected by DNREC; construction of permanent structures could not begin prior to issuance of a Final Plan of Remedial Action for the site, requiring public comment; and that any site work done prior to the issuance of such a plan would be at the parties risk, which might require changes at their expense to accommodate conflicts with the plan for remediation. Reitenbach testified that the document indicated that there were still several issues or data gaps that needed to be filled pursuant to the investigation; that clarification was needed regarding the construction schedule; and that the FI/FS could require reworking of areas which had construction at the owner’s risk. (A-38; Tr. 122-23)

Reitenbach testified that underground storage tanks and related petroleum products often cause significant environmental cleanup, not limited to the area where the tank was located, but tending to be site specific. However, it was other contamination that was discovered on the Site that was not attributable to the UST’s that required the more extensive site wide investigation. (Tr. 124) He testified that there had been two underground storage tanks, one removed in the 1970’s, and one replaced in approximately the same location. That area was one focus of concern. The investigation was to establish the extent of the problem, involving in part nonpetroleum contaminants of unknown source, and so was focused on the site as a whole to determine to what extent the contamination might be localized. He explained that the investigation was not limited to a certain area outside the footprint of the planned building. (Tr. 125-26, 130) Reitenbach identified the area around the smokestack as another area of concern, also outside the footprint of the building. (Tr. 130-31)

Reitenbach agreed that the Qore report listed a number of possibilities, but did not specifically find any actual contamination. (A-3 at 16-17; Tr. 133) Reitenbach agreed that

Banks' site visit report dated May 10, 2001, indicated that the parties agreed that there was currently no evidence of site contamination other than unidentified hydrocarbons in soil and groundwater sampling of UST closed sampling conducted by BATTI Environmental. The extent of the problem remained to be determined and was unknown. (A-14; Tr. 133-34) However, as time approached bid opening in August 2001, there was a substantial difference of opinion as to the level and the extent of the contaminants because there were soil and groundwater samples collected that exceeded the uniform risk standards of the State of Delaware. Reitenbach explained that normal remediation would have been to eliminate exposure to the soil contamination by various methods including removing the soil, by covering areas by adding topsoil to a certain depth, or building foundations, parking pavements, concrete sidewalks. (Tr. 136-37)

Reitenbach testified that DNREC required that there be a complete risk assessment as part of a normal process not dependent upon the perception of a severe problem at the site. (A-17; Tr. 137-38) The Child Development Center was thought to be the main concern driving the risk assessment; but there was a consensus that some remedial action would be taken at the site, subject to the investigation, and that portions of the construction would actually be part of the remedial action. (Tr. 139-40)

Reitenbach actually developed a subsequent, more compressed schedule, adopted as the plan, shortly before bid opening on August 16, for the issuance of the Final Plan for Remedial Action on October 17, 2001. Reitenbach explained that it was a response to DNREC's indication that covering the soil in the children's playground would be an acceptable remedial action. It was discussed with DOL and DNREC personnel and others involved with the Project. It was "challenging," though still doable, because it depended on favorable outcomes, and DNREC actually expressed concerns that the review cycles were much too tight.. In the event, DNREC required more sampling at different locations on the property, mostly related to groundwater and the extent of its migration, which had not been done by August 16, and which caused substantial delay. Reitenbach testified that Banks, Tevebaugh, Nutter, and Krueger and several colleagues at DNREC, as well as two DOL representative, O'Malley and Toler, and others at the August 7, 2001, meeting, were aware from the discussion that this schedule was going to be difficult to meet. (A-18; G-284, 285; Tr. 142-48, 155, 159-62)

Reitenbach defined pollution and contamination as synonymous; neither is inherently a threat until it reaches a certain level and there is an exposure. Reitenbach agreed that, though the Qore report of August 1999 referred to the possibility of contamination, and not a specific finding of contamination, between 1999 and the bid opening on August 16, 2001, contamination had been confirmed at the site.

Reitenbach explained that the various samples that were taken of groundwater surface soil and subsurface soil as reported on his July 16, 2001, memorandum were all taken outside the footprint of the building because the expectation was that the building was going to be part of the remedy; that it would be limiting the exposure to the soil; and so the sampling budget could be better used in other areas. Groundwater contamination adjacent to the building would be expected to be under the building also, and in such an urban area where groundwater, as

distinguished from runoff, was not used, no remediation might be required so long as there were no impacts to ecological receptors. (Tr. 162-64)

### Paul Will

Paul Will, a program manager, in the State of Delaware, Department of Natural Resources and Environmental Control, Division of Air and Waste Management, Site Investigation and Restoration Branch, was involved in the evaluation of the Project in 2001. Krueger was on his staff. He testified that he understood that the interested parties were seeking a release of liability, which would normally involve entering into the Voluntary Cleanup Program, which would normally require a Remedial Investigation/Feasibility Study, though a Facility Evaluation would be done, but might take longer if contamination were found, because a Remedial Investigation would then be required. Will testified that it was DNREC's understanding that the parties wanted to go directly to the RI/FS, and that DNREC never suggested that an RI/FS would not be required if a release of liability were sought. The release of liability, in effect, is a Certificate of Completion of Remedy issued by the DNREC and signed by the Director of the Division of Air and Waste Management at the end of a public process. It would represent, in effect, the Department's good seal of approval that the appropriate investigation and remedy has been completed at the property to the satisfaction of the Department. (Tr. 165-69)

Will testified that going directly to the RI/FS would normally expedite the process of site cleanup, because it would eliminate the Facility Evaluation and increase efficiency by coordination between the owner and DNREC. A VCP binds the relationship by an actual agreement. (Tr. 170-71) He testified that if there was sampling, a normal project would take from six to eight months to complete if everything went well and there were no delays or uncertainties encountered. Even if there were an effort to effect a compressed schedule, the process would depend on the results of initial sampling, complexity and size of the site, and whether additional sampling were required or other extensions depending on what might be found. (Tr. 172-74) In effect, Will's testimony established that the release of liability depended upon participation in the Voluntary Cleanup Program, which would generally involve an RI/FS.<sup>3</sup> [Tr. 175-76]

### Raymond Wu

Raymond Wu, who was sixty-nine at the time of the hearing, was the founder of Wu & Associates, and a general contractor with forty years of experience in the building construction industry. He had Bachelor's and Master's Degrees in Civil Engineering; and had been a registered engineer in Pennsylvania since the early 1970's. Early in his career he had worked mostly as a project manager for a number of companies in Taiwan and Thailand constructing commercial and institutional buildings and highways. (Tr. 188-90) In 1972 or 1973 he migrated to the United States, where he worked for a number of general contractors in varied capacities,

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<sup>3</sup> O'Meara explained that he called Will because Banks testified at deposition that DNREC first said RI/FS was not required, then did a 180-degree turn after the bid opening date and said RI/FS was required. Will was called to establish that there was no such change by DNREC and their position was constant, that release of liability depended upon VCP and generally would require a RI/FS.

including estimator, project manager, regional manager, and eventually president, on projects including hospital construction and renovation, school construction, and different kinds of buildings. (Tr. 190-92) When an ownership interest did not materialize, he founded Wu & Associates, a general contractor doing building construction, mostly in New Jersey, Delaware, and Pennsylvania, and for the Federal Government, including the Department of the Navy, Department of the Air Force, Army Corps of Engineers, Veterans Administration hospitals, and other public work including state and township jobs. (Tr. 193-94) Raymond Wu's testimony was not challenged with regard to his background experience or qualifications, and there is no suggestion in the record of extensive building construction of incompetence or deficient performance in his business history.

Raymond Wu testified that he had "many, many" occasions to deal with environmental issues before or during construction projects, most commonly asbestos abatement, lead paint container abatement, or soil contaminated by petroleum, heavy metals, or other environmentally sensitive materials. He testified that, with regard to asbestos, the specifications for a job would contain "a great deal of details and length" to guide the contractor handling and management of the hazardous materials. He explained that, because of special licensing and liability insurance requirements, general contractors would not do the abatement; and the company would solicit an environmental subcontractor upon whom it would rely entirely to look at the specifications and drawings and quote a price for abatement in accordance with the quantity and nature of the particular hazardous material. Raymond Wu testified that he had been involved with projects where there was information and where the specifications would clearly spell out the kind of contamination and the manner of handling the hazardous material, but that, although Wu had been involved with a few bids, they had finally refused to submit a bid because of too much liability. Therefore there had been no job in the company history involving soil contaminated by hazardous material. But, he testified that they had many jobs which had involved asbestos abatement or lead paint abatement. (Tr. 195-97)

Raymond Wu testified that he first heard that the Wilmington Job Corps Project was out for bids at the end of 2000 and attended the pre-bid meeting at the site. He remembered only that other general contractors, Banks, and Chris Mullin from Tevebaugh were present; that there had been "not much of a discussion," but that he had raised some of the questions. He remembered asking whether, because the original soil elevation was affected by a previous demolition contractor, Wu & Associates would have to do any further bulk excavation to change the grading, and was told by Banks to follow the existing grading. He also recalled asking whether the contractor would be responsible for removing concrete disclosed below the surface by the boring holes. He testified explicitly that there was no conversation whatsoever about any environmental issues at that meeting. He did not prepare a bid at that time in late 2000 because they received an addendum that it was postponed indefinitely, but no reason given. In July 2001 he noticed that the job was coming up for bid again. (Tr. 197-99)

Raymond Wu attended a second pre-bid conference at the job site where he asked Banks why the job was postponed seven or eight months, and Banks responded that there were some environmental issues. Raymond Wu testified, "I say what about the environmental issues, and he said it's been taken care of. It's not in your bid." There was no other discussion of

environmental issues. Raymond Wu then prepared a bid for the construction of the Job Corps Center. (Tr. 200)

Wu submitted a Request for Clarification dated July 20, 2001, to the architect, Robert Reid, asking if there was a “soil Boring Log” available, because Wu did not find the soil boring information in the specifications. Raymond Wu testified that it was very unusual for subsoil information to be lacking in a multi-million dollar project. He wanted the soil boring information because, he explained, it is related to the big cost, what kind of soil they would have to excavate and backfill, how high was the groundwater table, and whether it was suitable or unsuitable, for engineering rather than environmental purposes. He explained that unsuitable soil in this sense could be organic content, or heavy clay content that would not be used for structure fill and backfill, and that a high groundwater would generate costs for pumping during excavation of footings. Raymond Wu said he could not recall ever bidding a multi-million dollar job without subsoil information. (A-30; Tr. 201-02)

The answer to the inquiry from Christopher Mullin, Tevebaugh Associates, was “Attached is the Executive Summary from the Geotechnical Report. The entire report is too extensive to issue every bidder.” Raymond Wu considered this an inadequate response, but did not have any further discussion with the architect about the soil boring log or related matters because they would not respond to verbal inquiries, only questions in written form of the Request for Clarification. Raymond Wu did notice a reference to petroleum in the soil in the Executive Summary. He submitted another Request for Clarification as whether the general contractor would be responsible for the removal or abatement of the contaminated soil. (A-31; Tr. 203)

The Executive Summary related to the Duffield Associates’ Geotechnical Evaluation for the Project which included the performance of six Standard Penetration Test borings. It explained that because of the existing warehouse facility, which was to be demolished to allow construction of the new building substantially within its footprint, the test boring locations were limited to certain accessible areas. It noted that, in general, “the subsurface soils encountered in the test borings consisted of a surficial strata of bituminous concrete pavement underlain by miscellaneous fill materials consisting of sand, silt, cinder, ash and slag, with traces of bituminous concrete pavement underlain by miscellaneous fill materials consisting of sand, silt, cinder, ash and slag, with traces of bituminous concrete, concrete, glass, coal, wood and brick.....The miscellaneous fills encountered in the test borings contain materials of possible environmental concern (i.e., cinder, ash, slag, bituminous concrete, etc. These materials may require special handling during excavation and disposal in accordance with current regulatory guidelines. In addition, apparent liquid petroleum and associated soil staining was encountered in several of the test borings. It is recommended that the findings of this evaluation be provided to the project environmental consultant for their review and comment.” (A-31)

The Executive Summary surveyed the miscellaneous fills on the site, extrapolating from the test borings, noting the need for confirmation following demolition of the existing building. Because of the possibility that “environmentally sensitive” materials beneath the occupied areas of the building would create long-term health and safety concerns, Duffield Associates recommended the removal of the miscellaneous materials beneath the footprint of the building, and support of the building on a spread foundation and concrete slab-on-grade system. It

anticipated that groundwater would be encountered during construction of the building foundations and utilities, as well as perched groundwater conditions within the miscellaneous fill materials. It recommended that provisions for dewatering during construction be included in the construction contract documents, and that cost estimates and provisions for drainage beneath the slab be included in the floor slab design. Also, because apparent petroleum was encountered in some soils beneath the proposed floor elevation, it recommended, unless the materials were removed, that the building slab and below-grade portions of the building walls be provided with an active vapor venting system to reduce the potential for petroleum vapors entering the building area, and recommended construction of a venting system in the report. (A-31)

Wu's Request for Clarification dated July 27, 2001, relating to Addendum No. 1 – "Duffield Associates Executive Summary" inquired, "Per the above referenced soils report summary, there is reference to petroleum being encountered in some of the soils. There are no provisions in the specifications for contaminated fill removal (or the extent of same). There are also no provisions on the drawings and/or specifications for an underground vapor venting system. We are assuming the General Contractor will not be responsible for these items." The response on August 3, 2001, by Christopher J. Mullin of Tevebaugh Associates was, "The contractor shall not be responsible for any contaminated fill removal or underground vapor venting." (A-32, 33) Raymond Wu testified that he understood the response to mean that Wu & Associates was not responsible for any contaminated fill or removal for the contaminated soil material in their contract and were not responsible for building an underground vapor venting system, and he should not include that cost in his bid. (Tr. 207)

In response to the apparent discrepancy regarding the presence of petroleum encountered in some soils, Raymond Wu did not contact Banks because he was not the personal contact at the bid time. He testified that every question was required to be addressed to the occupant (sic). Raymond Wu testified that despite the recommendation in the Executive Summary that sensitive material finding should be provided to an environmental consultant for review, he did not know if that had been done. Also, he observed that despite the recommendations by the soil engineer regarding vapor venting if the fill layer material were retained; the possible removal of the whole layer of contaminated soil and backfill with clean soil; and need for subdrainage system under the building slab to cope with the high groundwater, there was no provision for any of those recommendations in the bid documentation, which would have included the specifications. (A-32; Tr. 205-06)

Raymond Wu testified that Wu had issued quite a lot of RFI's, by way of communications with the architect's office between August 3, 2001, the date of RFI #25 and August 16, 2001, the bid opening date noting that the RFI regarding specifications for contaminated fill removal and a underground vapor venting system was Wu's RFI #25. Raymond Wu did not recall the other RFI's, but testified that there were a lot of questions before the bid; that Wu and Associates audited the bid, "and put in the written questions which is also not normal." (Tr. 208-09)

Partnering Meeting in November 2001

Raymond Wu described a sequence of events at a “partnering meeting,” which had occurred in November 2001, described by Wu as nontechnical and designed to introduce the “major players.” It was attended by, among others, Raymond and Kirby Wu, the architects, Banks as project manager, Terri Sapp from Wu & Associates, some of the prime contractors, including the mechanical contractor, and representatives of the City of Wilmington. Clarification and representations on the record by counsel established that Dewberry, the technical representative for the Department, whose project director was Banks, worked with DOL personnel to oversee the projects and represent DOL, often in lieu of DOL personnel, but would report back to DOL. (Tr. 216-18)

Raymond Wu testified that despite the basic character of the meeting, “in the meeting they basically want us to start a job ASAP.” Raymond Wu testified that no one from DNREC came to the meeting until later in the afternoon, when Lynn Kruger arrived. Raymond Wu testified that he was surprised, because of the reiteration of the need to start work as soon as possible, perhaps the following week. He said he had advised, in the face of urging that work start as soon as possible, maybe the next week, that he needed about a week for mobilization. But, when Kruger appeared, late in the meeting, she basically said, according to Wu, that “we’re not ready to start this job yet. There is environmental issues definitely has to be addressed (sic).” Raymond Wu said he had heard nothing about those environmental issues before that meeting. (Tr. 217-19)

Kruger said the soil was contaminated, the water was contaminated, and Kruger said that proper procedures would have to be followed, in that the environmental consultant would have to develop a Remediation Action Plan, and the general contractor would have to develop a Health and Safety Plan, which would take “a lot of time, of course.” Raymond Wu testified that there was no discussion at the meeting of when Kruger thought the Project might be able to start, but that “until all those things on the right track she doesn’t want us to start the job.”

Raymond Wu acknowledged that there were references to environmental concerns in Duffield’s Executive Summary, which had been provided to him, including the recommendation that the findings be reviewed by the project environmental consultant, that there were potential contaminants on the site, including environmentally sensitive materials beneath the occupied areas of the building which might cause long-term health and safety concerns, and the possibility of petroleum contaminants. He pointed out that the soil report is one of the first and most important things considered when a project is being designed and so Duffield’s report was addressed to the designer, not to the general contractor, and it would be the designer that would have the environmental consultant review the report, not the general contractor who was not paid for that. (Tr. 221-23)

Because Wu was the contractor, not the designer, according to Raymond Wu, the contamination was not part of its contract; Wu was not at all responsible; or if they were, it should be in the specifications. Raymond Wu testified that A-33, the response to Wu’s RFI which advised that Wu “shall not be responsible for any contaminated fill removal or underground vapor venting,” and by implication, according to Raymond Wu, indicated that it was not going to delay his project, because it was not in the specifications or the bid documents, and, therefore, not in his costs. (Tr. 221-23)

Raymond Wu testified that there was ample time for the designer to provide for any contaminated soil. He was asked, regardless of what was in the specifications, whether he was under an obligation not only to investigate the site but to ensure that if knowledge came to him that would affect his bid, and to explore the problem with the owner of the property before making the bid. He responded, "That is not our responsibility. We don't design the job, sir. We only build. We only bid per plan and specification." To the extent that the response to the RFC became part of the specifications, and that showed that there was some potential contamination on the site, Wu asserted, "It could be taken care of during all this time by the designer, by the owner," and he took no further action to investigate it because it was not his contract responsibility. He considered his position confirmed by his verbal conversation with Banks that the environmental issues had been taken care of.

Regarding the need for further investigation, Wu declared, "Because at the bid time we raised a lot of questions and wanted to clarify the bid. Okay. It is a very, very competitive business. I cannot speculating there is an environmental issue to add \$2 or \$3 million on my bid price. When I was told it is not my responsibility, I did not have the time and cost included in the bid. And even though the test report says this report should be provided to a environmental consultant, we are not environmental consultant. We are not paid to do this work to hire another environmental consultant to help the architect engineer design this job. It's not my responsibility. (sic)" Wu asserted that he was not paid to investigate the contamination any further. He said he asked enough questions, and that if one looked at the bid documentation, probably Wu & Associates is the only contractor that asked close to twenty five or thirty questions. (Tr. 224-26)

Raymond Wu argued that the soil report existed long before the documents were published for the bid, and that when it was said that the soil report should be provided to the environmental consultant for review and comment, Raymond Wu assumed that this was already done by the designer, and that there was not a last minute requirement for the general contractor to hire another environmental consultant to review and comment on the findings, which would not be normally how it works in the construction industry. As the contractor, not the designer, Wu bid per the specifications. There were no specifications to tell the contractor to include the costs, or how to abate or handle or manage the contaminated soil. (Tr. 226-27)

In determining what to inquire about with respect to the bid documents, Raymond Wu testified that every job is different, and the judgment as to what to ask about from the technical point of view depends on different structure, different foundations, different locations, the size of the job. In this case with regard to the problem with the contaminated soil which could affect progress on the project, Wu testified that he had a concern before he submitted the request for information. Had the answer been that he was responsible for the contaminated soil, he probably would not have bid the job because one year to complete the job with an environmental concern is "ridiculous." He said, "There is no way it can be done within one year." Raymond Wu testified that he was off the job after the pre-construction meeting on January 11, 2002, and so could not answer questions regarding the amount Wu & Associates was paid for excavation of the soil and dealing with the contaminated proem on the site. (Tr. 227-29)

Raymond Wu agreed that he was paid for the Health and Safety Plan, for forty hours of OSHA workers' safety training of a portion of the workers, for some of the soil removal, for part of the delays. But he said it was very, very odd with respect to a large multimillion dollar project that the soil report was not in the specifications, that the contamination or environmentally sensitive material was not disclosed in any of the specifications until he raised the questions and were told it was not part of his job. (Tr. 230-31)

Kirby Wu testified that the contract documents were signed on September 28, 2001; a typographical error on the bonds was corrected by October 5, 2001; that the contract provided for substantial completion in 300 days and full completion in 356 calendar days; that after the bonds were resubmitted, Wu & Associates was waiting for a Notice to proceed, which would normally have issued on a Federal project in one or two weeks; that as of August 16, 2001, when the bid was opened Wu & Associates anticipated beginning construction in thirty to forty-five days, i.e. mid-September to early October 2001. (Tr. 248-52, 257-58) Kirby Wu testified that construction did not begin as anticipated and that he could not recall any information from DOL or any of its agents indicating why Wu could not start to perform the Project, and that at that time he did not know why they were not starting. (Tr. 257-58)

Kirby Wu testified that the first Partial Notice to Proceed was issued near the end of October 2001; that he had never seen a Partial Notice Proceed before; that to his knowledge a Partial Notice to Proceed was not provided for in any of the contract documents, and that he did not know what it was. (Tr. 259) He described it as an administrative Partial Notice to Proceed, allowing just administrative paperwork that might have to be done during the course of a project, such as the First Preliminary Critical Path Method schedule.

A Second Partial Notice to Proceed was issued the second half of December 2001, which instructed Wu to begin digging shallow footings for the building and some shallow utility lines. As of November 14 when the first rough schedule was prepared to provide an indication to the Government of what the sequence of activities was expected to be Wu had no idea when the job would actually start. (Tr. 260) Full Notice to Proceed was not received until the end of May 2002. (Tr. 263)

Kirby Wu testified that the second Partial Notice to Proceed had clear guidelines in terms of depth, and since the footings could not exceed a certain number of inches below grade, and the Contractor was directed to install those footings, the Contractor could only install a relatively few footings since most of the footings on the job were deeper than the limit. Wu did not begin to work when it got the second Partial Notice to Proceed, because at that point Wu was concerned about the events that had transpired up to that point and there was a lot of new environmental information, plus written documentation from DNREC that said the contractors would proceed at their own risk, and there was not clarification from DOL that DOL would assume the risk. The Contractor also had concerns that its workers would be exposed to an environmental site. Kirby Wu testified that there were too many unknowns at the time, not to mention that contractually there is no such thing as a Partial Notice to Proceed, for the Contractor to begin work. (Tr. 264-65)

Kirby Wu testified that the first real notice Wu had of the potential of some environmental problems on the site was at the partnership meeting in November 2001. The notice that there was something significant derived from the fact that a DNREC representative was at the meeting, and they had no idea why DNREC was there. (Tr. 262) Once they started talking about environmental issues, Kirby Wu realized there was going to be an environmental problem or they would not have been there at the meeting. (Tr. 263) Kirby Wu started taking over responsibility for the Wilmington Job Corps Project in January 2002.

The Health and Safety Plan prepared by the Contractor's environmental consultants, Ten Bears Environmental, L.L.C. was prepared pursuant to a Change Proposal Request from the architect to the Contractor in order to determine what type of environmental health and safety concerns the workers would be exposed to at the site and how to address those concerns before the start of construction. The Health and Safety Plan was not called for by the original contract. No date had been given at the November 2001 partnering meeting or shortly thereafter when the Contractor would be able to begin construction work. Kirby Wu testified that Wu's acceptance and performance of this Change Proposal Request to produce the Health and Safety Plan was rationalized by the Wu under the first administrative Notice to Proceed; by the Second Notice to Proceed the Contractor knew that environmental issues had to be addressed and "had not act[ed] on that by working on the job site"; and when the Contractor received the Change Proposal Request regarding the Health and Safety Plan from the architect, it felt that, from what it knew, the issue had to be addressed, and if not addressed, the job would never start, and so when Wu received the CPR it gave the architect a price, and simply caused the Health and Safety Plan to be prepared. (Tr. 266-69)

Kirby Wu testified that as of November 2001, beginning with the partnering meeting, Wu knew it had to write the Health and Safety Plan, but did not know what the consequences of the plan would be. The Contractor also knew that the Architect and EA were working on some type of remedial plan, and that, until that remedial plan was complete, the Contractor could not start work. The Health and Safety Plan required that a worker disturbing the soil or in the vicinity of where soil would be disturbed as part of its work activity, would have to be trained under the forty hour HAZMAT [hazardous materials] training program. Kirby Wu testified that initially about twenty workers actually received that training, and another six or eight toward the end of the job. (Tr. 269-71)

Kirby Wu testified that the number of people to be trained was an issue of contention with Banks, because Wu was concerned that the training requirement handicapped the contractor's performance to the extent that, if a narrow limited number of workers were trained, and if something happened to the worker, such as the worker's being sick, on vacation, quits the job, has to be moved to another project, there is nobody available to replace the worker unless the replacement is 40-hour Hazmat trained. Because the project originally had no environmental issues to deal with, the subcontractors the Contractor hired were not selected who had 40 hour HAZMAT trained workers to do the work. Wu, therefore, wanted a reserve pool of HAZMAT trained workers and Banks wanted to limit the amount of trained workers to as tight a pool as possible because of cost considerations.

Ultimately, they agreed twenty workers would be acceptable on the condition that, should this impact the job by constraining us to a number of trained workers, the Government would have to compensate the Contractor for that impact. Wu described the potential impact as being that the durations for doing specific tasks would be lengthened because only a certain number of people were trained so that, for example, the work force for a task that required disturbance of the soil could not be increased, and replacements were not available. The compensation would be by Change Order compensating for delays, for working out of sequence, or for training additional workers. Wu testified that the HAZMAT training constraint had occurred because such specific trades as those involving concrete work and site work were impacted because they required the most disturbance of the soil. (A-11; Tr. 271-74)

#### Preconstruction Conference of January 11, 2002

Raymond Wu testified concerning issues which were the focus of the Preconstruction conference on January 11, 2002, described in minutes dated January 21, 2002, prepared by Sundari Balakrishnan of Tevebaugh. (A-288) Paragraph 3 of the minutes described a discussion on the delays associated with the impact of the environmental issues, and the need to evaluate the effects of stopping and starting the project. At that time the Health and Safety Plan was projected to be at least three weeks from completion. It recorded that Banks stated that Wu would be requested to put a proposal together itemizing the costs associated with additional scope of services due to the environmental issues, which would include hourly costs associated with halting and continuing the project. Raymond Wu was noted as having voiced concern with regard to actual work that could go into effect without a health and safety plan in place, with the project twenty days into schedule, with only limited work such as survey work, shallow 5 to 8 inch trenching at footings and utilities.<sup>4</sup> (A-288; Tr. 211)

In regard to starting and stopping the Project, Raymond Wu testified that he was concerned about the environmental issue, and the Partial Notice to Proceed, which he did not understand and had not previously encountered. He described the problem as dealing with a directive to proceed with time ticking when their hands were tied but they were told to install a temporary fence and set up a trailer. After a Second Partial Notice to Proceed authorized digging shallow footings, Raymond Wu had asked for a definition of shallow footings. (Tr. 211) With regard to the problem of stopping and starting, Raymond Wu testified that he was very concerned about the need to develop the requisite Health and Safety Plan, and then had to wait for the Remedial Action Plan which was done by EA, another contractor which had been hired by the architect or DOL. He was concerned with five months of delays after the bid opening in August 2001 at that point, and the inability to start the job except for setting up the tent and trailer, which, in effect, involved no activity. (Tr. 212)

Paragraph 4 of the Pre-construction Conference minutes recorded that Banks had reiterated that if the affected soil were not encapsulated, the efforts needed to remove the soil would be revisited and the contract would be modified to account for legitimate delays, or, if the remediation process became prohibitive, a stop work notice would be issued in order to minimize risk to all parties. (A-288) Raymond Wu testified in this regard that encapsulate meant to put

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<sup>4</sup> Raymond Wu noted the typographical error regarding shallow trenching which was erroneously described as five to eight feet deep in the minutes.

another layer of soil on top of the contaminated soil, and that another option was totally to remove the contaminated soil, but that at that time “nothing was concrete” because there was no Health and Safety Plan and no Remedial Action Plan “weeks and weeks” after the meeting. (Tr. 212-13)

Paragraph 5 of the minutes recorded that Pat Logan, a Wu representative, had emphasized that the Health and Safety Plan would be ready for issuance to DNREC in the course of the next three weeks; that Banks suggested that the issue be revisited subsequent to the three week period to review the possibility for a quicker turnaround, because, “This project is high profile and needs to succeed.” Apparently it was Banks, who suggested that “All concerned are aware of the risks involved.” The minutes record that “Raymond Wu said that the General Contractor would like a document indicating a release with respect to any items outside the scope. Mark [Banks] stated there will be no such document.” (A-288)

Raymond Wu noted Banks’ repetition of the slogan that the Project was a high profile job, which he, Raymond Wu, found difficult to reconcile with his responsibilities to the Project as one of many jobs that Wu would have to complete. He also indicated that his request for the release with respect to any items that might be outside the scope of the contract reflected concern that there were documents he had not seen in the contract, and that, because Wu was under such pressure to start and proceed, he recognized there was liability exposure to what he called “product liability” even for an action like installing the temporary fence because he would have to dig at least three feet deep into the soil, which he was precluded from doing. (Tr. 213-14)

The Pre-construction Conference was on January 11, 2002; the minutes were dated January 21, 2002; in a telling description of the status of the Project, paragraph 10 of the minutes recorded, “Raymond Wu once again brought up his concerns with respect to the delays and costs associated with the environmental issues. His personnel have been dedicated to this project at all levels. Maybe a straight change order is needed. Mark Banks said it should be possible to work out all issues as long as there was a constant flow of communication. Fed Meyer suggested the associated cost per day be itemized and included as line item in any applicable proposal. Situation will be assessed per the impact of the environmental issues. Worst case scenario would be having to stop project, clean site and start construction once again.” (A-288) Raymond Wu testified in regard to paragraph 10 of the minutes of that meeting that he had repeatedly expressed his concern about the delays associated with the environmental issue, and that he did not know what “a straight Change Order” referred to was. (Tr. 214)

#### Lynn Krueger, DNREC-SIRB

Lynn Krueger, employed by the Delaware Department of Natural Resources, Environmental Controls (DNREC), Site Investigation and Restoration Branch (SIRB), was the agency’s project manager for the Project site. She testified that as an Engineer III Project Manager for the SIRB, she was the lead for many sites, and that she was also used as the Technical Advisory Group for the SIRB. She had been with DNREC for nine and a half years and SIRB for five years. She testified that the SIRB investigates and creates the cleanups for hazardous release sites that have had chemical releases of some sort. She has an environmental engineering degree from the University of Delaware, and a Master’s degree in environmental

administration and policy. The Wilmington Job Corps Project was her first site with SIRB beginning in March 2001. (Tr. 819-20)

Krueger's involvement with the Project began with the March 2001 meeting in Dover, Delaware, with all the parties, i.e. DOL, the Delaware Department of Facilities Management, to discuss the site and its potential redevelopment. She advised the parties that because Wilmington is known for certain contaminants from past industries, metals such as arsenic and polyaromatic hydrocarbons (PAH's) like asphalt were issues which would need to be addressed. She had only limited information from prior investigation of the site by SIRB. (Tr. 821)

Referring to the January 24, 2001, letter from Wirtz, Environmental Program Manager, and Krueger's superior which recommended participation of the Project in DNREC-SIRB's Voluntary Cleanup Program (VCP), Krueger described the VCP as the indispensable route with SIRB oversight which could provide a Certificate of Completion of Remedy for owners of contaminated sites which would allow them to sell the property without the new owners having liability. When Krueger became involved in March 2001, DOL and the State of Delaware had not decided whether they would enter into the VCP. Krueger explained that if the election were made not to enter into the VCP it would be developable only at their risk, and if later risk assessment was adverse, there would be liability and any building or other construction might have to be demolished. (Tr. 823-24)

Krueger described the steps involved in the VCP process as submission of an application for the VCP; a VCP is generated; the agreement is signed by the parties and DNREC; the owner submits a work plan for either a facility evaluation, or a remedial investigation which is more complex, involving more soil and water samples and investigation; SIRB reviews the work plan and approves it or asks for more information; SIRB oversees the investigation, which involves taking samples, collecting data, sending the data to a laboratory which documents that its validated data going through quality assurance checks; the applicant submits a remedial investigation report which is subjected to review and comment by SIRB; after the report is complete and final, DNREC prepares a proposed plan of remedial action which is published for public comment for twenty days; a final plan of remedial action is prepared and issued, taking account of the public comments received, indicating what action will be taken to make the site protective of human health and the environment. Thereafter construction and development is allowed to proceed. (Tr. 824-25) Krueger had extensive experience, having conducted engineering reviews as a member the SIRB's Technical Advisory Group, being responsible currently for twenty two sites of her own, and having completed work on another fifteen sites. (Tr. 825-26) She described the VCP process as taking nine to twelve months, but with caveats that the quality of the report, of the work plan, the public comment process, could extend the timing of the process. (Tr. 825-26)

The minutes of the April 10, 2001, meeting to deal with environmental issues related to DNREC-SIRB Branch prepared by Reid of Tevebaugh with a copy to O'Malley, provided a recent partial environmental history of the site, primarily dealing with the removal of the underground storage tanks and subsequent testing and assessment, largely by Batta Environmental, was attended by Krueger, who testified that, as reflected in the minutes, SIRB's Wirtz had committed to more testing and then the owner was going to decide whether to enter

into the VCP. Krueger testified that, though it normally would have been done as part of the VCP, but that Wirtz, her boss, “had kind of said we’ll take a look at the work plan and we’ll try to help you along prior to the VCP being signed,” and in doing so Wirtz was working with Dewberry, Reitenbach from EA, SIRB representatives, DOL, Nutter, of the Delaware Facilities Management (DFM), and Tevebaugh, all of whom were at the meeting. Krueger said she was doing most of her communication at that time with Reitenbach. (A-13; Tr. 826-27)

EA’s final work plan submitted on behalf of Tevebaugh to Krueger under cover of a letter dated May 24, 2001, was titled “Facility Evaluation Work Plan” which was characterized by Krueger as similar to a remedial investigation, and because it was supplemented with some additional sampling, it was considered a remedial investigation. It outlined the prospective sampling and provided a background of the site, in this case still before there had been an application for a VCP agreement. (A-7; Tr. 829)

A memorandum dated July 16, 2001, from Reitenbach to Tevebaugh with copies, *inter alia*, to Banks and Nutter, but not to DNREC, reported the sampling which Krueger indicated were very similar to what they had anticipated in that the site was not grossly contaminated, but that there were metals, semi-volatile organics, and PAH’s. The memo indicated, and Krueger seemed to agree, that since the applicable URS values were exceeded in samples from groundwater, surface soil, and subsurface soil, DNREC was likely to require a Remedial Investigation (RI) including a risk assessment, the scope of which would need to be negotiated with DNREC. (A-16; Tr. 831-32)

Krueger described the site as it appeared on April 12, 2001, after the April 10 meeting when a chemist, a hydrogeologist, as members of her Technical Advisory Group, and she went with Tevebaugh to walk the site to see what was there, observed, apart from people living on the site in different areas, obvious demolition, chunks of concrete and asphalt, probably contributing to the PAH’s that they saw. It was relatively flat, except for the stack. (Tr. 832-33)

Krueger received the VCP application from Nutter, on behalf of Delaware Division of Facilities Management, on August 13, 2001. (A-17A; Tr. 833) The July 30 notice of imminent filing from Nutter to Wirtz requested a meeting of Nutter and representatives from Job Corps with Wirtz and her staff to discuss what, if any, additional environmental assessments might be required, in light of the desire to avoid construction delays of what was deemed the relatively high profile project. (A-17A) The requested meeting took place on August 7, 2001, with Krueger in attendance, and the participants, Dewberry, Banks, Nutter, Facilities Management, DOL, the Delaware Job Corps, all discussed the findings of the facility evaluation and ways to compress the schedule as much as possible. Krueger, as the spokesperson, supported by her managers, advised the participants, who wanted to compress the schedule to about four months for the process, that the process normally takes seven to nine months in the best case, and more realistically nine to twelve months. (Tr. 834-36)

Krueger testified that with respect to reducing the process time, she had advised that DNREC would commit to moving the path forward as much as they could, reducing review times, making sure that Krueger was available for meetings, but that the reality depended on the quality of the reports and work plans that DNREC received. She pointed out that there still was

no VCP agreement, and commitments by the other participants were also needed. Krueger also pointed out other potential sources of delay such as the availability of the Technical Advisory Group, the fact that it was summer vacation time, and the availability of an unusually large number of interested parties. She noted that higher fees could reduce laboratory processing time. (A-18; Tr. 836-37)

Krueger documented the substance of that meeting in a letter to Nutter dated August 13, 2001, purporting to respond to an e-mail request sent to SIRB on August 8, to “confirm... the ability of the DNREC-SIRB to meet the revised schedule presented at the meeting with the parties held on August 7, 2001,” “because the schedule was so aggressive, we wanted to make sure that it was documented somewhere that we would do what we could, but in no way was that meeting committing to that schedule. There were too many things that were out of our control.” The schedule referred to in the letter targeted October 17, 2001, as the date for DNREC-SIRB to issue the Final Plan of Remedial Action. The letter gave assurance that DNREC-SIRB had made and intended to continue to make the remediation and oversight of the Delaware Job Corps Site a priority, but that there were significant issues, which were identified and outlined, that might affect the revised schedule as presented. (A-22; Tr.837-38) Krueger testified that there was no discussion that she could recall at the August 7, 2001, meeting of the fact that the bid opening for the construction of the Job Corps Center was scheduled for August 16, 2001, nine days later. (Tr. 840)

On August 10, 2001, Reitenbach advised Tevebaugh and Banks that Krueger had responded on behalf of DNREC to certain questions precedent to planned submission of the work plan on Friday, August 17. He advised that DNREC had advised that he did not have enough data to do a risk assessment for the children in the planned day care center, but that the issue could be addressed by adding cover to the area, consistent with prior planning, and facilitating the risk assessment, though DNREC’s decision regarding the necessity for additional samples was projected for August 13. Krueger testified that ultimately an eighteen inch cover of clean fill was installed. Krueger had also indicated that the necessity for excavation of soils in the area of the underground storage tank would await the risk assessment. (A-21; Tr. 838-40) Krueger testified that all of DNREC’s sites in Wilmington or vicinity have surface water body issues because there are so many rivers or creeks in the vicinity. (Tr. 840-41)

Nutter, as real property administrator for Facilities Management, an entity of the State of Delaware, which maintained the majority of properties owned by the State of Delaware, made the application for the VCP on behalf of the State of Delaware received by DNREC on August 13, 2006. (A-24; Tr. 833, 841) By August 24, 2001, delay problems were already apparent as reflected in a letter from Krueger to Nutter, which advised that the remedial investigation work plan was incomplete and unsatisfactory as initially submitted. The letter also advised that DNREC-SIRB had determined that all the data from BATTA relating to the Project were invalid, and should not be referenced. (A-28; Tr. 842-43)

A letter from Krueger to Nutter dated September 24, 2001, dealt with the issue of permissible construction prior to completion of the final plan of remedial action. Krueger testified that although the regulations prohibited such work, DNREC allowed exceptions in certain cases where the work could be undone and that would not cause a risk to the workers.

Thus, no vertical construction would be permitted, but sometimes footers for buildings and utility trenching could be undertaken, as well as mobilization, but at the applicant's risk in the event that the final plan was inconsistent with what had been done. The letter itself elaborated a substantial number of obviously significant issues requiring resolution, as well as preconditions, including provision for clearance and oversight, relating to commencement of any construction on the site, in addition to the assumption of risk (A-38; Tr. 843-44, 863-65)

Krueger testified that she told Banks that the owners were responsible for paying for the hazmat training and making sure it got done. The subcontractor Ten Bears was responsible for making sure that the health and safety requirements and environmental monitoring requirements were adhered to when there were earth moving activities. Despite Krueger's insistence, Banks resisted and agreed to the monitoring only "[r]eluctantly and sporadically."

Although Krueger professed not to know all the details, she testified this reluctance was manifested in that DOL would only pay for a few days at a time, and so there was discussion of how many days DOL "would do up front." From a construction perspective, Krueger knew that sometime the Contractor would work twenty days straight with no problems, and at other times the Contractor might work only three or four days at a time because of weather conditions such as rain, wind or snow, and Krueger ended up in the middle of e-mails between Banks and Wu to ensure there was provision for monitoring, with Wu advising that the contractor would be working a certain number more days and urging Krueger to insure that Banks approved the number of days required through a change order or documented process to ensure that the workers were safe when the work involved earth moving and oversight by Ten Bears was required. At issue was the cost of such monitoring of work at the site as required by DNREC, not the hazmat training of workers. The inference from Krueger's credible testimony is that Banks considered the environmental monitoring process merely an impediment, was reluctant to have it continue, and sought to avoid it and frustrate it to the extent he could. (Tr. 845-49)

Krueger testified that any soil moving activities, including digging, excavating, had to have one of the individuals from Ten Bears monitoring. To be efficient, the general contractor would have to inform DOL or Ten Bears in advance when excavation was to be done. Krueger did not know precisely how the notification process occurred, and did not know whether in dealing with an ongoing process the contractor called ten days prior or twenty days prior, but she did know that she "was involved in a lot of correspondence because the days were getting ahead of themselves. We had more construction than we had days, and the days were only allotted in very small increments, relative to a construction project." (Tr. 866-67)

Krueger testified that she was at the site quite frequently, beginning with the April 12, 2001, visit to familiarize her Technical Advisory Group and herself with conditions at the site. (Tr. 868-69) When she reviewed the site, aside from the construction debris which would cause the PAH's, which tend to be very volatile, there was no obvious discoloration of contaminated areas on the site that she saw. The metals that were in the soil could have been attributable to Wilmington's known tannery sites where arsenic was a main manufacturing ingredient and would have to be dug out and hauled to a disposal facility which treats soils. Other metals were often zinc and manganese. (Tr. 870-71) Visible debris at the site consisted of six to eight inch pieces of concrete, asphalt, and brick. (Tr. 868)

In explaining the technique of covering an exposed area, as opposed to digging and hauling, Krueger testified that in a risk assessment, one of the goals is to eliminate the pathway, i.e. how the contaminant is getting to the receptor, whether it is a person or an animal or some part of the environment, so that mitigation of the pathway, can reduce or eliminate the risk and avoid the need to remove the contaminant.” (Tr. 871) Covering the exposed areas was significantly affected by the childcare center, because when built it would have left minimal amounts of grassy areas because of the parking lot, the plantings, the Job Corps Center building, the childcare center building, the basketball court, and the loading docks. Without the childcare center, there is a fairly large area of grass which would have to qualify as covering. (Tr. 871-72)

Krueger explained the requirement that water be contained on the site as having stemmed from the sample results indicating that the soils were contaminated, so that there was a good chance that the ground water would be contaminated. The City of Wilmington did not want the contaminated water going to the sewer or running down the road, and so, of several options, a containment consisting of an earthen berm around with a liner in it was built on the site. (Tr. 850) The berm concept was the same as a detention pond. (Tr. 873) Krueger thought that the determination that water could not leave the site was made in the spring of 2002. The issue had been discussed during the proposed and final plan. (Tr. 872-73)

With reference in particular to the detention pond as a device for controlling the water on site, Krueger testified that DNREC was intimately involved in the process of specifying what methodology would be used to deal with any soil or groundwater as reflected in the proposed and final plan. However, with respect to dealing with the water specifically leaving the site, DNREC did not specify the method, but required that it be properly removed. Thus, DNREC did not control whether the water was put in tanks and removed or put in a detention pond, so long as it did not flow off the site into Wilmington’s sewer system or streets. (Tr. 876-77) According to Krueger the concern with flow of contaminants off the site, despite a long prior period when the site conditions were ignored, occurs when construction, excavation, grading changes, disturb, or are perceived to disturb, hitherto static conditions, and in the context of relatively recent environmental laws and regulations. (Tr. 877-78)

Krueger testified on cross-examination that if the owner had not entered into a VCP, which would involve DNREC’s oversight of data collection and DNREC certified labs doing the analysis, DNREC would not issue a Certificate of Completion of Remedy, even if the owner had attempted to clean up the contamination. Krueger cited as the only alternative DNREC’s Brownfields Program, just beginning, which was a state option to clean up the site under its Hazardous Substance Cleanup Act fund. She attributed the lack of agreement regarding the VCP to Nutter’s lack of understanding of what it was, and the question of who would sign the undertaking, which might include DOL and the Delaware Job Corps as well as Nutter who was signing on behalf of the State of Delaware Facilities Management, which owned the site. (Tr. 851-54)

Krueger testified that the costs of a remedial plan to clean up such a site tend to vary and clean up could be “fairly expensive,” but from the information she had in October or the fall of 2001, there was nothing to say this it was going to be very expensive, though it would cost

thousands of dollars. (Tr. 854) Krueger was never asked for a recommendation regarding whether bidding could occur in August 2001 and construction could continue. (Tr. 872)

On March 4, 2002, Williams, the CO, on behalf of DOL, and the Deputy Director of Facilities Management, Robert J. Furman, on behalf of the State of Delaware, signed a Memorandum of Agreement, between the State of Delaware as Lessor and DOL as Lessee, which recited that under the Lease Agreement dated December 14, 1999, for the occupancy and use of the property by DOL as a Job Corps Center, it was the intent of both parties that the State assume all responsibility for the environmental contamination that currently existed at the property; that DOL would “not be held liable in any way for the contamination discovered at the property that is not a result of their activities”; that the State would enter into the VCP with DNREC; and that DOL was not willing or able to co-sign the VCP with the State because of funding restrictions; that DOL would “contribute to the cost(s) for environmental remedial (investigation only) work needed at the property”; and that it was the intent of both parties not to hinder the development of the property with delay due to environmental remediation.

The agreement provided, based on those premises, that DOL had contributed a maximum of \$125,107.00 for the required environmental remedial work and Delaware would be responsible for all other costs incurred; that DOL would provide resources to accomplish the Remedial Action Objectives and Alternatives per section 5.1, Remedial Investigation Feasibility Study Work Plan as proposed, limited to the \$125,107.00 dollar value; that the resources were the environmental engineers, EA, management, Dewberry, and the certified lab, but only to the extent of the proposed work plan; and that the agreement would run concurrently with the lease. (A-40) Notwithstanding the obvious effort to limit DOL’s liability, Krueger, who was not familiar with the agreement and not an attorney, testified that her understanding was that under Delaware’s regulations and CERCLA there would be joint liability, so that DOL as owner/operator of the facility would be liable aside from any agreements. Krueger understood that Delaware, or SIRB, does not indemnify. Krueger testified that under the VCP the State of Delaware was primarily responsible for ensuring that the actions needed by DNREC were taken. (Tr. 855-56)

With regard to the letter from Nutter to Wirtz dated July 30, 2001, which transmitted the analytical results for the soil and ground-water samples collected at the site and represented that DNREC’s soil screening results and the laboratory analysis had indicated that the site was “not grossly contaminated,” Krueger testified that what she “saw at this site were low levels of contamination, relatively speaking, for an industrial site,” meaning that there were some spills on the site, which is completely expected on an industrial site, especially one that is 200 years old. Krueger explained the concept as both vertical and horizontal, that is vertical since there was some groundwater contamination, and subject to “hotspots” rather than the pervasive horizontal contamination that would be deemed grossly contaminated. (A-17A; Tr. 858-59).

With respect to the reference by the property owner in the VCP to soil samples taken near and downstream from the previously leaking storage tank and smoke stack which were contaminated with metals and PAH’s of initially unknown extent, Krueger explained that when the UST Branch removes a tank from a site, they take samples, but because they deal with a limited number of petroleum based contaminants, they refer their samples to SIRB if other

contaminants are identified, which is what happened in the case of the Project site. (A-24; Tr. 860, 880-81)

Krueger recognized that when the sample results were taken in July 2001, Reitenbach advised Tevebaugh that the test results did not indicate that the contamination was limited to any particular area, and indicated that semi-volatile organic compounds were found in eleven samples, and in five cases exceeded the standards for a noncritical water resource area. Krueger then testified that from DNREC's standpoint, once groundwater is contaminated in one part of the property, it might be contaminated in another part of the property downgrade because groundwater moves downgrade. (A-16; Tr. 881-82) Krueger testified that the soil samples from eight locations were purposely taken over the full site to get a snapshot of the entire site, though they did not know at the time where the footprint of the building was. Although the contamination exceeded the applicable standards by an unspecified amount, Krueger declared that once the standards are exceeded by however much something needs to be done, because the standards, though conservative, indicate that if exceeded the contaminant has the potential to cause human health problem and affect the environment. (Tr. 883-84)

As of August 14, 2001, when Nutter submitted the completed VCP application to Krueger, there was the potential for contaminants in a localized area where there was an underground storage tank and existing smoke stack cited as information in addition to the results of the earlier sampling at the end of May, according to Krueger. (A-24; Tr. 861)

With regard to the compressed schedule for completion in October 2001, which DNREC was trying to keep, and which Krueger characterized as "aggressive," Krueger testified that it was "[v]ery unlikely" that it was "doable," because it was an aggressive schedule and there were several factors which were out of DNREC's control. Krueger testified with regard to whether it would be reasonable for the owner or for DOL to assume it was reasonable or possible to complete the compressed schedule, "I know that every time I said, here's all the caveats, they pretty much ignored that. You know, they said, no, we can keep to the schedule, we can do this no matter what, and that's why I wrote the letter after the meeting about the schedule...." (Tr. 861-63)

Krueger testified that the health risk to children, as the most susceptible and closest to the dirt, was the primary concern related to the risk assessment related to construction. Krueger knew that the childcare center was not ultimately built, but was not privy to the decision. She testified that all of DNREC's risk assessment in the final plan included the issues related to a childcare center. She testified, "I don't know what the decision to not build the center was, but all of our evaluation, our risk assessment, the final plan, all included the issue of having a childcare center. It was never told to us that there would not be one." (Tr. 865-66) Counsel for the Contracting Officer represented that DOL was going to have a separate bidding process on a childcare center, and it never did do it on that site. (Tr. 866)

Krueger explained the causes for delay in the fall of 2001 as additional sampling after the May sampling to clarify areas of concern. There were issues to be resolved relating to the water plan. There were additional groundwater samples to determine if anything was leaving the site.

The form of the work plan was initially inappropriate and not in accord with applicable guidelines. However, the notice and comment process did not cause delay. (Tr. 875-76)

Krueger rated the relative level of contamination at the final plan as “Minimal,” relatively speaking, because it was an industrial site that would be more contaminated than someone’s yard. Krueger recalled no “major hotspots.” The eighteen inches of clean fill brought to grade, particularly in the childcare center, and cover by asphalt, concrete sidewalks, or the like, would be “capping” which would meet the requirements of DNREC. (Tr. 879-80)

### Steenbergen

John Steenbergen was the contracting officer and supervisor at DOL, Employment and Training Administration, from 1987 until January 2002, when he retired. His title was chief of the Division of Acquisition and Assistance supervising two units, one was research and evaluation and technical assistance types of contracts; the other was A and E (architect and engineering design) and construction contracts, with seven or eight contract specialists in each unit, including contracting officers. Steenbergen concentrated on the larger contracts and with claims and settlements as opposed to signing every document. The construction contracts were directly associated with the Job Corps Program and Job Corps Centers, and involved renovation, new centers, new buildings, small and large rehabilitation projects, and any kind of construction that would be required to maintain the building, a small campus-type facility. (Tr. 1618-19, 22) His involvement with the Job Corps and the construction of Job Corps Centers, Steenbergen testified that his relationship was primarily through the budget office, and related to the status of projects, small business contracting, and other matters. (Tr. 1622-23)

Steenbergen had a liberal arts Bachelor’s degree, no advanced or graduate degree, and his professional background in the seventeen years prior to 1987 involved various positions with various agencies as a procurement contract specialist. At DOL he spent an estimated seventy to eighty percent of his time involved with the A and E and larger construction contracts from award through the contract administration phase. His involvement with the Wilmington Job Corps Center contract ended prior to the contract administration phase because of his retirement in January 2002. (Tr. 1619-21)

Steenbergen’s actual memory of his involvement with the Wilmington Job Corps Center Project was limited. He would not have got the project until the general outlines of the project and scope of work for its design would have been developed and referred to his staff requesting that a solicitation be announced for the design contractor, i.e. the architect and engineer. Steenbergen testified that he probably would have signed off on the announcement, and started an established selection process. (Tr. 1626-27) He testified that he thought he had become involved with the Project in May or June 2001 after an initially published solicitation notice for construction had been canceled at the end of 2000 or early 2001 because of continuing concerns with “I think it was contamination specifically around where the tank had been removed.” (Tr. 1631-32)

Steenbergen described a sole source Small Business Administration demolition contract with ECG Industries, Inc. awarded pursuant to a February 7, 2000 request to him by the DOL’s

A and E contractor for removal and disposal of asbestos containing materials, lead paint, partial demolition of the building on site, with the remainder to be used for the new center, site utilities, and removal of an underground storage tank. The request indicated that performance was to be done in accordance with DNREC requirements. He testified that the work was accomplished, but that there was concern about contamination around the immediate area where the storage tank was removed, and that “we authorized the architectural contractor to do some additional testing or bore holes,” but could recall little else. He thought he was aware that there was contamination in the area of the tank removal, but did not think he was aware of any other contamination issues. (G-224; Tr. 1632-34)

On June 19, 2001, a request for reissuance of the Commerce Business Daily (CBD) Announcement soliciting the construction contract was addressed to Steenbergen, suggesting that soil sampling was expected to be completed in the near future. It noted that the bid opening following the first CBD announcement issued on October 18, 2000, had been indefinitely postponed because of the need for soil testing required by the State of Delaware. (G-232; Tr. 1635-37) The notice was accepted by CBD on July 27, 2001. (G-233; Tr. 1644)

Although he was unsure of the scope of the directive, Steenbergen acknowledged sending Change Directive No. 1 to Robert Reid, Project Manager at Tevebaugh, on March 16, 2001, to proceed immediately with the subsurface investigations required by DNREC for an amount not to exceed \$30,600. (G-229; Tr. 1637-38) Steenbergen acknowledged based on documentation that there were ongoing subsurface examinations of the Project site at least from March to May, 2001, although he was unsure of the precise scope. (G-229, 231; Tr. 1638-39)

Steenbergen testified that at a meeting in his office in May or June 2001 in response to a memorandum requesting that they publish notice of the construction phase of the Project in the CBD for the second time, he had discussions about whether the bid opening should be set for late summer 2001. No one suggested that construction or the bid opening should be delayed until the investigation was concluded or the site was cleaned up. According to Steenbergen’s recollection there was just a general discussion, without dissension, reflecting the participants’ thinking that the problem was limited to one area of contamination around the tank, and that they could go ahead with publication. The participants were Steenbergen, possibly Mike O’Malley, Chi Chiu, who might have been on speakerphone, Brenda Williams, and probably others. Steenbergen testified that the meeting was held to ascertain if the contaminant problem was resolved so that the contract could be awarded. He said it was his understanding at the time that the contaminant problem was restricted to the area immediately around where the tank had been removed, and on that basis determined that the Project could be successfully bid. (Tr. 1639-42, 1670-71)

Steenbergen testified that assessment of the consequences of a wrong judgment in this regard would be that if an award could not be made because something had not been settled, the solicitation could be canceled, and the bidding process delayed; if there were an award and a successful bidding, construction would be delayed. Such an action, however, was to be avoided, if possible. (Tr. 1642-43) The meeting was held at Steenbergen’s request because it was his final determination whether to issue the CBD notice or not; the tank and related soil contamination was the only factual consideration he could recall affecting the decision. There were no subsequent meetings of which Steenbergen was aware regarding his decision to go forward with

the publication, and no one raised any questions before the bid opening about going forward with the bid opening. (Tr. 1643-45)

Steenbergen conceded that it was unusual for there to have been a discussion in which he was involved about whether to proceed with a bid opening, except in a large project with an issue such as existed in this case, and that Williams and O'Malley probably wanted him involved. (Tr. 1672) He had no recollection of a letter dated April 11, 2001, from Tevebaugh to O'Malley recommending that the bidding should be canceled until a clear date on closure of any environmental issues is defined, or of any related discussion of the issue. He agreed the recommendation was not followed. (A-12(e); Tr. 1673-74) Steenbergen testified that he got the impression that the contamination was limited to an area around where the storage tank had been removed from discussions he had, and that no one ever showed him test reports, or indications that the contamination was more broadly disbursed. (Tr. 1675-77) He testified that removal of tanks was not an unfamiliar issue, because they had removed a lot of tanks. (Tr. 1678)

Steenbergen testified that DOL's technical representative, the COTR, O'Malley, the immediate advisor in a technical sense, would have been responsible for advising him of the July 16, 2001, test results that were published after Steenbergen's office meeting. (Tr. 1678-79) O'Malley never informed Steenbergen that he attended the meeting in Wilmington on August 7, 2001, with people from DNREC to discuss what the progress of the environmental remediation might be or informed Steenbergen that DNREC said at that meeting that the process to do the environmental studies and complete the RI/FS would take seven to nine months. He recalled no specific discussion after the CBD notice was issued until the bid opening. (Tr. 1679-80)

Steenbergen had no recollection of a discussion with one of the contracts people, Fred Myer, who allegedly had a telephone conversation with Steenbergen on August 13, as reflected in an e-mail exchange, which indicated that the bid opening would proceed as scheduled unless after a conversation with O'Malley there was to be any change. (A-26; Tr. 1680-81) It is clear from Steenbergen's testimony that, as Contracting Officer, he had no inkling of the scope of the problem as assessed and communicated by DNREC to various DOL agents when he made the final determination to issue the CBD notice and proceed with the bidding process. (Tr. 1643-44)

On October 22, 2001, Steenbergen, by one of his subordinates, Monica Gloster, issued Change Directive No. 5 by letter to Tevebaugh directing his firm to proceed immediately with the additional subsurface investigations required by DNREC-SIRB as specified in a sub-consultant's proposal dated September 25, 2001, in order to prevent continued delay in completion of the project. Without explanation, the same letter was dated November 7, 2001, with a notation "FAXed 10-23-01." (G-248, 249; Tr. 1645-46) By memorandum dated January 2, 2002, from Gulledge signed by O'Malley to Steenbergen, Proposed Modification No. 4 was requested for additional groundwater sampling as directed by DNREC for groundwater mapping, following subsurface sampling taken by EA and DNREC indicating possible groundwater infiltration. The memorandum indicated that the services were required to complete the Remedial Investigation Report/Feasibility Study (RI/FS). (G-254; Tr. 1651-52)

Steenbergen testified that the fifty year lease between the United States and the State of Delaware for the site in Wilmington was normal procedure in thirty to forty percent of cases; he

did not know who selected the site, but described a selection process. (Tr. 1628-29) Steenbergen described in detail DOL's structure for Job Corps contract management, including the outsourcing of design and management contracts, the functions and interrelationships and responsibilities of the various contractors and DOL, and the processes of contract management, including Requests for Information, Change Order Proposals, Change Directives, and other devices. (Tr. 1653-63)

Steenbergen described the relationship between Dewberry and DOL as operating under a system involving an architectural and engineering contract, a so called Brooks Act procurement for engineering support of design and construction and a program management contract outsourced to accomplish the responsibilities of DOL's Labor Employment and Training Administration (ETA), which has employed only one architect and one engineer for the last twenty or more years, for 120 or so Job Corps Centers, 70 or 80 of which ETA is responsible for facility maintenance and asset management. Operating the Job Corps centers, facility maintenance, construction, design, and other program activities are also contracted out. The engineering support contractor, such as Dewberry, identifies projects to be done, drafts scopes of work for such projects, works with DOL throughout the selection of the design contractor and design process; reviews and approves the design documents, assists in the bidding when the design is complete, does on site monitoring of the construction project, participate in the closeout of the project, develop the annual budget, maintain the entire database for the Job Corps facilities. The engineering support contractor has a project manager assigned to each center to monitor activities of any ongoing construction or design project in a center for which he or she is responsible. Such a project manager is not on the site, but visits the site once a month, or more often if necessary. (Tr. 1654-56)

Steenbergen testified that such project managers assist, advise, and recommend to his office and the Job Corps office, but they have no authority to sign documents, contracts, change orders. They recommend, if the architect of record certifies, the plans and specifications, which the engineering support contractor would not, could not do because of its prohibition against doing design work. Only the contracting officer has control of changes that materially affect the project.. (Tr. 1656-57) But an architect would approve an RFI, providing clarification and direction on how to proceed, provided it does not materially change the duration or price of the contract. If a material change were involved, the RFI would have to be passed through the engineering support contractor to the contracting officer. A change directive would be similarly handled. (Tr. 1657-58)

Steenbergen testified that McKissick is the program manager side of the engineering support contract, occupying the same office space, with 20 percent of the staffing as compared with Dewberry's eighty percent, with a staff of contract administrators without authority but very similar to the operation of the contracting officer, and the office that Steenbergen's office would primarily work with. Steenbergen described their functions as processing change orders, working with technical people, negotiating the change order, drafting correspondence, doing initial processing of a pay requests with review for Davis-Bacon compliance—generally similar to the functions of a typical government contracting office. (Tr. 1659-60) According to Steenbergen, cost questions are processed at various levels, and if unresolved eventually reach the contracting officer and become claims, although the disputes clause requires the contractor to

proceed with the work. (Tr. 1661-63) Initially, change orders would be negotiated between the contractor and Dewberry, which would have authority to make a recommendation, though the dollar amount would ultimately require approval of the DOL Contracting Officer. (Tr. 1664-65) Likewise, Dewberry cannot instruct a contractor what to do on a job, though it could advise. (Tr. 1666-67)

Banks was the engineering support contract project manager, and, according to Steenbergen, Eric Leukenhouse was the DOL project manager, though Steenbergen knew nothing about his performance, and when confronted with the suggestion that Leukenhouse's name appeared on no pertinent documents, it was more likely that the project manager was O'Malley, because although O'Malley was the COTR in design projects, sometimes they crossed and O'Malley was the person at DOL most intimately involved with this Project. Steenbergen had no personal knowledge of whether O'Malley ever saw the site. (Tr. 1668-69)

### Chi Chiu

Chiu described himself as employed for the past three and a half years as Director for Program Development, and Deputy Program Director for the entire operation by Dewberry, part of the P.B.Dewberry Joint Venture, the contractor currently providing engineering support services for the Office of Job Corps at DOL. (Tr. 1334) As such, he was responsible for managing the entire Job Corps budget, developing software to enhance operations, designing performance matrixes to ensure good performance, and assisting the program director in managing the day-to-day business including management of condition assessment people, design, and construction. (Tr. 1335)

Previously in 2000-01 he was the Director of Design and Construction for the Eastern Region plus the major projects for DMJM HTB, the prior Job Corps contractor from 1989-2000, a joint venture whose HTB component had been purchased by Dewberry in 1998. Dewberry had taken over part of the contract, and McKissick had undertaken the contract management aspects of the Job Corps contract, which entailed helping procure an architectural/engineering contractor, processing pay requests, helping to process claims, and other contract administration issues. Chiu had joined DMJM in September 1989 as the team leader for a design and construction group, after which in 1991-97 he became Director for Technical Support, managing a team supporting project managers for site investigations, review of contract documents, providing environmental services, ADA, and other technical support. (Tr. 1335-36) When HTM employees became Dewberry employees in 1998, he became Director for Design and Construction for the Western Region for Dewberry. (Tr. 1337) He had worn two hats, that of deputy program director, which was not full time, and technical support of design and construction from 1993-94 to the present. (Tr. 1338)

Chiu's educational background included a Bachelor's Degree in 1977, major in architecture, from Iowa State University, no Master's Degree, and an architect's license in Washington, D.C. When he had been Director for Technical Support, part of his job was to handle all the environmental issues, and he had surveyed virtually all Job Corps Centers under the A-106 program searching for environmental contaminants such as asbestos, underground storage tanks, and PCB's. Normally, leaking tanks were simply removed, along with the

contaminated soil, properly disposed of, and a closure report filed. Chiu described his understanding of the effects of time on hydrocarbons was “that the potency of those leaking oil (sic) has substantially reduced and it’s not going to cause any harm or major harm.” Chiu’s testimony indicated that he had little knowledge of applicable technical assessment standards. (Tr. 1361-62)

Chiu described Dewberry’s function on the Job Corps contract, including environmental assessments, with respect to which the real estate division contacts some local consultant to provide the environmental assessment services (EA). The resulting report by the consultant, according to Chiu, would be designed to ensure that the job corps center will not adversely impact the neighborhood, and to do a “very preliminary” examination of any environmental issues which might impact DOL “so to speak”; would be submitted to his office for review and comment; would then be filed as a preliminary report to DOL and published in the Federal Register for public comment; and if there are no comments in the usual thirty days, would be filed as the final environmental assessment report. (Tr. 1338-39)

Chiu described the Job Corps Center selection and lease process. (Tr. 1339-41) He testified that with respect to leased properties, it was pretty clear that the state would have the responsibility to take care of all preexisting environmental issues. He testified that DOL knew of potential contamination at the site because the EA report mentioned the outstanding closure issue regarding a previously underground storage tank which had been removed. The consultant would search the record, but not do soil boring, in assessing the pertinent circumstances. (Tr. 1341) The underground storage tank situation was not seen to be serious, “because the feeling is that if they take out a tank and if they allow a new tank to be put in, even though there is no closure report, the assumption is that there must be maybe just some paperwork problem, but there’s no indication there’s leakage or whatever.” (Tr. 1341)

Chiu described a closure report applicable to an underground storage tank, removal and disposal with proper documentation of any contaminated soil affected by a leak, notice to the state of remediation, and issuance by the state of a no further action letter confirming completion and thus closure. He testified that there was no closure report for the tank that was previously removed in about 1990, and no leaks related to the replacement 20,000 gallon tank, which had also been removed. Chiu did not know what kind of leakage was associated with the prior tank. (Tr. 1342-43) BATTA filed a closure report dated November 27, 2000, which detailed the disposition of the tank and soils, and recommended further investigation of the contaminated soils, but jurisdiction within DNREC shifted to Site Investigation and Restoration Branch (SIRB), and since BATTA was not a certified consultant accepted by DNREC, closure was not effected, and BATTA’s involvement with the Project ceased. (G 214; Tr. 1363-64) At that point Chiu instructed the AE, Tevebaugh, to hire Environmental Associates (EA) to provide environmental services. (Tr. 1365-66)

An environmental assessment dated August 8, 1999, was done for the Wilmington Job Corps site by Qore which found no adverse impact to putting the Job Corps center in that location, but did discover the lack of a closure report related to the previous underground storage tank. Subsequently Qore filed a Finding of No Significant Impact report, or “FONSI.” (G 209, 210; 1344-47) The initial report was comprehensive, and its Findings and Conclusions related to

the Phase I Environmental Site Assessment identified seven recognized environmental conditions, including the leaking and replacement underground storage tanks, as posing “a relatively high threat to the site” and declared that additional environmental assessments were warranted. It noted the site’s long history of commercial/industrial activity risking contaminated site soils among other unknown environmental concerns, but “no evidence of contamination from industrial activity was identified visually during the site visit.” At the time of the assessment, the obsolete industrial building unoccupied since 1995, was still present, with the likelihood of varied contaminants within the building. (G-209 at 18-19)

Chiu testified that “when the EA report is accepted by our technical people, the real estate group in conjunction with the DOL representative, they will help draft this FONSI, preliminary FONSI report. So we basically provide them some technical information but are not involved in drafting this report.” (Tr. 1347) He also opined that with respect to current historical environmental liabilities on the site, DOL “should not be liable in environmental impact,” and there is no concern about contamination on the site. (Tr. 1347-48) No comments from the public were received after publication in the Federal Register, as Chiu indicated was usually the case, perhaps because of appropriate site selection, and the Final Notice so indicated. (G-211; Tr. 1348-49) The gist of the FONZI applicable to the Project was that the Project would not have an adverse impact upon the neighborhood or environment, which was not really pertinent to the problem of contamination at the site or its remediation. (Tr. 1349-50)

Chiu testified that at the time of the FONZI, in April 2000, DOL really was not aware of any contamination of significance at the site. Though aware of storage tank without a closure report, “there’s no indication that there’s any serious issue.” (Tr. 1350) Chiu testified that the first indication of significance other than the storage tank followed soil boring which confirmed unremediated contaminated soil related to the LUST which had been removed and earlier reported by BATTA which had been hired to assess the soil condition and to attempt to file a closure report, which had been unsuccessful because of the contaminated soil caused by the LUST. (Tr. 1351)

Chiu described the soil boring as customary, and essential for design purposes, prior to design of a building to identify what kind of material is below grade in order to determine bearing capacity and footing design to support the structure. The relevant soil report was prepared by Duffield Associates, Inc. for Tevebaugh as part of its Geotechnical Evaluation dated May 2000 pertaining to the Project. It was a thirteen page report, together with table of contents and two-page Executive Summary, plus four small descriptive appendices, including a one page Appendix B “Test Boring Logs (6).” (G-212) Chiu used the terms soil boring report and geotechnical report interchangeably. (Tr. 1353)

Item 9 under Conclusions and Recommendations of the Duffield report pertinent to Construction stated, “All contractors interested in bidding on phases of this work which involve subsurface conditions should be given full access to this report so that they can develop their own interpretations of the available data.” (G 212 at 13) However, only the two page Executive Summary was given to bidders when Wu requested the soil boring logs with the excuse that the report was too large to distribute to all the bidders. (G-212; A-31) The report also noted that draft copies of the test boring logs and test boring location sketch had been given to Tevebaugh

on April 5, 2000, with the understanding that the information concerning petroleum odors and staining and apparent liquid petroleum observed in the borings could be given to BATTA, the environmental consultant, for review and further evaluation. (G-212 at 2-3)

Chiu characterized the findings of the Duffield report, “In summary, they do not see any major issue of the soil in terms of bearing capacity. They do identify some areas that the water table is a little high, but majority of the situation the water table is pretty low. They also identified some hydrocarbon chemicals in the soil, but they do not proceed to talk about how it needs to be handled. It’s just not their job.” Regarding soil findings other than debris, which they considered contaminants, Chiu observed, “The term contamination is very broad. You could have spilled a can of regular engine oil in the soil and they will categorize the soil as contaminated. So just the word contamination itself does not signify how serious it is and what kind of chemical it is...I would say even a strong cleaning detergent you spill in the soil could potentially categorize that as contaminated.” (Tr. 1353-54) Chiu testified that the geotechnical report “does indicate that there’s some contaminant in the soil, but it cannot truly quantify the amount or the level of toxicity,” which was not the purpose of a geotechnical report. (Tr. 1355)

Chiu testified that once the Wilmington Job Corps Project had been selected and budgeted, he had jurisdiction over the design and construction team because it was a “major project.” He had direct involvement and responsibility “from cradle to grave,” developing the scope, hiring the architect engineering firm (AE), monitoring the design, drawings, bidding process, and monitoring construction, from later 1999 through early 2002. (Tr. 1337-38)

Chiu testified at the hearing that the reference to contamination unquantified as to amount or toxicity in the Duffield report did not raise any concerns with the DOL about going forward on the Project. He said, “We have dealt with contaminated soil in the past. Most of the time it is simply a matter of digging it out, testing it, and then ship[ping] it to the right place and then we get the proper manifest to, to show that you have handled the contaminated soil in an acceptable manner.” Asked when whether any kind of major contamination became an issue, Chiu responded, “To be honest, it [the contaminated soil] was never really a major concern to us...The reason being the tank leaked many, many years ago, and the source of the leakage has been removed so there would be no further contamination. And for those chemicals to be in the soil for so long, I think the – environmental scientists told us the volatility of it is basically much weakened with time. So as far as we’re concerned, we feel that we feel confident that this soil can be dug up, tested, and shipped it off to a proper location, and this again is not a major issue for us.” (G 212; Tr. 1355-56)

Chiu’s testimony indicates that he did not understand, and gravely underestimated, the nature and scope of the contamination problem, and apparently had no appreciation of the time, costs, and other resources which would have to be committed to assessment and remediation of the Project site as a whole, even after completion of the project. (Tr. 1355-56) His attitude, that the significant contamination requiring remediation was so limited, if not inconsequential, is significant because of the scope of his responsibilities with respect to the Project and the fact that O’Malley, as the Contracting Officer’s Technical Representative, relied so heavily upon him for information and recommendations. (Tr. 2623-24, 2626-27)

Chiu testified that a July 14, 2000, letter from the Underground Storage Tank Branch of DNREC addressed to a DOL official and requiring a remediation process related to the site where the 20,000 gallon storage tank had been removed in order to effect “closure” was to Chiu’s knowledge the first involvement with DNREC and related strictly to the “alleged oil leak from the previous underground storage tank.” (G 225; Tr. 1357-58) The subsurface investigation report dated October 31, 2000, reflecting soil and groundwater testing, which was filed by BATTAs after removal of the underground storage tank was described by Chiu as reflecting the unsuccessful attempt to obtain a closure report, because, as Chiu described it, there was some hydrocarbon contamination, no closure report, and BATTAs’s recommendation that further testing be conducted. The investigation reflected eight soil and six groundwater boring samples. Page 3 of the BATTAs report recorded that the samples disclosed that high molecular weight petroleum hydrocarbons believed to be related to the LUST were present in the soil and groundwater and BATTAs recommended further investigation at the site under DNREC’s SIRB to quantify the hydrocarbons. Chiu testified that the conclusions regarding the hydrocarbons were not of concern to DOL because “we have from time-to-time encountered these cases of contaminated soil, especially the contamination—been in the ground for such a long time, it doesn’t really concern us that much. We just know that we need to take [the contaminated soil] out.” (G 213; Tr. 1359)

Chiu testified that the investigative activity, tank removal, and replacement of BATTAs by EA after November 2000, caused cancellation of the scheduled bid because “at that time, we don’t know enough about the contaminated soil situation, and since BATTAs cannot give us any further information, we just felt that we need to know more about a situation before we move on with the bidding phase. So at that time, if I recollect, that bid was cancelled.” (Tr. 1366)

A July 30, 2001, letter from Nutter, representing the State owner of the property, to DNREC SIRB represented that, based on preliminary information from EA, the Project site was “not grossly contaminated,” that an agreement to enter a VCP was imminent, and sought a meeting to discuss forward planning and ways to expedite the schedule to avoid construction delays. Chiu interpreted “grossly contaminated” to mean that some tests disclosed by the report exceeded DNREC environmental standards, “but is not by a whole lot. And I think the, the nature of the contamination and the substance is just not causing any major concerns.” (G 234; Tr.1367)

Chiu described EA’s first report of additional testing on the site, submitted by Reitenbach and dated July 16, 2001, as having “found that some of the contamination level exceeded the DNREC limit, but then again, none of that is high enough to cause any serious concern...”[t]o basically three area[s]; to the future construction worker that may come into contact with that or the future occupants who will be using that building, and apparently...DNREC is [a] little concerned about the potential impact on the occupants in the Child Development Center.” However, Chiu declared that DOL was not concerned. Chiu declared, “Again it’s no different from most of the contaminated soil that we’ve taken care of in the past. So again we just felt that if we cannot leave them in there, we’ll just take them out and dispose them properly.” (G-235; 1369-70) Chiu thus demonstrated that at that point he did not understand, as he should have, given the responsibilities and influence of his position, either the scope of the contamination at

the Project site, or the extent of the process that the State of Delaware through DNREC would impose upon its assessment and cleanup requirements.

A July 25, 2001, meeting in Wilmington to devise a response to the July 16, letter from EA, was reported by Banks, who was present along with Chiu, Nutter and Tiller from the State of Delaware, two local Job Corps representatives, Reitenbach, and Tevebaugh. Reitenbach, who was responsible for analyzing the findings and providing professional guidance necessary to obtain DNREC approval, described the two-step process involving the VCP and a six step risk assessment process projected to take four to six months. Discussion produced a condensed process combining three steps and eliminating thirteen weeks of processing time, with EA to prepare an appropriate work plan. (G 236)

Chiu described the meeting as disclosing a multiple step process which, though standard, was viewed as too long. So, he said, they sought to eliminate the preliminary and remedial investigations and reviews by going to the last step of risk assessment and feasibility study required by DNREC and whittling an eighteen month process to four or five months maximum. He said the compressed schedule was presented to DNREC and described the parties as cooperative, noting that DNREC “felt that the schedule is a little aggressive, but they expressed that they will put this job into top priority, and they will cooperate with us and try to review all the summary report[s] as soon as they can. Never in any correspondence I recollect that they say it is impossible.” Given DNREC’s cooperation and EA’s reports of timely performance, Chiu testified he expected final approval by sometime in October. (Tr. 1372-73)

Chiu, asked if there was any concern about going forward with the bid process on the Project declared, “Not at all, because the – we figure that the – by the time the bid is open, by the time the bid is analyzed and then awarded, it will be sometime in October/November timeframe anyway. So we figured that we can run these two things[s] in parallel and we should be able to get out final approval from DNREC just before the construction starts, since he contemplated a forty-five to sixty day period to evaluate the bids and for the contractor to be processed by the Contract Division after bid opening before the contract would be awarded. (Tr. 1373-74) Chiu testified that the main object of the process was to obtain final approval from DNREC in early to mid October 2001. (Tr. 1376)

Chiu testified that, at the time that the August 13, 2001, letter from Krueger was sent and received by Nutter responding to the proposed compressed schedule, DOL still thought the schedule was doable, being consistently assured by EA that the whole process was doable and that the October timeframe could be met. (Tr. 1381) That letter showed a schedule providing for October 17, 2001, issuance of DNREC’s Final Plan of Remedial Action, but notes that dates were not specified for certain “milestones” including DNREC SIRB’s review of the Closure Report and issuance of “a Certificate of Complete of Remedy (sic).” (G 238) He testified that there was no discussion about whether the process would interfere with construction at the site “[b]ecause the consensus was that the soil has to come out anyway, one way or the other, so that would be the first part of construction, so that shouldn’t be a delay to the construction process.” (Tr. 1381-82)

Chiu thought he had been involved in discussion about the bid opening in August 2001, but his actual recollection in this regard was notably vague. (Tr. 1382-84) However, extrapolating from the discussions he testified he must have had with a group that he said usually consisted of O'Malley, their contact person, the COTR in the Office of Job Corps, Steenbergen, the Contracting Officer, from time to time, sometimes by designated subordinate, Chiu testified that, "based on our assessment, the EA's finding, talking to DNREC, we felt that we can still continue with the bidding process and open a bid, and by the time they award the contract, we would have the final approval from DNREC. (Tr. 1383-84)

Chiu testified that his role as Director for Design and Construction for Dewberry at the time was to gather all the information from the project manager and the AE, look at their recommendation, assess it himself, and then make his recommendation to the program manager, and if they both concurred, make that recommendation to O'Malley. (Tr. 1384) Chiu testified that both concurred, without any other input received from outside contractors or consultants that he could recall, and without objection or suggestion that the project be delayed, or that the site should be cleaned up first, and recommended that the bidding process proceed. (Tr. 1385)

Asked whether there was any discussion about whether construction could occur if the site investigation took longer than expected, Chiu responded, "There was some discussion, but it was never a concern, the reason being at that time EA already filed their work plan so to speak, and the process is not a question. We all know that it needs to be taken out and ship it off the site. The only question that DNREC and EA is discussing is that, I think 20-day period that DNREC will file their remedial action plan and then to receive comments from the public. DNREC is in the opinion that we need to take that into consideration that we need to wait for the public comments. We, we recognized that, but at the same time we felt it should not impact the, the early stage of construction which involves mobilization, surveying the site, scarifying the site. So we, we don't see that as being a major issue." (Tr. 1385-86)

The conference report prepared by Banks of an August 30, 2001, meeting which focused on the preliminary design of the planned Child Development Center, which has not been built, noted another explanation by Reitenbach of the compressed schedule, noting particularly "the many potential pit falls that could cause delay," possible efforts to mitigate delay, and DNREC's support, but emphasis on the importance of quality submittals. (G 241) Chiu noted in relation to the document that potential environmental concerns did not relate to the Child Care Center, because it had already been decided that the Child Care Center would be constructed at a much later date, so that "we are not too concerned about the, the contamination issue on that site. Our main goal is to make sure we can start construction on the main building." Chiu conceded that DNREC was concerned about exposure of Child Care Center future users coming into contact with contaminated soil, "but their concern is—to me is rather minor. Even by their own admission, the way to resolve it is simply taking off some of the surface soil, about 12 to 18 inches, and then backfilling with 12, 16 inches of clean soil. That very commonly done, and it's not a major issue, or not a major cause at all," and he thought the final remedial plan called for that solution. (G 241; Tr. 1387-88)

Chiu testified that the Revised Final version of the remedial investigation and feasibility study work plan which outlined the procedures for dealing with environmental issues, the report

was in line with what DOL expected with regard to the level of contamination on the site, and did not engender any changes in how to deal with the construction on the site. That report which incorporated DNREC's comments, was prepared by EA and was issued at the end of November 2001. Chiu testified regarding the effects of the report, "[T]he strategy is still you dig into the soil and then you put the soil on the site, do the testing, and determine whether it is contaminated and the[n] you ship it off site. And if it is not contaminated, you can use it for backfill." (G-215; Tr. 1391-92)

Chiu explained that when he used the word "we" he implied Dewberry, because Dewberry "basically do everything representing them {DOL}, so it is easy to say whatever we recommend, whatever we do is pretty much is the same action that DOL would take" so that "we" thus used means Dewberry as agent for DOL, but does not refer, for instance, to Chiu's division. He agreed that Dewberry does not have the authority of the Contracting Officer, to whom Dewberry would make recommendations, and proceeds if the Contracting Officer concurs with the recommendation. Dewberry would assess, evaluate, and recommend changes in the scope of work or contract changes. (Tr. 1393-95)

In the fall of 2002, Steenbergen had retired; Williams had succeeded him; O'Malley was still the COTR. Chiu explained that COTR, in this case O'Malley, would make the recommendations regarding the technical issues pertaining to construction; the recommendation pertaining to legal, or contract issues are made by the CO's staff who are contract specialists. McKissick was the contractor for DOL that handled the contract issues, which is called program management support, but primarily helps DOL process contract related issues, such as preparing all the paperwork, obtain necessary approvals, for submission to DOL for final approval. (Tr. 1395-96) Chiu identified Banks as "one of the project manager[s] on my team and he's assigned to—the task of managing the design and construction process for the Wilmington project." (Tr. 1398)

Chiu's testimonial description of the VCP indicated that he misconceived its terms and purpose. The VCP by its terms was an agreement among three parties: DNREC, DOL, and the Delaware Department of Administrative Services, Division of Facilities Management, which was the owner of the property. The copy of the VCP in evidence showed only that Robert J. Furman signed the agreement as Director of Facilities Management for the State of Delaware on August 28, 2001, when Nutter transmitted them to Banks for execution by DOL. The VCP recited that at the time of execution the site encompassed a vacant lot with a brick smokestack. (G-240)

The VCP prescribed an arrangement for DOL to investigate the need for a cleanup of the site and to do any cleanup required under the supervision of DNREC and applicable Delaware statutes, regulations and procedures, essentially at DOL's expense. The VCP explicitly provided in paragraph numbered 3, "The intent of this Agreement is to allow Respondents [the United States Department of Labor] to conduct the activities outlined herein with oversight from the Department [DNREC] and in accordance with the guidance documents described below in Paragraph 5 [various Delaware manuals, procedures, and guidelines]. Respondents have indicated to the Department in its application dated August 13, 2001, that they wish to conduct the following activities at the Site with the Department's oversight: Remedial Investigation and Feasibility Study, of the Delaware Job Corp [sic] Site." The VCP provided in paragraph 7,

“After the Department’s approval of the Consultant and the laboratory as required under Paragraph 10 of this Agreement, Respondents shall conduct an investigation, removal and construction work consistent with the attached Scope of Work and in accordance with the Remedial Investigation/Feasibility Study (RI/FS) which is approved the Department. This Work Plan for the RI/FS work shall be submitted to the Department for review and written approval. After the Work Plan is approved, Respondents shall conduct all work at the Site as required therein.” (G-240).

Chiu’s testimonial characterization of the VCP was manifestly inconsistent with the terms of the agreement. Chiu described the VCP as follows: “Basically it’s an agreement between the state DNREC and a owner of a property...that they basically agree on a course of actions that they need to take regarding those contaminants in the property, and they agreed to take those course[s] of action basically under the guidance and approval of the DNREC people.” Chiu described the “significance of the VCP agreement” as “In some way VCP is a peace of mind for DNREC, meaning that the property owner has agreed to go through the process, identify these contaminants and basically eventually abate all these contaminants. So in essence, the State agreed to provide all these cleanup procedures potentially required.” Asked “who enters into such an agreement,” Chiu testified, “This is usually signed between the DNREC and the property owner, which in this case is the State of Delaware.” (G-240; Tr. 1398)

In response to the question, “Does the Department of Labor enter into these type of agreements?”, Chiu testified, “We {presumably, DOL} simply lease the property, so we are not in a position to sign these agreements.” Asked, “did the Department of Labor sign the agreement in this case,” Chiu testified, “No, no. The State of Delaware will enter into an agreement between themselves and the DNREC people. I think part of the reason that they voluntarily sign the agreement was that after they have seen all those reports and testing and make their own assessment, they feel comfortable that it’s not a major issue, so they decided to enter the voluntary cleanup program.” Asked “who would be responsible for the cost of cleaning up the site,” Chiu testified, “Obviously in this case strictly speaking will be the State.” Asked, “Will the Department have any liability to--,” Chiu responded, “In my opinion, no.” He testified that he had seen the VCP and saw a copy of the letter at the time that it [presumably, the VCP] was entered into. (G-240; Tr. 1399)

The “Final Plan of Remedial Action” dated May 2002 issued by DNREC SIRB, signed by John Blevins, Director, Division of Air and Waste Management on June 3, 2002, purported to present DNREC’s assessment of the potential health and environmental risks posed the site, and designates the selected remedy for the site. (G-19) The obligatory remedial plan therein prescribed:

1. Development of a soil management plan to identify the areas of the site, the depth and the disposition of soils to be disturbed during excavation and construction activities.
2. Removal and replacement of 12 inches or more of soil from the areas of site where no building or hardscape will be located based on the site development

plan, dated September 21, 2000 (or any subsequent revisions), and the soil management plan.

3. Placement of at least six inches of topsoil and seeding in with grass in those areas that will not be covered by buildings or hardscape.

4. Placement of a cap and cover consisting of buildings and hardscape as shown on the site development plan.

5. Placement of a deed restriction on the property: a) limiting the site to non-residential uses; b) requiring written approval from DNREC prior to any repair, renovation or demolition of the existing structures on the property, or any paved surfaces; c) prohibiting any digging, drilling, excavating, grading, constructing, earth moving, or any other land disturbing activities on the property without the prior written approval of DNREC; and d) prohibiting the installation of any water well on, or use of groundwater at, the site without the prior written approval of DNREC. In addition, the site will remain a part of the Wilmington GMZ.

Asked, "How does this plan change those requirements in terms of the site work that has to be done by the contractor?", Chiu testified, "I believe one of the issues is that they want to make sure that future users will not come into contact with the contaminants. So I guess there's some stipulation that the existing soil, at least the top 12 inches, need to be removed and the new clean soil be brought in so that that forms a barrier between the potential contaminant from future user who will be walking or touching the soil...I mean most likely in any construction the site will be pretty much torn up anyway. At the end of construction, they do need to fine grade the site and then put in most instances at least six inches of topsoil so the grass will grow. So in terms of magnitude, I would say it is really between 6 inches, 6 inches of soil versus maybe 12 to 16 inches." He was asked no further questions about the impact of this plan. (Tr.1402-03)

The "final" or "formal" notice to proceed was not issued until May 2002. Chiu explained the "partial notices to proceed," saying, "At the time DNREC did allow us to do some site work even though the final approval was not given, but we were asking them to allow the contractor to do a little more. Without the notice to proceed, the contractor would not be able to do anything. So our intent was to issue a partial notice to proceed, or sometime we refer to them as administrative notice to proceed, allowing the contractor to proceed with things such as ordering the material, shop drawings, some mobilizations, and also some surveying on the site, basic stuff that they need to do to start a construction." He testified that it had been done in previous contracts, "sometime it's because of a—maybe a paperwork issue or a timing issue, we do allow a contractor to proceed, but not the full construction." Chiu described the decision-making process, "It will start out from our office, P.B. Dewberry and McKissick & McKissick, we will discuss the issue, and we come to a consensus, and then we will make that recommendation to the contracting officer, and the contracting officer makes that decision whether to issue a partial NTP or not." (Tr. 1403-05)

Asked whether, as of July, August 2001, there was any understanding or knowledge on the part of Dewberry where the contamination was on the site, Chiu answered, "We know that

the contamination stems from that leaking tank, and there was some boring done or testing, or test boring done, but we have a general idea it may have migrated somewhat beyond that immediate area. But there's no way of telling exactly where the contamination of soil is. Until you take the soil out, it will be a guess from anybody." (Tr. 1405)

Chiu testified that when he had encountered contaminated soil on prior jobs they solved the problem by removing it and disposing of it appropriately. He estimated there had been ten or fifteen such cases, but in no case was new construction involved. The environmental contamination involved existing tanks that were leaking at existing facilities. (Tr. 1411-12)

Chiu manifestly did not appreciate the scope or complexity of the environmental contamination problem as it related to the Wilmington Job Corps Project. He took an unrealistic position that the DNREC clearance process which was manifestly only partially, if not inconsequentially, dependant upon the extent of the contamination, could actually be compressed any where near as much as he was insisting. In effect, his attitude was one of denial of what was a very serious impediment to rapid construction of the project that was his objective. He also conveyed the idea that the contamination was essentially related and limited to the leaking oil tank to his superiors, O'Malley, Steenbergen, and Williams. He was the prime operative decision maker, as he made clear, since Dewberry was acting, and DOL personnel in effect had essentially passive roles, where, as a practical matter, DOL personnel routinely approved what the contractors recommended or did. Because of their workloads and the layers of bureaucracy engendered by the established contract process, DOL personnel were in no position to make independent judgments in conflict with the recommendations of Dewberry. Chiu was Banks' supervisor. Banks was the Project Manager. O'Malley testified that he had long worked with and relied upon Chiu in fulfilling his role and managing projects. O'Malley was the Contracting Officer's Technical Representative, recommending actions at the highest contract level, and almost totally dependent upon Chiu for facts and recommendations regarding this particular Project.

On cross-examination Chiu conceded that he was not personally involved on a daily basis with either DNREC or EA or the architect of the Project; he met once with EA in May or June 2001 to discuss the schedule to get final approval; he met once that he could recall with DNREC's representative; but otherwise contacts went through Banks, the project manager, who briefed Chiu about what was going on the project by various written reports. (Tr. 1408-10) Chiu did not attend the August 7, 2001, meeting with DNREC. (Tr. 1410-11)

Chiu conceded categorically that, out of 120 Job Corps Centers, although he had dealt with approximately ten to fifteen cases in existing facilities in which there were leaking storage tanks of greater than 1000 gallon capacity, none of those cases of tank and soil removal were associated with new construction or rehabilitation. DOL had removed those tanks by a local contractor along with any contaminated soil, which was taken to an authorized site for disposal. (Tr. 1411-13)

From Banks, who reported back to him, Chiu learned what happened at the August 7, 2001, meeting where EA made the presentation to DNREC. Chiu testified, "Mark Banks basically said the schedule is aggressive, that DNREC will do their best to help us because they

know that we want to get the construction started, but they didn't say that it cannot be done." Chiu insisted that DNREC "have never in any correspondence that I saw that they say it is not possible." (Tr. 1422)

In his memorandum to Tevebaugh concerning the agenda and proposed strategy for the August 7, 2001, meeting and compressed review schedule, Reitenbach suggested as the quickest way to accelerate the schedule and possibly reduce the scope of the risk assessment and feasibility study would be an interim remedial action to be proposed to DNREC consisting of excavation and disposal of the surface soils from the areas planned as open spaces or recreational areas. He acknowledged the problem of cost amounting to \$2-300,000 to sample, remove, and dispose of approximately 3000 cubic yards of soil. (G-237)

Chiu was asked why DOL did not remove and replace 12 inches or more of soil from the areas of the site where no building or hardscape would be located prior to construction, particularly in light of DNREC's provision in its final plan of remedial action that contaminated soil had to be taken out and removed off site. Chiu testified that EA's recommendation for surface soil removal was discussed and rejected. He declared that removing the top eighteen or so inches of soil was not necessary or rational because there was no indication that the top eighteen inches of soil was all contaminated. He testified that it would make no economic sense to remove twelve or more inches of topsoil, bring back new soil, and put a layer of concrete or asphalt or concrete slab on top of it. (Tr. 1413-15)

Chiu argued that removal of the entire contaminated soil off the site prior to construction was not mandated; that it was one of the options to avoid contact, and that paving with six inches of asphalt would be another option. (G-19; Tr. 1416) Chiu contended that removal of 12 inches of soil where no building was planned prior to construction was unnecessary, because, if the removal was to provide a buffer, the construction equipment would compact and disturb soil whose extent of contamination, if any, was unknown. Chiu testified in response to the suggestion that if 12 inches of soil were not removed from the areas where there would be no buildings or hardscape, the contractor would have to work around it while engaged in construction, Chiu responded, "I don't believe that they have to work around it." (Tr. 1417)

With respect to the DNREC requirement not to let any of the surface water run off the site because the soil was contaminated, Chiu responded that if DNREC did determine that the soil was contaminated, it would have to be trucked off the site properly manifested, but if it were not contaminated, it could stay on site to be used as backfill. (Tr. 1417-18) He also challenged the applicable definition of contaminated, declaring that a can of engine oil dropped in the soil would categorize the soil as contaminated, "so simply labeling it contaminated doesn't mean that it's going to present a major health hazard to the worker or the occupant. I mean even, even this report somewhere it says the cancer risk is below the acceptable limits. So I mean I don't think that we should use that word contaminate and categorize that as a major issue." He testified that contamination "simply means that it is not virgin soil to State governments, and that the soil has been mixed in with other chemicals that are not normal, and he rejected the idea that contamination means absolute health hazard to the user. (Tr. 1418-19)

Admitting that DNREC required the participants to go through the specified process, Chiu insisted that “in this case here they are referring to once construction is completed, you put in that 12 inches buffer there. I don’t think it implies that you have to do it at any specific time.” (Tr. 1419) He dismissed the suggestion that Wilmington’s peculiar industrial history could increase the scope of environmental risk in site soils by declaring that a concrete slab floor of a textile mill would buffer the chemicals used indoors from the soil, and declared, “So I believe from the soil reports they don’t imply that the other chemical is a major issue. They do imply the oil tank is a issue.” (Tr. 1419-20) As for the several soil samples that tested positive from areas of the site away from the one LUST, Chiu declared, “There is no way of knowing as to where those contaminants could be coming from. They could even come from the adjacent property for that matter.”(Tr. 1420-21)

Confronted with the suggestion that Krueger had indicated that there were a number of hurdles to the very aggressive and possible but unlikely schedule, Chiu reiterated based on Banks’ report to him, “Yes. We all understand the schedule is very aggressive, and but like I say DNREC has expressed the willingness to cooperate with us to get these things through. They have never in any correspondence that I saw that they say it is not possible.” And again, “Mark Banks basically said the schedule is aggressive, that DNREC will do their best to help us because they know that we want to get the construction started, but they didn’t say that it cannot be done.” (Tr. 14211-22)

DNREC’s concern with the aggressive schedule and identification of seven dates for seven specific scheduled steps involving submissions and approvals and public comment required for issuance of the Final Plan of Remedial Action were the subject of Krueger’s letter to Nutter dated August 13, 2001, with a copy to Banks representing Dewberry. (A-22) Questioned about his understanding In August 2001 of the requirements in relation to the compressed process which was sought Chiu attributed significance to only three steps beginning with EA’s completion of the RI/FS Report scheduled for September 10, 2001, “perused” by DNREC as the second step, and published for public comment as the third. He expressly ignored the several steps allegedly being combined in the interest of haste for EA to produce the RI/FS Report. (A-22; Tr. 1425-27)

Regarding the pitfalls and delays to which the approval process was subject, as described by Krueger in the letter, Chiu responded, “Well, she expressed some concern, mostly about the quality of the report and all of that. But again, if there’s a pitfall, there’s a way to get around them, do a better investigation, spend more time preparing the report. We cannot say that because there is pitfall you’re going to automatically get delayed. I mean I just don’t buy that. Again, I’d like to emphasize if she in fact feels that it cannot be done, she will state it in this letter and just say we do not agree with your schedule. She never at one point say that.” As to that statement, that Krueger never actually said it was impossible, there apparently is no dispute. (Tr. 1427-28) But Chiu did not recall Banks ever reporting to him that Krueger said at the August 7 meeting that it was highly unlikely that the October 17, 2001, date for DNREC SIRB’s issuance of the Final Plan of Remedial Action could be met. Indeed, Chiu denied that there was major concern in late July or early August about the effect the environmental issues would have on the construction schedule. (Tr. 1429)

Again with reference to a conference report by Banks concerning a Wilmington Meeting on August 30, 2001, attended by Banks and Reitenbach, among others, at which the compressed schedule, nuances of the review process, and related potential pitfalls that could cause delay, Chiu testified, "I don't remember specifically talking about it . I still felt at the time that, yes, there is pitfalls. That doesn't necessarily equate to delay. I mean there is a way to work with the DNREC people to get things done." Asked whether Banks told him that people at DNREC thought pitfalls could cause delay, Chiu responded, "He may or may not have. I mean this is four years ago that he might have stopped by and talk about it, but I just can't recollect at this time." (Tr. 1434)

Asked if he was saying that neither Banks nor anyone else ever told him "that it was highly unlikely that October date could be met and that in fact the much more likely situation was that the process would take 9 to 12 months, which is what it usually takes," Chiu responded, "Well we talk about was the aggressiveness of the issues, aggressiveness of the schedule. Nobody ever say that DNREC said it cannot be done or it is highly unlikely or impossible. It's always been if we work at it, we can get it done." (Tr. 1435)

Chiu outlined a plan that contemplated bid opening August 16, followed by the usual 45 to 60 days to award the contract in early October, followed by the usual two weeks for the contractor to submit performance and payment bonds, which would allow "that approval from DNREC before the contractor actually do a groundbreaking or actual construction." He denied that by September 28, 2001, when the contract was awarded, he knew the October deadline for final approval from DNREC of the Final Plan of Remedial Action could not be met, and pronounced it "doable," relying upon constant assurances by EA that "it" [the final plan] was on schedule. (Tr. 1436-38)

Chiu's understanding of the process was incomplete, if not distorted, and he obviously did not try to inform himself first hand of the realities of the situation. He relied on secondary information from Banks, and a doctrinaire approach that, unless DNREC said the aggressively compressed schedule could not be met in so many words, it could and would be done. In the event the compressed schedule was not met, or even close. (Tr. 1437-42)

Chiu testified, however, that the submission by EA of its "final report" about August 17 or 18, 2001, with assurance that the process was on schedule, left two months to obtain comments on the final plan from DNREC, incorporate them, and publish them for public comment. (Tr. 1437) The schedule in Krueger's August 13 letter to Nutter specified submission of the Remedial Investigation/Feasibility Study Work Plan, including risk assessment and specified additional ground water information, by August 17, requiring DNREC approval of the Work Plan by August 24, and completion of the RI/FS Report by September 10, for DNREC approval by September 17, and issuance of the Proposed Plan of Remedial Action by DNREC for public comment on September 24, 2001, four days before the Contract was awarded to Wu. (A-22; Tr. 1437)

Chiu's recollection was that at the time of the contract award, "they are incorporating all the comments from DNREC and DNREC might have requested some additional information. Other than that, I cannot give you whether they're 98 or 99 percent, but I know they are very

close to getting that thing [the RI/FS] finished, ” so that the schedule was “doable.” (Tr. 1347-48) He suggested that the RI/FS “did say if you encounter certain thing what procedure or protocol that you need to follow. It does touch on those. It’s not all about trying to find out what is there because those tests is already done well, well ahead of time.” (Tr. 1439)

Chiu testified that there was no way of assessing the extent of the contamination until the soil was dug up, but that did not cause him to recommend that the bid be postponed until after August 16, 2001. (Tr. 1439-40) The Contract as bid had no specifications dealing with environmental contamination of the site. Chiu testified that, if there is an environmental problem of unknown extent on a site, it can be dealt with to some degree in the specifications, such as by unit pricing for removal of contaminated soil, or other actions. He said including specifications disclosing the fact of a contaminated site of unknown extent and including unit prices could be done, but not in some situations where there is insufficient information regarding soil test results or disposal, and an inability of contractors to provide a unit price because of insufficient information. Under such circumstances, Chiu testified, “So the better way to do and DOL has been very fair about this is that if in fact it is a unforeseen situation, if in fact we need to take those things out, we have always been able to negotiate a change order and arrive at a fair and equitable price. So that was the intent of using unit price. I don’t think the unit price will be accurate anyway from the contractor. (Tr.1440-41)

Chiu did not recollect why information about the environmental problem was not disclosed in the specifications, and declared “but it was given to all the bidders in the geotechnical report,” that is, the two page Executive Summary of that [Duffield] report , given to the bidders in response to a question about soil boring. (Tr. 1441-42) He testified that he had no recall of political pressure. (Tr. 1442-43)

Chiu categorically denied any recall of discussion in July or August 2001 of the possibility of postponing the August 16, 2001, bid opening because of the environmental concerns. He recalled the first postponement of the bid opening to August 16, but not after that. (Tr. 1431-32) The e-mail of Fred Myer, a contract specialist assigned to the Project, to Banks, copy to Chiu and others, referring to a process of final confirmation of the bid opening after an anticipated conference between O’Malley and Steenbergen on the eve of scheduled bid opening did not refresh his recollection to the contrary. (A-26; Tr. 1431-32)

Asked why the award of the contract was not delayed, since the October 17 target date for DNRECX approvals and issuance of the Final Plan of Remedial Action was only 19 days after September 28 when the bid was awarded, Chiu testified, “Well, actually really no reason. First of all I mean they’re—they’ve got 60 days to award the contract, and we were pressing close to that, and we don’t want to unnecessary ask the contractor to extend the bid. Second, I see no evidence from either EA or DNREC that the plan is in such shape that it cannot be approved. So I just figure that even if you – after your award, you’ve still got an extra two weeks for them to submit a bond and all that, so you have a little extra time to work with.” (Tr. 1444) Asked when he did know that the October 17 date could not be met, if he did not know it on September 28, Chiu responded, “It was later. It was after the award. I remember DNREC is asking for more testing and more information. Yeah, then later I know that October 17 is not going to happen,” but he did not know when before October 17. (Tr. 1444-45)

Chiu explained the fact that the final plan of remedial action was done in May 2002, roughly eight months later, “I think my recollection was that the DNREC people keep asking for more information, keep asking for more testing, keep asking for more soil boring, more monitoring, more—had they – why didn’t they come up with these requests well ahead of time, I cannot answer, but it’s just every time we turn around they ask for more information. I don’t know what’s their intent truly.” He denied knowing any of this on September 28, 2001. (Tr. 1445)

Asked whether any of the statements, oral statements by DNREC or the August 13, 2001, letter, which is A-22, had put him on notice prior to August 16 that the requests for more information and testing and the resulting delays in getting reports approved which had occurred might happen, Chiu responded, “Not those documents. They never mentioned that additional testing is required. They give EA some comments, okay, that they incorporated. They just – subsequent to that every time we turn around EA would tell us that DNREC required them to do more testing, but you know why couldn’t they tell us to do those things well ahead of time?” (Tr. 1445-46)

Chiu testified that at the initial stages of construction DNREC would not allow the Contractor to take new soil out of the ground and just ship it off to a dump site. They required it to be stockpiled, tested for contaminants, and if determined to be contaminated, trucked off to a specific location authorized to take contaminated soil. If the excavated soils were not contaminated, they could remain on the site for use to backfill construction or for other purposes. (Tr. 1433)

### O’Malley

Michael F. O’Malley was the COTR [Contract Officer’s Technical Representative] for the duration of the project. Most significant written correspondence showed a copy to him. His title at the time he testified was Unit Chief for the Division of Facilities and Budget Support within the National Office of Job Corps, DOL, a position he had held since 1999. Though a reorganization had changed the position from the Division of Administrative Services to the Office of Job Corps, he had held the position and responsibilities since 1991 when he started with DOL. (Tr. 2584) He was currently supervising four people. (Tr. 2585)

From 1985 to 1991 O’Malley had worked for two contractors, Leo A. Daly Company, and then DMJM [Daniel, Mann, Johnson and Mendenhall], an architectural and engineering firm, very similar to Dewberry, the same type of contractor with DOL, in the capacity of design and construction project manager. (Tr. 2585-86) O’Malley’s general responsibilities then were to manage various individual design and construction projects and to act as technical advisor to DOL. Those responsibilities were very similar to those of Mark Banks or Ron McIntyre. The construction projects were mostly large, mostly new center construction, mostly new dormitories, some renovation work, very similar to the type of Job Corps construction that he was currently involved in. As a team leader for DMJM, he was responsible for seven Job Corps centers most of the time, with two or three different projects, small to medium to large, going on among the centers at any given time. (Tr. 286-87) Before working for Daly, he had spent several

years overseas in the Mid-East and Africa working for international architectural and engineering firms. (Tr. 2587-88)

O'Malley graduated in 1977 with a BS degree in architecture from the University of Maryland, and had worked at various small local architectural firms, and was licensed to practice in D.C. since 1993. He is a certified Federal Historical Preservation Officer for DOL. (Tr. 2589) As Unit Chief at the Job Corps, O'Malley described his responsibilities as administering approximately \$120-130 million of design and construction dollars received annually from Congress, and to administer that production under a contract with Dewberry, which acts as an engineering support contractor to DOL under a contract with the Division of Contract Services. (Tr. 2589-90)

O'Malley described the role of Dewberry in Job Corps construction as an extension of his duties "because we have a very lean Government staff. We only have two technical people to administer this program, me and a civil engineer and two other administrative folks, and we use P.B. Dewberry and McKissick and McKissick which is a separate contractor to act as an extension of my office." However, they have no authority to issue contracts, to make changes to contracts, to increase the time of contracts, to affect a contract with other firms. (Tr. 2590-91) O'Malley described the role of McIntyre and Banks, employees of Dewberry, as having independent authority to act on technical issues that don't affect the contract duration or dollar amount or scope, i.e. the nature of the work to be done, of the contract, including to give advice and monitor the contractor. (Tr. 2591)

O'Malley described the scope and function of his authority. He testified that he does not have authority to change the duration of the contract or any dollar amounts that affect a job. But, before the contract is issued, he has authority to write comments in the scope and to change the scope to be inserted into the contract for bidding purposes without the necessity of approval by the Contracting Officer. (Tr. 2592)

O'Malley described the difference between the Contracting Officer's and O'Malley's offices, and the operative managerial structure, including the process of creating and administering a contract, and who has what authority at what times. He testified that he acts as the COTR for all Job Corps work on each of the centers, with authority to determine the scope of work, to conform the design to be assigned to the architect and engineer to the amount of money approved. The scope of work is prepared by Dewberry and approved by O'Malley, the finished design is approved by the COTR's office, without the Contracting Officer's approval, and then, after the scope is approved through the Contracting Officer's office, the design contract is advertised for competitive bids for A&E [architectural and engineering] services by the Contracting Officer but with monitoring and technical advice by the COTR. After the contract is put out for bids, the Contracting Officer administers the contract. (Tr. 2592-93)

O'Malley, as COTR, charged with authority to approve the scope of work drafted by Dewberry in this case, would have been responsible for including any appropriate specifications dealing with environmental contamination in the contract. There were none prepared or included, even after the existence of contamination was known, prior to the bid opening or award of the Contract.

O'Malley testified that a short list of contractors to be interviewed is culled from the responses to the advertised A&E design services contract. Each firm on the short list is interviewed by Dewberry, which is under contract to do so and to make a recommended selection based on qualifications, and the basis for it, to O'Malley, who cannot perform the interviews because he has over 200 projects each year to review, 100 of which need A&E services. O'Malley testified that he accepts the recommendation 99-100 percent of the time and that he has final authority to make the selection. The selection is referred to the Contracting Officer who develops a contract with the A&E firm selected. The COTR negotiates the contract fee based on the scope of work with the selected firm, and recommends the resulting negotiated fee to the Contracting Officer as fair and equitable. That was how Tevebaugh was selected with respect to the Project. (Tr. 2594-96) O'Malley testified that he follows Dewberry's recommendations ninety-nine percent of the time, because of his work load and inability to know the details. (Tr. 2762-63)

O'Malley gave a fairly detailed narrative description of the site selection and acquisition process and design process. (Tr. 2596-2600) He thought the initial selection of Wilmington occurred in March 1999. (Tr. 2600) He acknowledged that before DOL could sign a lease or make an acquisition it would have to perform an environmental assessment, duly published and subject to comment for forty-five days, and with respect to the Project resulting in a FONSI [Finding of No Significant Impact], all of which takes time. (Tr. 2600, 2602) The required environmental assessment report is routinely put out for competitive bidding after McKissick personnel produce a fairly standard scope of work, and select the lowest bid under recommendation from O'Malley, which is paid for by purchase order from McKissick. Thus Qore became a subcontractor of DOL. (G 209, 210; Tr. 2601) According to O'Malley, because DOL was owner of the Project, as opposed to owner of the property or land, which was owned by the State of Delaware, DOL was required to publish the environmental assessment. (Tr. 2603-04)

O'Malley testified that the lease arrangement was a normal nominal lease for minimal consideration and a long period of time, pursuant to which DOL was assuming that it was responsible for everything done on the project, which would be maintained and would result in an environmentally stable product. O'Malley testified that DOL still had to follow certain State guidelines, and, since the environmental assessment disclosed that there was an abandoned underground oil tank, on advice of counsel a memorandum of agreement was attached to the lease, which sought to limit DOL's liability for the cleanup cost to a certain amount of dollars even though the assessment did not project that there would be a large problem on the site. (Tr. 2604-05)

O'Malley testified that at the time of site selection for the Job Corps center, or request for proposals from the states, there is no assessment of environmental issues, although there is a perfunctory inquiry as to whether there are any environmental concerns about the site. O'Malley testified that with respect to the Wilmington Job Corps Center, there was no large magnitude of environmental concerns in their proposal, or of such magnitude that would have prevented them from going further. (Tr. 2598-99)

O'Malley construed the preliminary FONSI as recording the absence of any identified significant adverse environmental impacts, though it identified the old tank, which O'Malley testified did not imply that there would be adverse effects in trying to clean that up or remove the tank. (Tr. 2607) He also noted that based on the information they had gathered, Qore found no environmental liabilities current or historical to exist on the site. (G 210; Tr. 2607-08) In April 2000 the final notice of no significant impact was issued after there were no comments and no change in substance. O'Malley testified that at that stage, he had no knowledge of other problems on the site. (G 211; Tr. 2608-09)

O'Malley testified that, based on what had been disclosed, there was no need to stipulate to cleanup of environmental hazards before acceptance of the lease, and that further environmental assessment extended to "simply a matter of removing the tank during construction; and that Tevebaugh was directed to identify the tank on its drawings so that the contractor could remove the tank in accordance with all the State regulations. This was done so far as he knew. (Tr. 2611-12) When the tank was dug up, he was notified that it was leaking, and DOL was compelled to deal with the cleanup of the contaminated fuel that had leaked into the soil. O'Malley identified the appropriate response as a change order to the general contractor digging up the tank, since he was pretty sure that the problem was not recognized in any of the specifications or drawings received by the general contractor. The State became involved because the contractor was required, O'Malley thought by specifications, to contact the local environmental authorities, which was DNREC. (Tr. 2612-13) O'Malley apparently was confused regarding the sequence and provisions of the several contracts dealing with the environmental assessments, problems, and responses. (Tr. 2611-2620)

O'Malley testified that the Geotechnical Evaluation prepared by Duffield was to enable Tevebaugh to provide the structural consultants with information, including soil borings, relating to underlying soil compaction and possible environmental hazards, necessary to the design of the building's foundations. This assessment was not part of the environmental assessment, and was performed by a different contractor. (G-212; Tr. 2617-18)

O'Malley had no recollection of the BATA environmental assessment of October 31, 2000, which was based on soil borings and other technical investigation and identified the presence of hydrocarbons on the Project site. (G-213; Tr. 2619-20) O'Malley first became involved and knowledgeable about the fact that there were issues and concerns about contamination at the site that might have to be dealt with when DNREC had to be notified. He indicated that he received monthly status reports on all his projects, and DNREC was notified around the time of the removal of the underground tank in 2000. (Tr. 2620-21) Asked if he was involved in discussions about contamination on the site, O'Malley testified, "In a general nature, and the general nature was that there was nothing that, that couldn't be overcome in a short period of time. (Tr. 2621)

O'Malley did not remember any discussion with Tevebaugh or any details relating to a letter to him from Tevebaugh dated April 11, 2001, referencing progress on environmental issues, and expressly recommending cancellation of the bid previously extended indefinitely by DOL until a clear date on the closure of any environmental issues has been defined, though he

said he probably did discuss with Tevebaugh whether to go forward with the bid at that time. (G-230; Tr. 2621-22)

O'Malley testified that, as the August 16, 2001, bid opening approached, he was constantly trying to reassure himself that he was giving correct technical advice to the Contracting Officer concerning whether DOL should go to bid or not. He had a general recollection of talking to Chiu, his counterpart at Dewberry, with whom he had been associated since 1985 when they worked together at Leo A. Daly, and whose advice he trusted "imperatively actually." O'Malley recalled that they would talk about the risks of taking the bids in August 2001, or just stopping the entire project and clearing up the environmental hazards prior to bids so that they would not be concerned with change orders to the general contractor. His vague recollection was that he agreed with Chiu "that it wouldn't make a difference between delaying the bids and getting the environmental contamination cleaned up, based on the information we all had on hand, against opening or taking the bids in August." The discussion, he recalled, happened over a period of several weeks. (Tr. 2623-24)

O'Malley admitted he "was relying a lot on the advice of P.B. Dewberry and Chi Chiu in particular," because there were four separate projects of this magnitude going on at the same time. The other three were Job Corps Center projects involving about \$18 million, one of which was in design only at the time. He noted, "So they were fairly large for ou[r] little engineering component." (Tr. 2624) O'Malley testified that the average Job Corps type of project is really only between 1 million and 3 million, usually new construction, but sometimes renovation, and usually involves just a single building like a new dormitory or gymnasium. "[B]ut when we take on these tasks, when we're tasked with building an entire new center, it raises the ante quite a bit on trying to provide the time and effort to get these things off the ground.." (Tr. 2625) Thus, O'Malley, who had little specific recollection of pertinent events, admitted that he was stretched very thin and, in effect, was relying almost totally on the advice of Chiu, because he had to, and because he had a long association with Chiu and trusted his advice. An inference is virtually compelled that O'Malley contributed almost nothing to the decision to open the bids on August 16, 2001, other than as a conduit of Chiu's recommendation to the Contracting Officer, Steenbergen.

O'Malley vaguely remembered the August 7, 2001, Job Corps meeting as his first with the principal of the Project and DNREC. He remembered that in general what he went to meeting for was different than what happened. He recalled an issue about a voluntary cleanup program, and "an issue of timing of how much DNREC would have to do to certify that the project could go on in terms of cleanup of environmental contaminants. Not only ground and water contaminants, but also soil contaminants." Regarding discussion about the extent of contamination, he recalled mostly that the conversation was about how much and how quickly DNREC could work with us to get the contaminants off the site. (Tr. 2626-27)

Regarding scheduling, O'Malley recalled his surprise that the August 7, 2001, meeting disclosed that "there was more DNREC involvement than, than I was advised of. More being in terms of what we had to produce and how quickly we had to produce it for DNREC" He could not recall specific dates, and he had not seen the memorandum from Reitenbach to Tevebaugh which outlined the proposed agenda for the August 7 meeting and proposed an accelerated

schedule. The memorandum shows Banks, but not O'Malley, was sent a copy. (A-18; Tr. 2627, 2792-93)

O'Malley's vague understanding of what was discussed about scheduling was that DNREC presented the typical procedure for site cleanup with work plans and approval of evaluations and studies, and DOL proposed an accelerated plan. O'Malley's recollection was that he was advised that DNREC was being uncooperative and he was needed to emphasize that DOL had to get the clean up process done as quickly as possible, with the help of the State representatives. O'Malley testified that "it turned out during the discussion, it became apparent to me, that DNREC was helping out as much as they could in my opinion." (Tr. 2628) Although his recollection was limited, O'Malley testified that he relayed the information discussed with Krueger on to Steenbergen, though he had no recall regarding the test results of July 2001 disclosing the site contamination. (Tr. 2776)

O'Malley absolutely did not see a problem in going forward with the bid opening on August 16, 2001, because "we thought it [the problem] was minimal, and that we could probably take care of it during the construction process." He testified that the magnitude of cleanup was not that much. Their Experience at Exeter, where there was a similar issue dealt with "on the same basis" was resolved by issuing contract change orders to the general contractor to do various cleanup during the construction of the building. There was no thought or talk about it's being large, and in fact it was just the opposite, minor cleanup and it could be done quickly. O'Malley best recollection was that DNREC accepted the revised schedule, but he did not think there was anything in writing, or at least they said they would try their best to accomplish the task by November or December according to the revised schedule on the last page of the Reitenbach to Tevebaugh memorandum. He had no recollections about an October date. (A-18; Tr. 2629-30) And he could not recall whether at the time of bid opening everybody was fully aware that there were more environmental issues than just the underground tank. (Tr. 2796-97)

With regard to discussions with DOL personnel regarding the feasibility of the bid opening, O'Malley testified that when he received the feedback from Chi Chiu during his questioning of the issue, he would relay that feedback to the Contracting Officer, Steenbergen or Brenda Williams. He said the specific discussion consisted only of his repeating to them that they knew that there was a risk; the issue was whether it would be significant enough to stop the bid opening and do the cleanup before the contract was let for the Project construction; "and the answer was always no, it was not significant, that we should proceed with the, with the bid opening." (Tr. 2630-31)

O'Malley testified that he had numerous conference calls with Steenbergen in his office, but could not recall specifics, but that the decision making procedure involved the COTR's recommendation to the CO on a technical issue; the CO has the right to accept or reject the recommendation; and ninety-nine percent of the time Steenbergen and O'Malley agreed on the recommendation, so that Steenbergen usually accepted his recommendations, which in this case was, "Basically the risk was there but it wasn't a significant risk to delay the bid opening." (Tr. 2631) However, they did not discuss whether there was a possibility of delay and whether that could disrupt the project. (Tr. 2631-32) And O'Malley had no specific recollection of discussions with Steenbergen in the three days before the August 16 bid opening. (Tr. 2632-33)

However, as of August 13, O'Malley testified, his view was "To proceed and get it done as quickly as we can." (Tr. 2633) Asked if there was any question about the cost and about potential liability with the site in relation to contamination, O'Malley testified that the primary part of the discussion was about the cost, though they could not come up with an exact amount. They tried to project cost, and O'Malley recalled that they stated they would be liable for about \$125,000 in the memorandum of understanding with the State of Delaware. (Tr. 2633)

By letter dated June 27, 2002, O'Malley notified Nutter that DNREC had completed its review and acceptance of the Proposed Plan of Remedial Action and published the Final Plan of Remedial Action (FP) dated May 2002. O'Malley recited that DOL had fulfilled its financial responsibility as stipulated in the Memorandum of Agreement between Delaware and DOL, and that the remaining remedial action was as specified the responsibility of the State. O'Malley requested that Nutter provide him with the State's 'procurement strategy and funding plan within 15 days. (G 28)

Attached to the O'Malley letter, under cover letter dated March 4, 2002, from Nutter to McKissick were copies of the Memorandum of Agreement for the Job Corps Center property. This Memorandum of Agreement executed March 4, 2002, by Delaware by its Division of Facilities Management, the owner "Lessor" and DOL by Contracting Officer Brenda Williams as "Lessee" provided, concurrent with the lease agreement, first, that DOL had contributed a maximum of \$125,107 for the required environmental remedial work, and that the State would be responsible for all other costs incurred; and second, that DOL would "provide resources to accomplish the Remedial Action Objective and Alternatives per section 5.1. Remedial Investigation Feasibility Study Work Plan as proposed, limited to the specified \$125,107. The resources were identified as EA, the environmental engineers under contract with DOL; Dewberry, the engineering support consultant under contract with DOL providing management, and the certified lab, but only to the extent of the proposed work plan. (G 28)

The recitals of the agreement acknowledged the Lease Agreement dated December 14, 1999, pertinent to the Project site, but, significantly, declared that it was the intent of both parties that the State assume all responsibility for the environmental contamination currently existing at the property; that DOL would not be liable for contamination discovered at the property not caused by DOL; that the State would enter into the Voluntary Cleanup Program with DNREC because DOL was not willing or able to co-sign the VCP Agreement with the State because of funding restrictions; that DOL would contribute to the costs for environmental (investigation only) work needed at the property; and that it was the intent of both parties not to hinder the development of the property with delay due to environmental remediation. (G 28)

O'Malley testified that the Memorandum of Understanding was discussed in January 2002, but, though he thought it was probably discussed at the time of the bid opening in relation to potential liability for cleanup, he did not recall it. With regard to the decision to proceed with the bid opening, O'Malley testified that the Memorandum of Understanding "somewhat alleviated a minor issue but we could never be sure that the State would live up to the agreement." With regard to the minor issue he referred to, O'Malley testified, "We were concerned about the environmental cleanup, and at that time, we didn't think it was going to be a

huge cost, but we didn't want to be—if I recall right, it was probably from your office and the Solicitor advising us, well, if you have this problem, why don't you set it aside and make a memorandum of agreement with the State saying and stipulate to the fact that we will participate to this amount of dollars, this amount of money, to clean up the residual costs of a State owned property.” O'Malley attributed the estimate to Dewberry's estimating department, and declared that he “had no reason not to agree with it.” (Tr. 2640-41)

O'Malley explained that the \$125,107 amount was based on what Dewberry thought was the actual amount that DOL should be exposed to, and that if DOL was exposed to further action, the State would be the responsible for the rest of the cleanup. He said it was just generally thought that the amount should cover everything pertaining to an environmental cleanup, as best he could recall, and there were no discussions as to whether it could be more than that amount. He thought the initial estimate might have been \$75,000, but was increased based on further estimates. (Tr. 2641-42, 2784-85) He testified that the estimates were the product of a team effort, but he was sure that Banks and Chiu had been involved. And he said the only discussion with the State regarding potential financial liability was that the State agreed it would be responsible for all the costs incurred. (Tr. 2642) The cleanup costs incurred were well in excess of the amount agreed. (Tr. 2642-43)

By letter dated September 16, 2003, from O'Malley to Furman, the Deputy Director of the Delaware Division of Facilities Management, the property owner “Lessor,” with reference to the March 4, 2002, Memorandum of Agreement, DOL presented to the State an accounting of the costs incurred for environmental remediation at the Project site in the amount of \$3,373,150.65, plus an anticipated amount of \$260,000 for removal of approximately 6” of contaminated material necessary to establish the elevation of 12” or 18” below finish grade to prepare the site for the appropriate capping material as required in the Remedial Action Plan. The net amount demanded by DOL of the State after deduction of the \$127,107.00 provided in the Memorandum of Agreement was \$3,246,043.65. A two page cost log for remedial work performed by DOL and a copy of the Final Plan of Remedial Action dated May 2002 were attached. (G-273)

O'Malley testified that, in the letter referencing the March 4, 2002, Memorandum of Understanding between Delaware and DOL, “we simply were recognizing the fact that the Department of Labor had so far had been exposed to approximately \$3.3 million of cleanup costs and anticipated another 260,000 which was required in the remedial action plan, and that we were asking the State to pay these costs or reimburse us for these costs.” (Tr. 2643) That amount was in addition to the Contract amount of \$5.8 million. (Tr. 2644) O'Malley testified that the State never responded in writing. O'Malley recalled a telephone call from Furman two or three weeks later acknowledging receipt of the letter, disclaiming knowledge on the part of the State that the claim would be so large, and declaring that if they had known or been advised that the claim would be so large they probably would have “stopped the project.” O'Malley did not know whether Furman, who had signed the memorandum of understanding, had been involved in the review process, since DOL had dealt with Nutter. The State pled lack of funds. (Tr. 2648-50) The changes and increased costs of the Project to around \$10 million were paid for by DOL. O'Malley testified that, so far as he knew, DOL was pursuing no collection action, and the

planned child development center had been tabled and was on hold, and had not been built. (Tr. 2651-52)

O'Malley testified that some of these listed costs, which included development of the health and safety plan, additional monitoring, subsurface exploration, additional environmental services, transport of contaminated soil, were incurred by Tevebaugh, "but the majority were done through the general contractor who was Wu & Associates." He could not provide a breakdown, but testified that, so far as he knew, all costs that related to Wu & Associates were paid pursuant to the attached schedule, other than the disputed items. (Tr. 2644-45) O'Malley testified that the letter and schedule of strictly environmental costs, broken down by contractor in respect of Wu, Tevebaugh, and ECG, was prepared by Dewberry. (Tr. 2647-48; G-273)

With respect to the disparity between the \$125,000 exposure estimate in the face of the environmental assessment characterized as minimal by Dewberry and the more than \$3,300,000 cost so far at the time of the hearing, O'Malley was philosophical responding "So it happens" and cited a flip side asbestos removal estimate of \$2,000,000 for work which ended up costing \$600,000. (Tr. 2797-99) O'Malley conceded that with additional testing after the bid opening it became evident that the problems were greater than they thought. (Tr. 2799-2801) When it became obvious that the health and safety plan would have to be written and contaminated soil would have to be taken off the site, and that whatever would have to be kept on site, the \$125,000 amount was never altered, because the issue never came up again and the building of the project was the focus of attention. (Tr. 2801-02)

O'Malley testified that in terms of the risk assessment related to such a DOL undertaking, DOL would take into account time involved, the costs of that time, and the importance of Delaware's and DOL's desire to construct a building or center to train and educate young people as quickly as possible. The additional cost of a change order to deal with the problems was taken into account. With respect to the additional cost to Wu, O'Malley responded, "Well, there's always that amortization. It's usually done on a percentage of the overall contract of what the risk would be. If Dewberry came back and said, "Hey, Mike, there's going to be a 30 percent total of the base contract that we're going to risk having to pay additionally to the general contractor," the I would probably recommend to the ...contracting officer, "We've got a problem here. We need to do something about it, that this risk is too high to go out and take a bid on." (Tr. 2802-04) O'Malley testified that the \$125,000 for the environmental cleanup did not include a possible delay claim. He thought it was just to advise the owner of a limit of responsibility regarding the direct cost of cleanup. (Tr.2809-10)

O'Malley believed that the VCP, and DNREC's desire for it, was as "an administrative document mostly, just essentially making sure that somebody, some owner agreed that there would be a voluntary cleanup program that's stipulating, stipulating what would happen to make sure this site was no longer environmentally hazardous." Accordingly, his recommendation to the CO not to sign was because DOL was not owner of the property and should not be involved in any such agreement, and he thought the Solicitor's office offered a verbal opinion confirming that position. (Tr. 2666-67)

O'Malley testified that he had recommended against signing the VCP or any document like it, essentially because "it goes outside the realm of responsibility of the property that we have." DOL was not the owner of the property. But he believed that the State had signed the VCP. To O'Malley's knowledge the State of Delaware did not take any action to deal with the environmental issues directly. (G 240; Tr. 2663-64, 2665-66) DOL undertook to resolve the environmental issues without State involvement, and DOL itself or by its subcontractors dealt with all the issues at the site, to the best of O'Malley's knowledge. (Tr. 2663-64, 2666) The record copy of the VCP showed that Furman signed it as Deputy Director of Facilities Management, and thus by the State of Delaware. The VCP was acted upon, but to O'Malley's knowledge, DOL did not sign, he having recommended to the Contracting Officer not to sign. (Tr. 2664-65) There is no fully executed copy of the VCP of record.

O'Malley described a typical sequence following bid award. O'Malley testified that after a contract is executed, the normal process is for the contractor to produce bonds and insurance prior to the notice to proceed, usually within ten or fifteen days—in the case of Wu it was ten days. After the bonds are received, the notice to proceed is issued within two weeks, unless the contractor has problems with bonding or some other cause. (G-6; Tr. 2668-69) After the NTP, a pre-construction conference is scheduled, usually within the first two weeks after the NTP, to establish operating rules in accord with a general text, either read exactly, or paraphrased by the project manager, Banks, among the general contractor and major subcontractors, who must be present, as well as a representative of DOL, which would be O'Malley or someone to represent him on a major project such as the Wilmington Job Corps Center. (G-8; Tr. 2669-70, 2672, 2675) The pre-construction meeting for the Project was on November 14, 2001, according to O'Malley (G-8; Tr. 2671) O'Malley could not remember whether he had been at the meeting, but confirmed from the attendance list that he was not, that Banks had probably represented him, despite his usual practice of attending the meeting with these types of projects to insure that everything was said properly. (Tr. 2673-74)

On September 14, 2001, O'Malley sent an e-mail to Brenda Williams and Steenbergen advising them that DOL had taken the risk that DNREC would accept its test results and not require more tests, but that DNREC had not accepted DOL's test results and required more testing "downstream from our main area of construction," with the result that DNREC had not accepted DOL's Remedial Action Plan or Final Work Plan. The message advised that Banks, the A/E, and their consultants had persuaded DNREC to allow construction in the Main Area which was the subject of bids, as opposed to the CDC, the child development center not the subject of bids, area, once certain documents were submitted.

O'Malley recommended that upon acceptance of the Work Plan, the contract should be awarded on September 30, 2001. The time required for the successful bidder to secure bonds and insurance and for DOL's review would be followed by an NTP. O'Malley testified, "Our further recommendation would be to issue an Administrative NTP to allow the contractor to submit their schedule of values, early material submittals and early shop drawings for approval, prior to allowing them to 'break ground.' The reason is that the later we restrict the contractor in breaking ground, the more we will have time to finish our testing and knowing what we are dealing with in that CDC area." Because Dewberry had advised O'Malley that DNREC was

unlikely to require further testing, he concluded that “[i]t would be a minimum impact to the contract.” (G-246; Tr. 2773-76)

O’Malley’s testimony in this regard corroborates the conclusion that Wu could not have assessed the site conditions by a normal and reasonable site inspection. It and the reformulation of the schedule establish the extent to which DOL devised a plan inconsistent with normal practice to stall, delay and manipulate Wu while dealing with the known and still to be assessed environmental problems undisclosed to Wu.

In relation to the issue reflected in the September 14, 2001, memo regarding more required testing, O’Malley was asked whether there was consideration given to delaying award of the contract until the environmental issue was resolved, and O’Malley testified that the issue was continually being weighed, to wait, to get another environmental contractor to come in and do the clean up, and then make the award, or reissue the bids. However as he recalled it, the analysis was, because of inflation, and other increases in cost, it would be a balance, and so “the recommendation was: go ahead and issue the contract or make the recommendations of the contracting officer to proceed with the NTP on a limited basis, and let’s deal with it as it happens.” (Tr. 2786)

Asked whether in retrospect it would have been much cheaper to do the cleanup first, O’Malley testified, “I guess you could make that determination. I don’t know. I don’t know. I don’t know whether it would have cost us \$4,000,000 to clean up the contract or what. That’s unknown, clean up the property.” (Tr.2786) O’Malley testified that once they had made the decision to do a partial NTP, he thought the discussion was over with regard to trying to terminate the general contractor for convenience, and then cleaning up the site. At least he had no recall. “I knew it took a long time.” (Tr. 2787)

Asked, “When the risk assessment was done before the bid opening, was any analysis done of what it would cost to work through the contamination,” O’Malley responded, “The only thing I recall was the answer was minimal. It was not major, but there was no dollar amount. Regarding the decision to build the building and work through the contamination, deal with it at the same time, O’Malley testified, “Essentially, an analysis was done, but it was characterized as a minimal amount of contamination. So go ahead and proceed.” O’Malley could not recall whether the analysis was put in some written form, but he knew they had talked about it. (Tr. 2790) O’Malley conceded that the memorandum of understanding and the \$125,000 agreement with the State of Delaware alleviated his concerns about the cost because at least he know from the DOL standpoint that Delaware should have assumed any costs over \$125,000. (Tr. 2790-91)

Asked about the risk to Wu related to that agreement of having to deal with both the initial delay and then having to work through a contaminated site, and whether there was any concern or thought given to what the risk for Wu was, including possible huge extra cost to Wu, O’Malley responded, “The only fact of the matter is that they would be compensated for that activity. It would have to become compensated put it that way.” (Tr. 2791) O’Malley had no recollection of discussion regarding the possible magnitude of a delay claim prior to the bid opening. (Tr. 2791-92)

In his September 14, 2006, e-mail O'Malley referred to a statement in the schedule allowing the Contractor to begin no sooner than November 20, 2001, which he said Banks had changed to say DOL intended to award by September 30 and that an NTP would be issued as soon as possible after that, and certainly no later than November 20, 2001. O'Malley added the reassurance that "we are doing everything possible to keep this procurement possible. If you see anything in this explanation that represents more risk than you want to take, then please call me."(G 246)

O'Malley testified that the e-mail was addressed to Williams as Contracting Officer for the Project and Steenbergen as head of the Contracting Office. He explained that he sent the e-mail to give his opinion as COTR whether to issue the NTP in light of what the program management, engineering management company was recommending, and it was concluded that consistent with DNREC requirements, DOL could proceed on the major portion of the project that did not impact construction of the CDC, which had not yet been bid. O'Malley suggested that the CDC portion of the site offered an area that could be used to put down contaminated soils temporarily if they were encountered, and thus "offered us a good solution to proceed with the base contract." (Tr. 2690-91)

Though his recollection was poor and had to be refreshed, O'Malley suggested that the original intent and expectation which he had, as the official charged with predicting things and estimating when activities would happen, was a full NTP no later than November 20, 2001. The full NTP was in fact not issued until May 2002, because, O'Malley guessed, DNREC changed its remedial action requirements as reflected in DOL's remedial action plan and final work plan. (Tr. 2692-94)

DOL issued a "Partial – Notice to Proceed (PNTP)" purportedly "established as of October 31, 2001," on October 30, 2001, over the signature of Monica C. Gloster, Contracting Officer, addressed to Raymond Wu. (G-7) In letter form it acknowledged receipt of the Certificate of Insurance and Performance and Payment Bonds, and "instructed [Wu] to commence with the Administrative functions of this project only. This includes matters referenced in Sections 01027, 10200, 101320 and 10340 of the Project Manual; preliminary submission requirements and any related consequential concerns that lend to correspondence resolution. The period of performance shall be from November 30, 2001, through September 26, 2002." It added, "This does **not** constitute Notice to Proceed with Mobilization for Construction. Your firm will be notified to commence with mobilization for construction at a later date." It advised Wu to contact Banks of P.B. Dewberry/M&M at a specified telephone number.

A second document of similar purport, which did not explicitly identify itself as either an administrative or partial notice to proceed, was issued by Gloster on December 20, 2001. (G-10) In similar letter form it stated, "You are hereby given Notice to Proceed to commence with the following portions only: 1) mobilization of plans/equipment, 2) site surveys, and 3) grading and shallow trenches for footers at the [Project]." It continued, "This does **not** constitute notice to proceed with any other site work not described above. **We will keep you informed of your full Notice to Proceed at a later date,**" and directed Wu to contact Banks.

Neither document shows participation by or copies to O'Malley, Williams, or Steenbergen. Gloster's identity or status as a Contracting Officer with respect to the Project is unexplained and unverified, and there is no evidence that she had replaced Williams or Steenbergen. (G-7, G-10)

O'Malley explained the basis for the document to be called an administrative NTP, as an action generally recommended to the Contracting Officer when "we think there will be necessary actions taken by an entity that would not allow the contractor to break ground, to actually start. However, an administrative NTP would allow the contractor to, one, mobilize; in other words, set up the trailers, begin bringing his minimum administrative staff in, and also, going through the various submittals that they have to submit for approval to the A&E, to the architectural records. And what it does, it allows—and most of the time, this happens at the same time, but when we think that there's a problem with "officially breaking ground," and that working with the local entity, i.e., Wilmington, apparently, they were giving us notions that it wouldn't be good for them to officially start. We would allow Wu and Associates to start an administrative NTP, and that's what that is. These things have been issued before, but as you can see, the contracting officer doesn't particularly like to do that. It's another step." (G-7, G-10; Tr. 2694-95)

O'Malley noted the different terminology, i.e. what he called "an administrative notice to proceed" "they," "the contracting officer, Monica Gloster" called "a partial notice to proceed." He explained that there are two things that happen: "It officially notifies the contractor that he has the ability to start submitting referenced documents in sections 010207, 01200, 01300, which are basically preliminary submission requirements for the contract, i.e. submittal for steel drawings, submittal for concrete mixtures and so on and so forth but not to start digging ground, not to officially start the breaking of ground. And in this case, it also says, "No mobilization for construction," which sometimes we allow, but in this case we didn't constitute that notice to proceed, and that we tell them that the – we don't call it the real NTP, but we say another NTP will be issued for those purposes at a later date." (G 7,10; Tr. 2696-97)

O'Malley testified that, in a sense, the second partial notice to proceed issued December 20, 2001, begins the construction period because the contractor was allowed to start digging for foundations or footers, and shallow trenches for footers, at the Project in paragraph 3. (G-10; Tr. 2697) On December 17, 2001, Marissa G. Dela Cerna, a DOL contract specialist in DOL's contract services department, who was monitoring contractual issues related to the Project, e-mailed O'Malley to say that Fred Meyer wanted a NTP for mobilization of construction at the Project. She said she needed clearance from Delaware's SIRB and O'Malley.

O'Malley responded less than an hour later, "From all that I can ascertain and after a phone conversation with Mark Banks on Friday the 14<sup>th</sup>, a full NTP can be issued sometime this week, say 19<sup>th</sup> or 20<sup>th</sup> for the work associated with the new Wilmington JCC project and not the work associated with the CDC portion of the site. . . WU Associates are fully cooperating with us and have a firm understanding of the issues at hand. . . I'm not sure what this SIRB is all about, but the DNREC folks are fully aware of what we are in compliance with and because we are not disturbing the soil over the Child Development area, they do not have a problem with what we are doing at the rest of the site. So, in a sense, the DNREC folks have given us their blessing for

the site that WU ASSOCIATES can begin with. The DNREC folks still need some testing done on the CDC site that we do not intend to build on until they give us their blessing on that particular site . . . In other words, There is not a risk in issuing the NTP to WU ASSOCIATES for the construction of the Wilmington JCC project and that they are to avoid all contact with the Child Development Center portion of the site. This is my opinion. If anyone differs with it, then please call.” (G-253; Tr. 2698)

O’Malley testified that he was recommending a full NTP at that time. He explained the fact that a partial NTP was issued three days later might have been the result of an unresolved issue related to what was and was not contaminated soil, and because DNREC was going to require testing of excavated soil at the time of excavation. (G-253; Tr. 2699). This communication by O’Malley and his testimonial explanation show that he had a poor and incomplete understanding of the environmental problems with the site and the requirements of DNREC.

On O’Malley’s recommendation a letter was sent over Williams’ signature by Monica Gloster to Wu dated January 17, 2003, advising Wu of “Superintendence Requirement” and stating that the letter is written as a result of the many letters received in this office, regarding matters that the Government considers normal superintendence of a construction project. The letter stated that the Government, having reviewed the pertinent contract related documents, had “determined that there are no issues preventing the continuance of construction activities by a reasonably experienced and prudent contractor” citing FAR Clause 52.236-3 relating to site investigation and conditions affecting the work, FAR Clause 52.236-6 relating to superintendence by the contractor, and FAR Clause 52.236-10, relating to operation and storage areas requiring the contractor to confine all operations including storage of materials to areas authorized or approved by the Contracting Officer and hold harmless to the Government.

The letter sought to advise Wu that the clauses are to inform bidders of their responsibility to manage the site and construction activities. “Furthermore, these are intended not to relieve the Contractor from its responsibility for properly estimating the difficulty, and cost of successfully performing the work, or for proceeding to successfully performing the work without additional expense to the Government. In the event of a differing site condition, in accordance with contract Section G.13 Equitable Adjustments, it is the Contractor’s responsibility to promptly notify the Government by submitting a proposal in writing through the proper channels, for the work involving the contemplated change(s)... In view of the above, the Government requires, as is its right under the Contract, that Wu perform the work specified under the contract in accordance with the terms and conditions which Wu agreed to, by submitting its bid herefor.” (G-64) This action evidences DOL’s effort to shift responsibility, planning, and costs for the minimally defined environmental cleanup process under DNREC’s oversight, which were not bid in the Contract, to Wu.

O’Malley testified regarding the letter that he had recommended it be written by the contracting officer to notify Wu that that there would be no further issues preventing the continuance of construction activities by a reasonably experienced and prudent contractor, with reference to contract clauses. He testified that the letter was sent because, “we monitor this contract through an engineering support contractor, and every month we go over – I go over a

status report for every project that we have. And at the time, we were monitoring about 150 projects at one time.” The monthly status report would have showed problems, delays, and “we probably said, ‘Okay, engineering support contractor, recommend a draft of a letter from the contracting officer, spelling out the exact problems that you’re focusing on, and then we’ll review that letter, finalize the letter, and send it out to the contractor from the contracting officer for work for a purpose.’ To notify the general contractor that these are serious issues that we believe are happening during this contract, and that they are impacting or have an impact on either the cost of the contract or to the timely performance of the contract.”

When asked how closely O’Malley or his consultants manage what’s going on the site, O’Malley testified, “Well, my consultants or my contractor, engineering and support contractor, are essentially an extension of – they’re not my agent, but they’re an extension of my office having to recommend to me once a month and produce a status report on every single project that we have from the national office of the Department of Labor – (Tr. 2705) Asked if they are on site and managing what’s being done on the project, O’Malley responded, “They are not on site. They are monitoring the process for me and developing progress reports every month.” (Tr. 2705) As to who makes the decisions about what is done on the sites, the schedule, the routing work and that sort of thing, O’Malley testified, “The decision on how to complete the project is up to the general contractor. How to build it and so on and so forth are directed to him through the design of the contract not through the Government.” (Tr. 2705)

Because DOL leased the site and did not own it, problems arose regarding the certificate of occupancy and the process whereby DOL allowed Wilmington to enforce its codes and conduct inspections. O’Malley testified that when DOL leases from state or city or other entity, in the lease they say they will conform not only to the national codes and standards, but “we will also take a look or at least allow whatever entity we are leasing with the right to say, ‘You must follow some local ordinances.’ And in this case, we allowed the city of Wilmington to say, ‘Well, we’re going to inspect from our city inspectors, inspect the building and issue what is generally called a certificate of occupancy.’ Normally, the Department of Labor did not issue something called a certificate of occupancy. Once we achieved substantial completion, that i[s] our understanding of the certificate of occupancy. However, in the non-Federal Government world, it’s not uncommon that the local municipality will require a final certificate of occupancy to allow the owner to occupy the building...And in this case we were allowing that process to occur...allowing in a sense that we normally don’t do this. But because, we being the Department of Labor, but because this was a leased-owned facility, we allowed the city of Wilmington to go through this process.” (Tr. 2734-35)

O’Malley explained what was standard practice for Job Corps complying with local and state codes for building, health and safety, fire and safety, and similar requirements. In general DOL follows all national and national building codes, i.e. the BOCA or Standard Building Code accepted by GSA; also the National Fire Protection Association, NFPA, 101 Regulations, and tells the architects of record to design the buildings according to those codes. Because the Project was a leased-owned property without full Government ownership “we make a decision early to either accept limited inspections or limited compliance to the local entity” unless there is a major impact to DOL’s costs. They concluded that what the City of Wilmington was asking did not impact the cost of the building in such a manner that would require refusal to follow the

local codes. The city provided inspectors to inspect the building and provided the certificate of occupancy. (Tr. 2736-37) Thus, a decision in this respect had not been made when the Contract was bid and awarded.

Asked “Were there many changes related to the city of Wilmington?” O’Malley testified, “I believe so. I have a recollection that there was, that if they weren’t involved in it, it may have lessened the amount of tasks that the...general contractor needed to accomplish. It may have lessened, minimized, I guess.” But O’Malley testified that to his recollection that would not have delayed the project. (Tr. 2737-38) O’Malley said the average change order rate for new construction would go as high as 5%, but admitted that this job was much higher if you throw in the environmental. (Tr. 2789)

O’Malley confirmed that DOL generally has architects design buildings to national codes, which happened in this case, but that when the City of Wilmington got involved, there had to be design changes to meet the local codes, but it was not to a magnitude that impacted the cost of the project. However, O’Malley testified that from his point of view they really could not tell whether conforming the building to the local codes impacted the schedule, even though it did not significantly increase costs. O’Malley believed that they knew about the local codes far enough in advance and notified Wu that they would apply, so it would not have impacted the schedule to a large degree. (Tr. 2741-42) He could recall no discussions about DOPL sovereignty over the Project at any time. (Tr. 42) Although he thought the A&E brought conflicts with the local codes to his attention, and he knew that Reid butted heads with the Wilmington authorities on a number of issues, to O’Malley’s knowledge the A&E never recommended that DOL take sovereignty over the site to avoid dealing with Wilmington. (Tr. 2743)

With regard to Wu’s failure to estimate time extensions required by Change Order requests, O’Malley conceded that estimating time extensions was difficult and required the General Contractor “to look into a crystal ball” to estimate needed extensions, and that in the general sense, there would be additional time necessary to be added to the contract by work dealing with environmental problems that Wu had not bid on. But he declared that an approved modification states the amount of money and any additional time extending the completion date. (Tr. 2748-52) O’Malley agreed that the work that Wu actually performed on this job was significant, it was dealing with all the environmental problems, was significantly different than what Wu had bid upon. (Tr. 2752) He testified that the one thing that DOL did to move the project along was to retain 10 percent of each of Wu’s pay requests until they were on schedule. (Tr. 2753)<sup>5</sup> DOL also discussed sending architect who was monitoring by visiting job once per week to increase visits by Dewberry, the engineering support contractor, going every two weeks instead of once per month. (Tr. 2753-54)

O’Malley did, “Absolutely,” recall that Wu was complaining on this job that a number of things were delaying the project, mostly the environmental issues. Asked if he ever investigated

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<sup>5</sup> This action, while often appropriate and legal under a contract, quite clearly exacerbated Wu’s problems of obtaining timely and adequate payments from DOL so that he could pay his increasingly disgruntled subcontractors promptly and is consistent with Wu’s complaint of DOL’s lack of cooperation under the particular circumstances of this case.

to determine whether what Wu was complaining about was accurate regarding delays attributable to environmental issues, O'Malley responded, "Well, that's the problem. In many instances other than Wu and Associates in this project, it's hard to determine what side is right. You get sometimes three or four different sides, opinions of what the issue is..." He asked for recommendations from his senior level managers at the engineering support contracting, and acknowledged that there were some personality issues, and brought it up to the senior level management of Dewberry. (Tr. 2754-55)

O'Malley testified regarding Banks' removal, whereby Dewberry was asked for recommendation to resolve problem and Banks "Got relieved with a recommendation because of the personalities involved and the problems involved that it would be better for Mark Banks not to be – not continue on a project manager..." O'Malley effectively admitted that he had recommended that Banks be replaced. (Tr. 2758-59) O'Malley testified that Dewberry started their contract in 1999, as successors to DMJM and HQB, joint venture. Most of the project managers had college degrees, which were usually architectural or engineering degrees. O'Malley apparently did not know that Banks had just a high school degree, and so was not concerned. Banks had indicated to O'Malley that he had a wealth of construction experience, but that was all O'Malley knew. (Tr. 2788-89)

O'Malley described the procedure for correspondence which was usually drafted and typed by Dewberry or McKissick because they knew the facts better, and O'Malley could not recall an instance from this job when he did not follow the recommendation of Dewberry, but testified that 99 percent of the time he did. (Tr. 2762-63) After a meeting with Kirby Wu and his father regarding the Project management hierarchy all correspondence was directed to Williams, copy to O'Malley, or to O'Malley, and thus to DOL, so that O'Malley was not dependent upon information from Wu being relayed through Banks. O'Malley could not recall if that had been the case prior to the meeting. O'Malley testified that prior to that meeting it was his recollection that Kirby Wu was relating to Banks as *de facto* owner and instructing the architect to say yea or nay on various change orders. (Tr. 2763-64)

O'Malley testified that when they got written correspondence direct from a general contractor or A&E, we always call up or send over directly to the project manager to find out what it's all about, and to obtain a recommendation. O'Malley's recollection was that many issues the Wu's had was that information given to Banks was not being properly made known directly to the Contracting Officer or himself. (Tr. 2765) O'Malley recalled from the meeting that he tried to persuade Wu that DOL did not want Wu to finance the job, that it did not intend that result, although there was a long time between performance and payment, "but that's part and parcel of our job, of our contract." Also that Wu could contact Williams or O'Malley direct if there were future problems. Also the need to avoid changes to modifications sent by DOL to Wu created continuing problems. (Tr. 2766)

Stating that basically in DOL contracts there's a month you perform the work and get paid for it the next month. O'Malley adamantly denied that it was a delay, and characterized it as just a process. He recalled that Raymond Wu was very worried about financing the job. (Tr. 2767) With reference to the letter directing Wu to proceed to perform work without additional expense to the government, and with respect to whether this job, because of the environmental

issues, was going to involve a lot of work which had not been part of the original contract. O'Malley said there was no dispute about that, but "essentially, we compensated the contractor for that additional expense." (Tr. 2772)

Regarding the August 7, 2001, meeting with Krueger from DNREC, O'Malley recalled that the impact of the environmental issues on the schedule was discussed, as the point of the meeting. He did not recall Krueger's saying that the usual process was 9 to 12 months, and that it was possible that it could be done in less, but things would have to go right, which was unlikely. He did remember that there was a longer period of time and yet it was still the recommendation from Dewberry that it wouldn't impact the work involved in doing the contract of the Project. It was a combination of Chi Chiu, Banks, and some others that gave that advice, and O'Malley accepted the recommendation that DOL go forward with the Contract even though there was this lengthy period of testing that DNREC wanted to do. Dewberry's recommendation was that DNREC's process "wouldn't have a major impact" on the work involved under the Contract on the Project, despite the prospect of DNREC's lengthy testing. O'Malley relayed what had been discussed with Krueger at the August 7, 2001, meeting to Steenbergen. (Tr. 2774-76) O'Malley testified that he could not recall whether the risk assessment performed by Banks and others before the bid about the possible effect of the environmental issue was ever put in writing. (Tr. 2783)

O'Malley testified with regard to the security guard that DOL's decision not to pay, after he had recommended payment because he believed that provision of a security guard had not been anticipated in the contract due to the environmental conditions, and after soil had to be segregated and water kept on site, was because the Contract provided that the Contractor was responsible for all security of the site. O'Malley said he was concerned with people wandering onto the site without electrical sensors, risking contamination of people from environmental hazards, as opposed to the Contractor's concerns with protections of tools and supplies. (Tr. 2776-79, 2804-07) O'Malley was not aware that DOL had issued a change directive for the security guard, then refused to pay for it. A change directive being defined by O'Malley as notification by the contracting officer to the contractor of record that the contractor is supposed to follow the directive and there will be a modification of the contract relating to cost. (Tr. 2808-09)

With respect to delay claims with which he was very familiar, O'Malley testified that every delay claim or any kind of change order that involves duration and time is evaluated first by the architect, then an analysis is done by engineering support contractor, primarily by McKissick in concurrence with the project management of the project. O'Malley looks at the analysis, concurs or not, and passes it on to the CO, who makes the final decision. O'Malley assumed he followed standard operating procedure in this case. (Tr. 2780-92) In assessing delay claims attributable to the Government O'Malley testified that the Eichleay formula is used even if it is not just a complete suspension of work. (Tr. 2782-83)

O'Malley explained his direct testimony, that he had been surprised at the August 7 meeting by the extent of DNREC involvement, that he meant that he had either missed it in the assessment Banks provided to him, which he did not think was the case, or Banks had not communicated it to him. O'Malley said DNREC had been depicted to him as "an

uncomplimentary organization to put it lightly,” but he got a different attitude after the meeting, that DNREC would be involved, and it would take a while to get the process done, but they would work with DOL to minimize the amount of testing and so on.” (Tr. 2792-93)

O’Malley insisted that after the tests in July 2001 and prior to the bid opening, the extent of the contamination had been characterized or depicted as minimal. Dewberry characterized it as minimal. (Tr. 2798-99) Asked, if the environmental problem was so minimal, why it cost over \$3 million to deal with it, O’Malley said “somebody told us it was only going to expose us to \$125,000 originally,” but they were way off and he said “That happens.” On the flip side, he said, DOL had had a very large cost overrun for asbestos removal in Alaska, estimated to cost \$2 million and cost only \$600,000. “[I]n this, we underestimated...So it happens.” (Tr. 2797)

With regard to the extra cost to Wu to do the job, O’Malley responded “Well, there’s always that amortization. It’s usually done on a percentage of the overall contract of what the risk would be.” Thus if it were projected to be 30% of the base total of the contract that might have to be paid to the general contractor, the risk would probably be deemed too high to be let for bid. (Tr. 2802-04) O’Malley testified that the \$125,000 for the cleanup, did not include a possible delay claim. He thought it was just to advise the owner of a limit of responsibility regarding the direct cost of clean up. (Tr. 2809-10)

O’Malley acknowledged that there was political pressure, involving U.S. Senators, congressmen, city and state officials, with respect to location, selection, and to get the project built, though O’Malley observed that they do not appreciate how long the process takes. He said he had heard that there was a lot of pressure, which was normal, but it did not affect their performance. (Tr. 2793-95)

### Mark Banks

Banks was a senior project manager for Dewberry, a joint venture, for three or four years after he had worked for four years under the DMJM contract, a total of seven years under DOL’s Job Corps program. (Tr. 2080) He was trained as what he called an “experienced base[d] architect.” He had no degree, but had some college-level training in business, technical, construction management, construction technical applications, and other subjects. (Tr. 2079-80) At the time he testified, he had been with GSA for a little over a year, after having been relieved from Project responsibility in March 2004. (Tr. 2080) He testified that, although he had experience in dealing with environmental issues in rehab projects, this was his first experience in dealing with environmental issues on new construction, “to any large extent.” (Tr. 2213, 2215)

With DMJM Banks was a senior project manager, titled as a team leader, who supervised approximately five project managers and had oversight of some contract administration personnel. In that position he was a regional manager who managed several projects for the southeast region utilizing his assigned project managers. His daily work related to the development of repair and maintenance of Job Corps Centers throughout the southeast region, with the project managers tracking and managing projects for repairs and major alterations, including the development of dormitories, and approximately 50,000 square foot administration buildings, which comprised new construction. (Tr. 2080-82) With Dewberry Banks was senior

project manager for the major construction projects. He had no staff, and no team leader over him, and administered and/or directed directly under the director of his division. He normally handled three to five projects, primarily new construction, and some major renovation-type projects. (Tr. 2082-83)

Much of Banks' testimony was not credible because his independent recollection of particular events was poor, and he had not prepared well. He admittedly had no experience with new construction on a contaminated site, and evinced a history and an attitude of hostility to the environmental constraints that interfered with construction of the Project, as well as a seemingly calculated lack of understanding of the practical problems engendered by his decision to make Wu work through the site contamination. Since Banks was the DOL manager closest to on site operations with whom Wu had to deal, his testimony was significant and probative to the extent that it revealed the state of knowledge and attitudes of DOL's representatives and other participants. He obviously had no understanding of or sympathy with Wu's practical legal concerns with liability related to the contamination or the risks of proceeding with work in potential violation of the requirements imposed by DNREC. In general, Banks' limited professional qualifications and his tendency to ignore or dismiss peremptorily Wu's concerns and complaints as well as what seemed to be significant problems on the site, made his observations and opinions in these respects unconvincing.

Banks admittedly had no memory of the time frame of his early involvement with the Project, and had a confused memory of particular dates related to his involvement with the Project, but he testified that he started working on the Project shortly after "the new construction – the new contract was let to P.B.Dewberry." (Tr. 2083, 2088) The project was ongoing insofar as the demolition of the existing structure and removal of an underground storage tank under a separate contract with which he was not involved. He came directly after the demolition, and prior to the award to Wu. (Tr. 2084-85)

Shortly after Banks assumed responsibility for the Project, he became aware that there was an issue of some contaminants discovered as a result of the removal of the underground storage tank. (Tr. 2085) Once the underground storage tank issue was elevated (sic) Banks was "asked to help with the evaluation and the strategy towards the plan to move forward on the project," which involved meeting with DNREC and "discovery kind of activities." There were meetings to discuss the findings or to assess the problem. EA was doing the actual environmental investigation, a month or so after he became associated with the Project. (Tr. 2086-87)

Banks did not think that Nutter's letter to Wirtz, DNREC-SIRB dated July 30, 2001, which purportedly sent preliminary results for soil and ground water samples, reflecting contamination, but not a "grossly contaminated" site, and requesting a meeting to determine what additional environmental assessments might be required and how to avoid construction delays, "was evaluated as far as moving forward on the bid." He was copied on the letter, but he was not sure, and thought "this information, possibly relative to this document, maybe was. It might have been." But Banks testified that he was involved in the discussions as to the evaluation of the project site. (G 234; Tr. 2088-89)

Banks attended the August 7, 2001, meeting at which the compressed or accelerated schedule for satisfying DNREC's requirements was discussed. Banks viewed the proposed compressed schedule, titled "Revised Schedule," and the even more compressed schedule reflected in panned-in changes which Banks believed to be his, and identified the date he "would like to have started construction," as "realistic." (A-18, 19; Tr. 2090-92)

Banks testified that discussion of the August 13, 2001, letter from Krueger to Nutter responding to a request for confirmation of DNREC's ability to meet the proposed accelerated schedule and outlining the applicable procedures concluded that the October 17, 2001, target date for issuance of the final plan for remedial action was reasonable, and there was agreement that the date was reasonable. (G-238; Tr. 2093-94) Banks testified that he believed DNREC's only concern regarding the October 17, 2001, target date at that time was that DNREC could not control the date. DNREC felt it could be done if proper resources were applied to develop the remediation action plan which involved a lot of investigative steps, and if DNREC supplied its equipment to do that and to help turn around the sample results quicker. (Tr. 2094)

Banks opined to someone in DOL that the bid opening should go forward, "that [he] didn't see any problem with that, based on the communications that were coming from the experts." He testified that there was no concern raised about problems with meeting the schedule. (Tr. 2095) He testified that neither Dewberry nor anyone else involved suggested at that point delaying the bid until remediation on the site was done. The opinion given to the DOL officials was that of Chiu, Banks' director, "in developing that decision. At the end of the evaluation process when all the documents and all the data was in place, that was probably myself, our environmental person in our office at that time, and our contracting...personnel." (Tr. 2097-98)

An e-mail from Reitenbach to Tevebaugh and Banks dated September 4, 2001, itemized the costs and schedule impacts of the additional sampling required by DNREC, and indicated that the delay might be as much as 12 weeks, which might be shortened by two or three weeks by paying a premium for the lab work. The schedule indicated that the time required for certain procedures could not be avoided under applicable regulations. (G 242) Banks testified that this was a proposed plan at that time which might have undergone modification, but some form of which was implemented. (G 242; Tr. 2098-99)

A letter from Nutter to Krueger dated September 13, 2001, proposed a schedule or work plan for initial construction while the environmental investigations were being completed. (G 243) Banks had received a copy of the entire proposal, what he described as a "heads up," document to Krueger. The proposed schedule attached to the e-mail identified the issues of concern as "Levels of contamination to soil and ground water"; "Potential migration and exposure route of detected contaminants of concerns (sic)"; and "Human health Risk," described as issues of major focus during the construction phase of the Project to mitigate or deal with those problems during construction. Banks testified, "We monitored the site and – provided the proper reporting of the monitoring of the site." (G-243; Tr. 2101-04)

Banks had no independent recollection, but testified that a site visit report dated May 23, 2002, six days before the date the full NTP was issued, was one typically prepared by him

monthly to record Project progress for DOL. Banks, Raymond and Kirby Wu, and representatives of Dewberry, EA, and Tevebaugh, but not DOL, observed no construction activities, beyond staking and survey activities performed several months prior to Wu's work stopping work in January 2002. The report identified various inquiries, issues, and needed actions. Banks did not know why Wu had stopped work. (G-24; Tr. 2109) Banks testified that, though the NTP had not been issued, there should have been some construction activities on the site which he identified as those pursuant to the partial NTP, which he suggested should have included "quite a bit of soil excavation, surface soil excavation, site preparation-type activities going on." (Tr. 2107-08) Banks noted in the report that, "After MB brought up the question regarding the start of excavation, KW reiterated their position that they will start work only after the 'MOD' incorporating the environmental monitoring and pollution insurance was issued. They also need a letter lifting the restrictions on the NTP issued in December. Mark Banks responded that the letter clarifying the partial notice to proceed has been issued and additional correspondence is in the works. There are some procedural matters being worked through." (G 24)

Under "Required Actions" Banks had noted with regard to the need to state "specific intervention tasks" "to restore successful and timely project completion," that the A/E would respond in the applicable manner to the items specified and "provide a cost proposal to address the soil management plan requirement as a result of DNREC acceptance of option 3 of the Remediation Plan." (G-24) He testified, having referred to his site report, that none of the work authorized by the NTP had been done. (Tr. 2108-09) The partial NTP to which Banks referred, which was dated December 20, 2001, explicitly limited operations to "1) mobilization of plans/equipment, 2) site surveys, and 3) grading and shallow trenches for footers." (G-10; Tr. 2108-09)

Despite refreshing his recollection by reviewing Raymond Wu's letter to DOL, attention Marissa Dela Cerna, Contract Specialist, as to why Wu was not working on the site when Banks arrived on May 23, 2002, and Wu's position regarding proceeding with the limited work under the partial NTP's. Banks responded, "I don't see any reason why there would be no work going on in May of 2002." (G-11; Tr. 2110) Banks' testimony in this specific instance and generally had little credibility, because he had little independent recollection of particulars, and much of his testimony depended wholly upon documents or was led by counsel. He also demonstrated no understanding of or sympathy for the environmental clean up process imposed upon Wu by DOL and DNREC. Banks acknowledged that Wu objected to the partial Notices to Proceed in these cases. (Tr. 2111)

Banks apparently did not understand, or ignored, Raymond Wu's letter of December 21, 2001, which acknowledged the second "partial (conditional) Notice to Proceed dated December 20, 2001," and advised that pursuant to Banks' e-mail instructions Wu had revised its original preliminary progress schedule dated November 14, 2001, to reflect the impact of the change orders relating to the Health and Safety Plan and actual implementation of the final remedial action plan of contaminated soil and ground water. The letter listed the assumption on which the revision was based, projected a substantial completion date of April 2, 2003, and outlined a schedule for mobilization, site survey, grading and shallow trenches, noting that no grading was necessary, and that because the depth of trenches ranged from 3' to 10'6" below existing grade,

“there is virtually no other construction work we can do to improve the schedule.” Wu undertook to prepare a change order proposal to write the Health and Safety Plan and to provide a full time “CIH.” Wu noted, “As you know, the DE DNREC has stated that ‘no permanent construction can begin prior to the issuance of the final plan.’ In addition, Wu cannot leave open trenches or piece meal the construction. Clearly, this request is beyond the scope and requirements of the contract.” Wu suggested a pre-construction meeting the first week of January to discuss the delays, cost to the contractor, and many pending issues unclear to Wu. (G-11; Tr. 2114)

Also refreshing Banks recollection as to why there was no work on the site in May 2002 was Raymond Wu’s letter to the CO dated January 31, 2002, copy to Banks, and Balakrishnan of Tevebaugh, regarding the disputed notice to proceed, which Banks testified reminded him “of Wu’s contest to not proceed with the contract as per the direction granted” in the partial notice to proceed. He characterized Wu’s concern regarding the partial Notices to Proceed as, “Wu wanted to move forward with the contract in totality. We couldn’t move forward with the contract in totality because there were certain issues that had to be resolved prior to that. However, DNREC gave us a direction that shallow trenching could occur as long as we were monitoring the site, et cetera, et cetera, and Wu – Wu felt that that was not the way to move forward on this contract, even though the government had made a recommendation to move forward in that form.” (G 13; Tr. 2111-12)

Banks explained that the shallow trenching was for the foundations under the building, and he thought, but was unsure, that “shallow” trenching was less than ten feet. He described the limitation on shallow trenching as being part of the change directive or change order, in relative correspondence. He noted that “the contract states that upon a change to the contract, the contractor will proceed diligently with the work and recommendations to how to proceed to the government, to the benefit – for the benefit of the government.” Describing that statement as a paraphrase, he said, “in other words, the contractor is to continue to move forward with the contract in accordance to the direction given by the contracting officer, and Wu contested that and refused to move forward under that direction.” (Tr. 2112-13)

Raymond Wu’s letter to the CO dated January 31, 2002, pertinent to this testimony, recited a history of the contract award and notices to proceed with their particular constraints and inconsistencies, suggested that the partial notice issued 10/31/01 should be treated as the official Notice to Proceed, not partial. Wu asserted that it could not perform grading or excavation due to the contaminated soil, documented, and other efforts frustrated, including denial of a change order to allow trailer installation on more solid ground. Wu stated, “At this point in time, Wu & Associates and its subcontractors cannot perform any meaningful work at the construction site nor have we been able to since the contract date of 9/28/01, aside from partial mobilization. Despite this, Wu & Associates and its subcontractors have and continue to incur cost.” (G 13)

Wu also asserted in the letter that Partial Notice to Proceed was not defined in the Contract, nor was “a Notice to Proceed that consumes contract time while denying the contractor permission to perform the work of the contract. Such notices to proceed, in effect, have acted to suspend the work. Wu asserted its position “that 10/31/01 was the official date of Notice To Proceed not Partial Notice To Proceed and that the intervening time has been lost due to conditions beyond Wu & Associates control for which they are entitled to compensation in time

and costs. . . As partners with a common goal, we must recognize that the reason for the creation of partial and limited Notices to Proceed is the contaminated soil issue and its impact on the contract.” (G-13) Banks testified that an e-mail from him to Dela Cerna dated July 30, 2002, reporting on a site visit and ventilation of delay issues related to soil remediation. (G 261; Tr. 2114-15) Banks reported that the trip had been productive, “ill regardless of Wu’s effort to belabor the process and maintain their obstinate stance.” (G-261)

Banks gave an incoherent response to the question of how the soils problems impacted the project. (Tr. 2115) But he knew that Wu stopped work on the project because of problems with the soil being excavated for the footings. (Tr. 2115) Banks testified that “we” understood that contaminated level was below the 10-foot level and minor excavation and remediation could take place at the shallow point. Wu disagreed, and felt they were not in a safe environment to move forward with the removal of soils until they got further direction from DNREC. He said that was *before* they hit problem soils. When they started excavation for the footers they ran into some unknowns at some contamination level in darkened soil which was then tested. (Tr. 2116)

Banks testified that Wu was not performing and was warned that progression at the site was at its own risk. “We had given them direction to move forward and to continue to work, and they felt that they weren’t going to work until they’d gotten certain documentation in place.” Banks testified that Wu actually stopped at certain junctures, but he could not speak with particularity. (G-261; Tr. 2117)

Banks described soils stockpiling as requiring that soil removed from the trench had to be stockpiled and isolated in order (G-261; Tr. 2117) These were activities that Wu contends precluded proceeding with construction under the partial notice to proceed, particularly since there was no applicable provision holding Wu harmless if Wu proceeded at the co’s direction in violation of DNREC’s requirements, although a contractor usually assumes the risk of adverse intervention of third parties, and agrees to abide by local laws and regulations, the DNREC requirements were not a part of the original contract or its premises and were superimposed without Wu’s prior knowledge or consent at the time the Contract was bid and awarded.

The hazardous monitoring training required by the health and safety plan necessary for labor workers on the site and excavating soil, in contact with the soil or risking possible contamination during construction, did not designate the number of workers to be trained. Forty hours of training was specified for certification. Banks testified that the training was to teach people to protect themselves if they contacted hazardous material. Wu and DOL disagreed as to the number of workers to be trained, because DOL wanted only workers to be trained who would come in contact with the soil, such as workers digging trenches. Wu, DOL, and Banks negotiated a number. Banks could not remember how many Wu wanted, but he said 22-23 were agreed on as indicated on the 3/18/02 meeting minutes. Banks opined that the project manager and superintendent were probably not on the list initially because they were unlikely to come in contact with the soil. The list included plumbing and concrete workers as well as site workers. Banks suggested that the numbers probably came from the recommendation of Dewberry’s estimators. (G-15; Tr. 2119-23) Banks remembered no problems with the number of environmentally trained workers on site, although he recalled making some adjustments in the number of trained workers by change order. (Tr. 2123-24)

The Minutes prepared for a March 18, 2002, Progress Meeting regarding the Environmental Work Plan and Change orders by Kirby Wu at Wu's office reflected attendance by EA, Raymond and Kirby Wu, and Banks. (G-15) Negotiations relating to HazMat training, Banks' concern with training too many workers, and Wu's concerns with training too few. Wu cited such problems as workers leaving jobs before starting work, limiting the right of subcontractors to rotate employees, and the need for DOL to compensate Wu for extra time required to complete work after measuring actual duration, the issue of maintaining a security guard, the need to recover costs of the health and safety plan while waiting for a formal MOD when Wu could not submit invoices for his costs, and the need to address the delay claim for Wu's increasing costs incurred prior to the full. Wu recorded that "Mark stated that Wu and their subcontractors would be fairly compensated for the delays." Wu also disclosed that Trainor, the masonry contractor, had backed out. (G-15)

Banks attributed the Project delays to "the environmental aspect of the project," which increased the schedule because of the increased scope of work for the environmental services to remediate the soil, which was not a part of the base contract as bid and awarded. In addition, he opined that "the contract was continually increased because of some site mismanagement issues, water, saturation of the soil, faulty work, poor coordination of the subcontractors, or other disciplines, and also rework of the quality of work...And we did have some weather delays." Assessing responsibility for the delays, he testified, "Some were shared and some were a part of the unforeseen conditions, which was part of the contractor, and then there were quite a bit that were Wu's responsibility, in my opinion." (Tr. 2124-25) Banks elaborated on lack of coordination of subs, working ahead and behind schedule. He cited an example of site work done in the beginning of the project where Wu graded initially and then had to regrade to correct the prior grading, apparently because of activities such as traffic flow which took place on the site, which in turn delayed other contractors. (Tr. 2126-27).

Banks recognized a problem of saturation and dewatering the Project site. But when Wu asked DOL how the Contractor should maintain the water on the site, DOL responded, "That's the general conditions, means and methods." Wu demurred in this situation because it was contaminated water. Banks testified, "So we asked them to make a recommendation on how to manage the soil – how to manage the water on the site." (Tr. 2146) Banks defined means and methods as meaning the contractor's way of building the project on site, the things that cannot be expressed in the design documents, how they move around the site, how they protect the site, and how they construct the intricacies of the property. How they prepare the site in order to continue to construct throughout the duration of the contract. (Tr. 2146)

Banks testified that the means and methods were affected by the contaminated site, and while soil removal would not be a standard means and methods, he did not think managing the storm water "is that much greater than in a normal situation." Banks declared that a normal site would require preventing the soil from running into the street, and water would have to be managed to keep it from pushing soil into the street, and the contractor would have to do what the county or city required with respect to storm water. (Tr. 2146-47) Banks identified the retention pond as the solution employed pursuant to a delayed change order and contract modification, and that it managed the water on the site, but disclaimed experience in that area

because he was not a civil site contractor, and did not deal with site work, but thought it was a good recommendation and that it worked insofar as holding the water on the site and complying with the DNREC requirements. (Tr. 2148) He admitted that it took a while to get the change order processed, because DOL needed to find out whose responsibility that was. Banks testified that the Architect was unable to give a definite recommendation as to the detention pond and contract compliance and so there was need for additional advice from Dewberry, which concluded that water control was the Contractor's responsibility. (Tr. 2149) But he testified that DOL acquiesced despite that advice because DOL did not want the issue to hold up the project. (Tr. 2148-49) Banks described the processing of RFI's as usually answered by the Architect, though the answering process was a joint activity. He conceded that there was a large number of RFI's. (Tr. 2156)

Banks described soil handling as Wu's responsibility pursuant to change order for soil removal to the point of transport. A third contractor hauled away the soils, which was not Wu's responsibility. (Tr. 2157-60) Banks first categorically denied that the soil piles interfered with work on the site, which is not credible under the circumstances, and then conceded that there would have been some, though not much, and not more than would be normally found at a construction site, though it might have affected movement of personnel and work activities. (Tr. 2160, 2170-71) He indicated that he did not have much first hand recollection of the situation. He indicated that because the site was sloped prior to construction there was a lot of dirt on the site, much of which had debris. (Tr. 2168-69)

Banks testified that the use of soil on site was restricted because of poor quality and debris. He understood that DOL's demolition contractor, ECG, had used some of the material from the demolished building to grade the site, so that debris was in the soil when Wu started to cut his foundations to build the new building, though the problem was not evident from a visual inspection. (Tr. 2170) There were questions about what to do with the soil. (Tr. 2160) Banks said that soil was saved on the site because of the cost of removal. (Tr. 2168-69) DOL had originally thought that soils could be reused, but the geotechnical firm that worked for the Architect determined that the soils were unusable because of their content, and so they were removed in stages, first to the main holding location, then from the site, sometimes directly from the site. (Tr. 2167-68)

Banks testified that Change Order No. 4 to the ECG contract provided for the removal of 60,000 gallons of water from the retention pond which was about to overflow in the face of predicted rain. Banks testified that early in the contract Wu made it clear that Wu would not remove the contaminated waste from the site "as we directed them in a change order, a contract directive, or requested of them. So we had to hire an independent contractor, and environmental contractor, to come in and facilitate those services." He identified ECG as the contractor for waste removal, but made no reference to ECG as the demolition contractor who prepared the site. Significantly, that change order to ECG gave very detailed instructions regarding the handling and disposition of the contaminated water in accordance with DNREC requirements. (G 265; Tr. 2172-75)

Banks' July 11, 2002, site visit report recorded that no work had been performed. Although Banks had no independent recollection and relied on the report. Banks testified that the

determination that nothing had been done was made by Banks, himself, and the Architect, and that all work should not have been stopped at the time. (Tr. 2179) Banks said it may have been one of their first reports. (G 125; Tr. 2176-78) The report took no cognizance of the circumstance either that a stop work order had been issued pursuant to the Health and Safety Plan on July 8, 2002, when Wu had unexpectedly encountered contaminated soils and requested directions from the CO, or that the problem was compounded and a resolution delayed because unsuitable soils were encountered July 9, 2002, which required cancellation of excavation until DOL provided direction. (A-85, A-274; Tr. 291-96)

The July 11, 2002, site visit report reflected attendance by Kirby and Raymond Wu and Boeckel from Wu; Banks from Dewberry; Kreuger and Will from DNREC; Cloonan from Duffield; McAndrew from Ten Bears Environmental; Tevebaugh and Balakrishnan from Tevebaugh; and three other firms. Its stated purpose was “to check the progress of the project and clarify several issues revolving around the soil and handling of the overly contaminated soils, and it declared that it was the first progress meeting after start of construction on July 1, 2002. (G-125) This report discloses the extended scope of what Wu was required to do regarding the environmental clearance from DNREC and the lack of direction or particular specifications regarding that work from DOL. It also shows how unprepared DOL was to deal with the problems Wu encountered and the extent to which DOL proceeded *ad hoc* while Wu had to wait.

This report identifies significant unresolved issues and highlights Wu’s problems. Wu’s soil testing agency had declared certain stretches of excavated area unsuitable for placing footings; Wu said excavation and foundation work was stopped because of uncertain fill conditions; Wu needed direction from engineers and DOL to proceed, and Kirby Wu said Wu could not proceed without firm direction. Duffield was conducting test pits on site, and evaluation was expected. (G-125)

Wu requested directions on the protocol for storing excavated soil because the site was contaminated. Wu had not been given a copy of the Remedial Action Plan (RAP) at that time, and had been specifically “asked to ignore the Remediation Work Plan.” (Tr. 310-12) Wu said that special methods of handling of excavated contaminated soil had been discussed, and that Banks had stated that “the appropriate language was being developed to provide the requisite direction and would be forthcoming shortly.” (G 125) Since neither specifications nor direction were available at that time, Wu determined it could not reasonably proceed without unacceptable risk.

Kirby Wu said he had had difficulty justifying the current progress, and that in retrospect it might have been more economical to have removed all the contaminated soil prior to start of construction. “Mark Banks suggested that the government had DOL assumed entire responsibility for how to proceed. Wu said that utility trenching was not on critical path, but they would continue with that part of the work. (G-125 at 2.4)

Regarding excavated material, Kirby Wu stated that Wu would need direction on procedures for handling the soil with the solvent type contaminant and the oil type extraneous material. DNREC wanted to know if anyone was notified of the discovery. Balakrishnan of

Tevebaugh had been notified, and had notified EA, which said that it was necessary to employ a monitor who is a Certified Environmental Professional; that EA had been contacted for the purpose and was preparing a proposal for DOL, and would arrange to provide on site monitoring once proposal was approved. Krueger would be the DNREC contact. (G-125 at 2.5)

The issue of the Security Guard was also unresolved because Wu was unable to find company willing to guard a contaminated site. Banks told Wu it was responsible. DNREC offered to provide Wu with information as to available companies. (G-125)

Banks gave Wu a copy of the Environmental Work Plan, indicating, "A copy of the Soil management plan will be forwarded to them for information only." Wu expressed concern because Wu had not been provided with methodology for separating, segregating and managing the various types of excavated soil. DNREC's Will suggested that EA would incorporate language addressing "free products" in the management plan. (G 125) The report indicated that "It was agreed that perched water could be discharged on site per the dewatering specification. No water to leave the site. Any excess water would have to be contained in tanks. The oily discharge would have to be separated and treated separately." (G 125) But there was no specification to deal with this process.

The report recorded that Wu expressed concern regarding the space available on the site for excavated material. Banks was to research the possibility of a paved area next door. Perimeter controls needed to be maintained. DNREC advised EA that a periodically revised Site plan indicating the stockpiles of excavated material would be acceptable. Kirby Wu also had sought clarification on the personnel who would be able to exercise authority with regard to day to day activities, especially with regard to excavation and soil treatment activities. Banks replied that in accordance with the operational mode of DOL all clarifications needed to go through the Contracting Officer. (G-125)

The report recorded that Wu had complained of delays impacting Wu's allocated costs for the project and exhausting supervision costs very quickly. Banks asked Wu to submit proposal for additional compensation, instructing "The proposal is required to follow the conditions of contract and needs to follow the format of lump with not to exceed amount." (G-125) Regarding "Project Issues" Wu had asked for clarification on certain structural drawings, and said that Wu was still waiting for a change proposal request related to culinary equipment and information on workshop equipment. (G-125) Wu had also been unsuccessful in contacting Wilmington personnel for standard inspections, one indication of a delayed process in dealing with the City of Wilmington. Needing a response to the letter dated May 13 Wu had put a hold on the underground utility work until further clarification was received from the Engineers. Banks suggested that DOL should apply for a waiver. Tevebaugh was to contact City to pursue a waiver, and Banks said his office would "be in contact to work through the waiver." (G-125) Banks asked that proper procedures be followed for routing correspondence, and that "Where correspondence is required to go to the ESC Contractor Mark Banks should be receiving all pertinent correspondence." (G-125) The confused status of relations with DOL and the City of Wilmington is thus evident.

The summary in the report identified required actions including, 1) “Unforeseen Soil Conditions to be addressed. Test Pit evaluation and direction to be forthcoming. 2) Appropriate language to be communicated by DOL to Wu & Associates addressing environmental concerns and request for methodology. 3) Wu & Associates is to provide site security per conditions of contract. Any modification to scope will follow specified procedures. 4) City of Wilmington to be contacted for Waiver of inspections.” (G-125)

With respect to his Site Visit Report dated August 9, 2002, Banks testified that the report recorded ECG’s first removal of soil stockpiles, which would have been the large piles; that Wu had received the necessary and requested assurance that ECG had bonds and insurance qualifying it for the environmental work; and that he, Banks, had concurred that soil, consisting of large piles nine or ten feet tall and twelve or thirteen feet wide, would have to be moved to vicinity of the smokestack to get it out of the way of utility trenching. He stated flatly that that location did not interfere with any work on the site. He did not otherwise address the removal process. His prior visit to the site had been July 11. (G-126; Tr. 2180-81)

The report recorded that “[t]he visually contaminated piles are being cleared,” and that the soil stockpile with debris content was addressed, and Banks restated that as little of soil as possible was to be removed from the site and no more “select fill” would be accepted on site. Duffield provided information regarding bearing capacities that needed to be conformed to, and the process for using soil relatively free of debris. Compaction requirements outside of the building pad were reduced. Kirby Wu stated concern regarding liability and warranty issues. Banks said that Duffield would assist in providing direction for attaining suitable compactions. (G-126)

Banks confirmed in that same report that DOL had assumed sovereignty over the site and City Inspections have been waived. Permits were still required, and Wu would still be responsible for obtaining all permits. Kirby Wu wanted documentation of the agreement. Tevebaugh was to investigate requirements of Sewer Permit and would get permit application signed by the owner so that Wu could apply for the permit. Wu was aware of City’s requirements with regard to subcontractors licensed to work in the City. (G-126)

Kirby Wu expressed concern regarding the excessive amount of soil present in the stockpiles, and suggested that the soil could not be used up without some significant attempt at regrading. Banks concurred that the soil would have to be moved to the vicinity of the smokestack to get it out of the way of utility trenching. Kirby Wu said Wu was not interested in being contracted to move that soil. Banks requested proposal from ECG for relocating soil and mitigating presence of really large pieces of debris during the moving process. (G-126)

Regarding Contract Issues, the report recorded that Kirby Wu expressed strong concerns again regarding having received nothing on the “modifications” incorporating the undisputed COR’s. He did not want to continue to finance this job. The MODS in issue were: “1. Cost to write H & S Plan, 2. Additional for H & S plan, 3. Additional Surveying, 4. Pollution insurance.” Kirby Wu also inquired about the status of the “Extended Overhead” Change Order Proposal, and Banks said he did not have the complete paperwork in his hands as yet. (G-126)

Kirby Wu sought clarification on alternate methods for estimating work described in P.P.R. #6 (protecting soil with poly) in C.O.R. 15 & 16. Kirby Wu wanted to have DOL or the A/E provide the back up for negotiating if they did not agree with his methodology, and stated that he did not want repeated visits to Change Orders. Banks stated that the A/E would contact Wu to work this out, but later clarified that all negotiation would have to be processed through the Contracting Officer. (G-126) Since the A/E initial processing was a, if not the, primary cause of delay, this exchange reveals some significant difficulties Wu confronted in trying to obtain prompt payments. Kirby Wu also advised at that time that the 8 week approved period of performance for Ten Bears was in week five and near its end, and that Wu needed a modification to their contract for an extension period for H & S monitoring. (G-126)

Banks testified that the August 22, 2002, site visit report reflects emphasis to Wu that excavated soil must be kept on site, and that the requirement was related to avoiding the costs associated with removal. (G-127; Tr. 2181-82) This requirement apparently imposed by Banks was evidently very costly, rather than cost saving.

Banks testified with respect to the soil stockpile at the southwest corner of the site, which was obstructing installation of the storm drain, that EA would evaluate the soil samples to determine the character of the soil within two weeks. Such a determination would have three possibilities. If it were unsuitable soil structurally, or regular suitable soil, Wu would be responsible for removing it; if it were contaminated soil, Wu would not be responsible for removing it. Banks did not think there was any dispute as to the allocation of responsibility, and Wu would have to wait for the government or its contractor to remove that soil from the site. Banks said, however, that Wu could move the contaminated soil from place to place on site, as long as he protected it in the manner outlined in the applicable change order (G-127; Tr. 2182-85)

The August 22, 2002, site visit report noted that construction had resumed as of August 12 for spread footings, building pad, excavation for utilities. Wu wanted to know the timeframe for clearing soil stockpiles. Existence of the ECG contract was confirmed, a copy of the certificate of insurance was provided to Wu; ECG collected samples from various piles on August 20 with results expected August 27. Wu was assured that ECG would take care of its own equipment and follow the regulations. (G-127)

The Site Visit Report noted that it was emphasized to Wu that all effort needs to be made to keep the excavated soil on site. DNREC would direct remediation. Soil that could be placed under the parking lot or under landscaping would have to remain on site. Soil containing debris would be used subsequent to removal of debris over 6 inches. (G-127) The Report also noted, "Since it has been established that the City of Wilmington will not waive inspection, the required procedures need to be followed. E & S plan and application for permit is required by DNREC. Tevebaugh to research." (G-127) This result contradicts Banks' earlier assurances in the August 9 report regarding a continuing problem for Wu.

Kirby Wu again expressed concern regarding the "modification" incorporating the undisputed COR's: 1. Cost to write H & S Plan; 2. Additional for H & S Plan; 3. Additional Surveying; 4. Pollution insurance. He also inquired about the status of the "Extended Overhead"

Change Order Proposal. Banks stated he did not have the complete paperwork in his hands as yet. (G 127) The earlier request was reflected in the August 9 report; this report was dated August 22. Wu wanted to see explanations for alternate methods of estimating COR's 15 and 16. Kirby Wu requested that a unilateral MOD be considered. (G 127) Kirby Wu stated that Wu would be submitting a delay claim shortly, not to be taken personally, because of the nature of the project. The summary indicated that Dewberry would follow up on the MODs. (G-127)

Banks explained that the October 3, 2002, site visit report indicated that Wu was concerned that ECG's soil removal process was interfering with Wu's subcontractors' operations. Banks testified that he recalled the problem, that there was a difference of opinion on both sides. EGC felt it was adequately removing the soil as fast as they could. Wu felt they should have bigger equipment. Banks informed ECG of that, and that ECG said on the next issue they would have large enough equipment for timely removal. (G-127; Tr. 2190-91) That site visit report also dealt with sovereignty issues and City of Wilmington inspection process, which would apply; DOL's decision not to install underslab venting; the use of an unhazmat trained worker; and Banks' reiteration of policy of removing as little of the soil from the site as possible.

Regarding the urgency of the project, Banks testified "[They] were anxious, yes. I think everybody was anxious. And even, I believe, in order to get the project on the street and accomplished, we needed to approach it with a bit of push. I don't think there was any push to do anything unsafe or unreasonable." (Tr. 2215) Banks testified that, regarding bid opening scheduled on August 16, 2001, there were probably one or two meetings of DOL and Dewberry regarding whether the bid should proceed on that date. There were several prior meetings get the data necessary to the discussion. In the first meeting Banks testified that it was probably himself, Chi Chiu, the environmental person in Dewberry's office, and possibly the program manager. The second follow-on meetings probably with government officials, O'Malley and Steenbergen, but he could not recall how many. (Tr. 2216)

At first Banks did not recall that Steenbergen took the position that it would be better to delay the bid until more was discovered about the environmental issues. Banks thought he might have taken that position during the discovery stage, but not at the time the contract was to be awarded. After his recollection was refreshed with his deposition testimony, he testified that Steenbergen in the beginning thought that the bid ought to be delayed. He thought O'Malley also wanted to get more information, though everyone ultimately agreed the bid should go forward which it could not do without the concurrence of DOL. (Tr. 2219-20)

Banks testified that after their initial concern, after Steenbergen and O'Malley got more information about the environmental issues, that made them more comfortable with proceeding with the bid. There were more studies done. Banks was unsure of the timeframe, but when the issue was first discovered, Banks was sent with Dewberry's environmental person and with the Architect to meet with DNREC to find out the parameters of the risk; Banks reported back; and Banks and his director and people in the office discussed the issues and came up with a strategy; which was then discussed with Steenbergen and O'Malley who gave the direction. Banks remembered O'Malley's asking his opinion, but he felt the decision had already been made in pursuit of action and he was not in the discussion among the powers that be that made that decision. He was, however, part of some discussions with O'Malley and Steenbergen, and his

assessment was that after their initial reluctance, additional studies were done and they became comfortable with going ahead on August 16. (Tr. 2222-23)

Banks did not think that as time passed, more information about the contamination revealed that it was fairly extensive, and more than previously thought. He testified that additional information came out when they got on the site and started moving soil around, the contamination had articulated down the site a little bit. They did not budget much money at all in order to push the project forward. They felt the risk for major contamination, even when they received the remediation action to do the process—it also seemed to be very minor in scope to remove six inches of soil and cap it with six inches of clean soil. It was assertedly a very basic approach to get a project cleaned up. (Tr. 2223-24)

Those involved received information about the remedial action plan, conferred with DNREC, during the preliminary research during the first investigation, with DNREC taking soil samples. They identified limited areas where the contamination was thought to be, and based on that information went forward with the construction process. Dewberry estimated \$200K to remove that soil, which it felt was reasonable, and sent a memorandum to the State of Delaware. They sent a memorandum to the State of Delaware suggesting a partnership to get the contaminated soil removed, purportedly having no indication that there was much exposure there. Thus, Banks said that as of the bid date, August 16, 2001, his knowledge and the knowledge of the people on his side of the table including DOL was that the contamination was limited to a very small area, and that was so when they initiated the action to go forward with the bid. (Tr. 2224-25, 2228-29)

Banks was referred to the memorandum dated July 16, 2001 from Reitenbach to Tevebaugh, with copies to Banks among others, regarding the soil sample results which indicated contamination sufficient in Reitenbach's opinion to require a Remedial Investigation including a risk assessment to be negotiated with DNREC. Banks had no idea that findings of "VOC" meant volatile organic compounds which had been widely detected in all three groundwater samples. The extent of the contamination in various samples suggested that DNREC would also require a VCP application and agreement, which Banks understood to mean a Voluntary Cleanup Program. Banks testified that, notwithstanding, there was a drawing in the documents which was explained to him by the experts to indicate a risk of limited scope. He said that they relied on the professional people to assess the risk, the EA professional or a DNREC professional. (Tr. 2227-28) Banks did not know whether there were any new contaminants discovered after the bid that had not been discussed in the July 16, 2001 sample results. (Tr. 2231)

Banks admitted that the entire site was deemed contaminated in the end result, but he argued that there were several levels of contamination, with some contaminants regulated and some monitored, and this was a monitored site, the lesser, with the least requirement for disposing of the material. This site had "very slightly contaminated material. The risk for exposure was very slight, but we wanted to do the right thing by the government and remove it to the level to what we knew as the result, because we're going to bring kids on this site after the fact and we wanted to make sure that this site was clean. So we weren't moving in a direction to move into a risky situation and try and get this project built and cost us an arm and leg doing it.

We felt that this project, based on our professional advice, we felt that this project was capable of being constructed in a timely fashion with little –with very little burden placed onto the general contractor...And the general contractor, in the beginning, expressed to us that he was willing to take this project on in that form, so we moved forward. We felt we had a partner in this situation and we could expedite this project. It didn't – we – by no means did anyone on our team or DNREC's team have any understanding that this – project was a highly contaminated site, and we would cause burden onto the contractor or the existence of a safe environment post construction." (Tr. 2230-31)

Banks testified, "We had – the contamination was low. The work process was clear – come in and remove the soil down to the grade you need to get it to for rough, come back, investigate that soil, remove it from the site, dispose of it to a registered location, and bring in fill to replace it. Everything beyond that – everything in that scope of work is a change order to the contractor. It's a very clean process, if you approach it that way. (Tr. 2231-32) Banks testified that he understood "the contaminant was in a defined area, and whatever other contaminants were there on the site, they weren't that – the risk of those items weren't that great." (A-16; Tr. 2236)

Banks, however, learned that the contamination at the site was not just around the tank, from the July 16, 2001, report which he read, and which he admitted "was pretty much Greek to me," so he was dependant upon environmental personnel to define the scope of contamination and who "communicated the same types of information to me, that we could move forward with this project and . . . we're not in a situation where we're going to need to have a lot of remediation issues. We going to remove the soil in this point – in this area, and once we get there, we'll go through the Voluntary Cleanup Plan, which was, as it states, a voluntary cleanup plan that the State of Delaware of the City of Wilmington – I believe it was the City of Wilmington – the State of Delaware agreed with the state of DNREC – what DNREC – the State of Delaware, DNREC, to do the voluntary cleanup. So as far as – I think, if the information – when the information did come forward, it didn't change the pre-bid judgment. (Tr. 2237-38)

Asked if part of the remedial action plan was that all the water had to be contained in the site, Banks declared "That was a recommendation of the remedial action plan," not a requirement. That did not mean it did not have to be done, but, Banks testified, "[O]nce we found this out later in the process, if you could find a way to remove the fluid, you [could] do so and that's what we did towards the latter end of the project when we found out that you could just pump the stuff into the sewer system, because the state of DNREC and the Wilmington water facility had the capabilities to manage this contaminant and they allowed us to do that." (Tr. 2232) This was manifestly contrary to the information and instructions governing Wu.

Banks was aware that DOL allowed Wilmington to do the storm sewer tie-ins, and took the work away from Wu, so that Wilmington's contractor ultimately did the tie-in to the sewers after a long time. But he responded, "I'm aware of that action that took place, but I'm not sure where that plays into the removal of that waste." (Tr. 2233) Banks testified that he understood that they could have discharged the water into the public service system from day one, and blamed Wu for failure to recommend discharge into the existing sewer system after a tie-in, rather than building the retention pool, because he believed that approach would have been less

of a problem to the contractor. (Tr. 2233-35) Banks' testimony in this regard reflected almost no appreciation either of the practical realities of the situation with which Wu claimed to deal and which DOL had created for the Contractor, or the limitations imposed by DNREC and the City of Wilmington's control created by DOL's uncertain then belated waiver of sovereignty.

Banks testified that the Architect, "had never done anything – any environmental-type work that – that was done in unison with the construction, and he felt that it was – you know, we could get this done. I mean, I think everybody wanted to do it. If we could've done it that way, we would've done it that way, but we didn't have that opportunity and since the risk on that portion of work was so – our understanding was that it was so minor that we could go ahead with the project." (Tr. 2238-40) Banks testified that the Architect had recommended that the August 2001 bid be postponed, and that Steenbergen and O'Malley, though initially cautious, ultimately changed their minds and decided to go forward. No one other than those three expressed an opinion that the bid ought to be delayed that Banks could recall. (Tr. 2240) Among the recommendations that the bidding should be canceled until the environmental problems related to the Project site were resolved was a letter dated April 11, 2001, from J. Tevebaugh to O'Malley which noted that DOL had extended the bid on the Contract indefinitely and recommending that the bidding be canceled "until a clear date on the closure of any environmental issues is defined," at which point the Project should be advertised as a new bid. (A-12(c)) Reitenbach also had recommended that the contaminated soil be removed from the site before beginning construction.

Asked if there was any magnitude placed on the possible exposure of DOL to a delay claim by the contractor in those discussions, Banks testified, "We assessed it. We looked at it and we figured – we weighed the difference between change orders to the contract or postponing the contract, and what was the best way to deal with it. We thought we had a contractor that was willing to proceed in the fashion that we were moving. So we felt that – that if there was a change, it would be just like writing a – do another contract. So we would just rather do the contract – do the change order. I mean, we're going to pay – basically, we're going to pay the same pot of money that we had estimated as being the scope of the work to either Wu and Associates, or we would delay the contract and give it to another contractor and pay the same amount of money. There was no real win situation that we thought, because we didn't think it was that – we didn't see – the team didn't see where the risk lied (sic), based on the information that we had." But Banks did not think that the team misjudged the risk. (Tr. 2242)

Banks' assessment of the situation was that no later information came to the fore, and, "I think, once we determined – the scope of the work was the scope of work. The process to remove the scope of work was fairly defined. We would do our trenching, do the air monitoring, get the soil out of there, and then come back and put in the six inches of soil. It's basically a clean job. But when you start to factor in the reluctance to pursue the project in the form in which we thought we had a partner in, then you start to pull in problems, you start to pull in delays. The people are not as proactive as they would've been under, you know, a quality environment. So we had problems. I mean the project had problems. We had no control over those problems." (Tr. 2243)

Banks explained, “[W]e tried to express a commitment to Wu and Associates by cutting the change orders to them, by giving them the change orders, and we also sat down with Wu and Associates as early on in the project with Mike O’Malley, I believe it was Brenda Williams, because I believe John Steenbergen had returned – Monica – I can’t think of Monica’s last name right now. And she was also – I think she shared the contracting officer’s responsibility in the office. And the contract Specialist – Marissa. We sat down with Wu and Associates because Wu had a problem with the wording in a change order that removed his ability to come back for additional time claim. And we removed that information – that text out of the change order process so we would show Wu the good faith effort that the government was playing.” This referred however to experience after the bid, months later relating to the remedial action plan. (Tr. 2244-45)

Banks initially testified that he had no recollection of the August 7 meeting, though he acknowledge the sign-in sheet. (A-19; Tr.2246) He then recalled that Krueger had stated at the meeting that the schedule proposed by EA to accomplish the procedures within a few months was not impossible, but highly unlikely, and that the processes usually took seven to nine months, and so understood when he left the meeting. But he testified, “Yes, I understood they had that opinion and we were going to work together to try to reduce that schedule, as we did.” “And they committed to do that, yes.” He conceded that Krueger described a number of pitfalls, such as document submittals, test results, and other things, that could delay an ambitious schedule at the meeting. (Tr. 2247-48)

Banks testified that he was not immediately familiar with the acronym “RIFS” process. But he recalled that due in part to test results related to the July 16 memorandum it became apparent that DOL would have to go through the RIFS Process, and there was no doubt about that as of August 16, 2001. (Tr. 2248-49) He did not think that DNREC never changed its position on that issue, and Banks testified, “No. I think we went through that process. (Tr. 2248-49) But he admitted that he had little or no memory of the particulars of what occurred. Having testified differently in his deposition regarding DNREC’s alleged change of mind, he said he did not remember, pleading that there were a lot of meetings, the events had occurred several years before, he did not work on the project anymore, he did not keep contact with the people involved. (Tr. 2249-51)

Banks testified that putting the environmental information he was aware of in the specifications for the bid package that went to all the bidder had been considered, but was not, “Because we didn’t know. If I recall correctly, I don’t think we knew exactly what to put in there and we wanted to make sure we put the right thing in there.” (Tr. 2251) Banks testified that the factor that “the people on [his] side of the table” thought that the information came too late to get it out to the bidders before the August 16 opening “might have played into it.” (Tr. 2251) Banks himself apparently thought that some information should have been put in the specifications so that the contractors who were bidding on the project could base their bids accordingly. (Tr. 2251-53)

Banks testified that Wu delayed the Project “In large part.” (Tr. 2255-56) It was Banks’ opinion that DOL also delayed the project in some degree. (Tr. 2256) He explained his view of how DOL delayed the project, because “we had no understanding of how Wu wanted to pursue.”

(Tr. 2256-57) Banks conceded that a few change order requests were not timely processed, but he thought DOL had paid the contractor for DOL delays. (Tr. 2256-58)

Banks read the contract, he said, to require no stoppages by the contractor, even if there are delay issues. But he insisted the delays were minimal. Banks testified, “[I]n the contract we state how the process works. And the contractor, if he’s working in one area digging trenches for foundations, he runs into a problem in that area and he comes – he tells us there’s a problem here and he can’t work any further, we either give him a direction to proceed in the fashion that he feels is best suited for that position, or he relocates his operation into another area and he pursues the work.” Banks’ view was that if Wu encountered a problem, issued a Change Order Request, and the government did not act on the COR, it was Wu’s responsibility to get direction not to delay. (Tr. 2259) This approach took no appreciable account of the requirements of DNREC when Wu encountered site contamination, or secondary effects of adherence to those requirements. Nor did it recognize the effects of the ignorance of Banks and other DOL representatives, or indeed Wu, in dealing with a contaminated site and working through the contamination as Banks had directed.

Banks denied that the government ever needed to act on a change order that needed to be executed immediately and failed to do so in timely fashion. Banks said they would give Wu a directive that same day to move forward, not to exceed a certain dollar value. (Tr. 2260). Banks testified that he thought they gave directives on change orders that were not critical to the project because they knew that Wu needed this type of direction to move forward. “So we did that on a lot of issues.”

Banks recalled that there were discussions in May, June, July up until August 16, 2001, prior to the bid opening about whether or not to go ahead with the bid opening, but he did not recall the discussion or the date or time frame. (Tr. 2813) The nature of the discussions was typical construction-type conversations in regards to where we are on the project, what’s the risk exposure on this type of work, etc. Banks testified that there were some discussions in regards to the environment, including actual face-to-face meetings to discuss that specific issue. (Tr. 2814) Banks testified that there were issues concerning the risk of proceeding with the bid opening, which involved review of documents relating to the findings of the survey, the areas of contamination and possible contamination, and how they would approach that kind of construction environment. (Tr. 2815) Banks described the approach to what they had identified as an isolated area where the contamination existed, and testified that they were under the impression that they could remove that soil and refill that soil or remediate that area and continue with construction. (Tr. 2815-16) However, after his recollection was refreshed by reference to the July 2001 test results which referred to contamination at various areas of the site and about ground water contamination, though his recollection was imprecise, he admitted that when those results came out he was aware that the contamination was not limited to just one area, even though he might have thought something different before. (Tr. 2816-17)

Banks testified that at the point when the results showing broad contamination came out, DNREC and the environmental folks felt that those items [contaminants] were pretty typical for that area, so that he understood that the risk factor was not that great. The risk factor as explained to him was that those types of samples would come up pretty much anywhere in the

state of Delaware and the city of Wilmington. Banks testified that DNREC did not say what could happen with the soil and recommended no particular remedial action. They required a volunteer cleanup program and “a full gamut of items that take place,” but Banks understood that it was normal activity on a construction site in that area. He noted that the site next door had recent construction without remediation. (Tr. 2817-19)

Banks testified, “My opinion [regarding whether to proceed with the bid opening] was that if we went through the process, and found out more information, that we could put it inside the bid package, it would probably be beneficial to the Government. But as far as cleaning the work up during the construction process, I didn’t find that to be a problem either.” He thought it might be a better idea to hold off on the bid opening, because “[i]t’s always better to hold off on bid opening if you have work that you can incorporate into the bid package, because you get into the competitive environment as opposed to an noncompetitive environment.” (Tr. 2823-24) Banks testified that he believed the reason that the entire scope of the contract work was not put in the contract subject to bid “was more of a timing situation far as getting the project underway, not waiting another total year to not have access for these kids to have training, and the risk was very – in our opinion, was very minor.” (Tr. 2824)

Banks testified that the risk assessment done in connection with the decision to proceed with the bid opening was not a document, but was “more or less a practice and analysis of the risk.” It was prepared as “a concerted effort between the environmental folks in our office, myself, office engineers, civil engineers, and I believe that’s probably about it, but a concerted effort within the office. Banks explained, “We retrieved data – I basically finalized the package or finalized the assessment, which gave us a cost factor of what we’ve anticipated it being the outside cost on the project, on a change order.” He did not know where it ended up, but he gave it to his supervisor, Chi Chiu. It consisted of a couple of pages. Banks did not know whether Chi Chiu made any changes, but the estimated cost for contaminated soil removal was approximately \$125,000.(Tr. 2824-26)

Banks described the process: “Our civil engineer took the drawing that had the delineated area where the soil was contaminated with some outside, I guess some factor to it, and gave us a quantity with some weights and some prices, some quantity to that, and we put prices to it as far as what a special ton of soil will be to be removed.” (Tr. 2826-27) He was not sure, but he thought the assessment was done before the July 2001 test results were received and indicated that there was widespread contamination on the site. Banks thought that assessment was sent back to their civil engineer “to see if there were any glaring issues within that new test results.” He did not think there were any major concerns with the additional results. The \$125,000 figure relating to the risk assessment was never changed so far as Banks knew. (Tr. 2827)

Banks got an award for the Wilmington project, for working with DNREC and environmental groups in establishing a plan to “exercise” this project. The award was given to Banks early in the construction project, apparently around December 2001. He testified that Dewberry, not he, had done an “assessment,” an evaluation of [root] cause analysis, which concluded that if they were to do this type of project again they would do the environmental aspect first, because in the case of the Wilmington Job Corps Project the scope of work was not defined. (Tr. 2839-42)

Banks testified that Tevebaugh, as well as Wu, did some things that delayed the project, but that they never did an assessment on it to see who had delayed what and what were the problems, and he could not then determine what the problems were. He admitted that he concluded that some of the problems were design errors by Tevebaugh, and could have caused some delays on the project, unless they were caught in time. He suggested that it would require him to do an assessment of the delay or the claim to determine what caused the delay. (Tr. 2830-31). He denied there were slow payment issues “according to the contract.” (Tr. 2831-33) Asked how WU could have done the work under the contract in the time period allotted under the original contract when at least 20% more work was added to the contract, Banks said, “I don’t think that was the intent. I don’t think there was any idea that the possibility of them doing the work within the same period of performance as per the base contract was ever expected.” He said there was documentation indicating to Wu that Wu would be given more time. (Tr. 2835)

### Robert Reid

Robert Reid testified that he is an architect licensed in Pennsylvania, Delaware, and New Jersey, and a principal of the architectural firm, Tevebaugh Associates. He performs oversight of projects and office functions. (Tr. 2274-75, 2278). He has a Bachelor of Architecture undergraduate degree, from Temple University, and was involved in the Wilmington Job Corps project from the beginning of the project. (Tr. 2279).

Reid’s credibility was impaired by a relatively poor recollection, failure to recognize and assess particular circumstances affecting the site and the Contractor’s performance, his unfamiliarity with construction on a contaminated site and the problems entailed, an apparently simplistic approach to dealing with the problems of contamination, and an apparent failure to appreciate practical problems which obviously adversely affected Wu’s performance. Besides testimony which seemed inherently incredible, and a less than convincing demeanor, he gave testimony which was less credible than Wu’s in many respects.

Reid testified that Tevebaugh was selected in 2000 to design the Job Corps Center. When Tevebaugh was first hired for the project, the only environmental issue he was informed of related to an existing building on-site with possible asbestos. (Tr. 2280-82). As a result, Tevebaugh included an environmental engineer to assess the environmental issues related to demolition of the existing building. DOL hired EGC to do the demolition, which ran concurrently in 2001 with Tevebaugh’s design project (Tr. 2284).

Reid testified that Tevebaugh’s subcontractor, BATA, found environmental hazards in underground storage tanks, which needed closure with DNREC. BATA tested the storage tanks and submitted documentation to DNREC with a proposal for closure. (Tr. 2285-86). Reid also testified that Tevebaugh submitted a request for a clarification, asking if a “soil boring log” was available and received the executive summary of the geotechnical report. (Tr. 2290-94, 2298)

Reid testified that his involvement with the Project was oversight of the contractor’s work and attending job meetings. (Tr. 2301). He stated that Tevebaugh’s responsibilities on this project were to obtain preliminary information, make designs based on the general contractor’s

specifications, and attend biweekly construction meetings to review questions that might arise and review schedule performance. (Tr. 2302) A representative of Tevebaugh would also visit the site weekly to review the schedule and monitor the contractor's progress. (Tr. 2303-04)

Reid opined that the project's delays were caused by weather, lack of performance from a contractor, and questions that needed to be answered by the architect. He testified that the "normal construction process always has questions going back and forth," but that with this project, "little things became big things, and there was [sic] major delays." (Tr. 2305-06). He stated that there were problems with manpower on the project and problems in "properly controlling the site so that the subcontractors could work on the project during a wet period." (Tr. 2306). In Reid's opinion, "the impediments were small but became major impediments when due to -- in my opinion mismanagement, that there didn't seem to be a proper plan n how to deal with dewatering the site properly or, or if a contractor is not showing up on time." He opined that these issues took Wu longer to resolve than he would normally expect from his experience. He stated that there was "great difficulty in getting him [Wu] to do his work when he was supposed to be doing it" throughout the project. Reid testified that the masons were understaffed. (Tr. 2307).

Reid testified that Harmony, the site contractor, did not have proper personnel to install site utilities, a problem that lingered for 9 or 10 months, and impacted the concrete subcontractors and the masonry subcontractors. He testified that the water on the site was going into the footings in a manner that was "inappropriate for the smooth movement of materials and equipment," and that the movement of soil due to contamination affected the project, because, in some instances, the soil was put in the way of future construction and had to be moved again. (Tr. 2300-09). He testified that the decisions about soil placement were made by Wu, as it was responsible for the site contractor. (Tr. 2310) In fact the soil placement was the result of a complex process under DNREC's oversight.

Reid testified Wu advised at meetings with Tevebaugh and Banks that working on a wet site such that this was hard. (Tr. 2315-16, 2322). Reid admitted that it was a difficult and very wet site to work on, that the fact that the water could not leave the site was not normal, but opined that "the water could have been managed better to allow construction vehicles" onto the site such that construction would have been able to continue. He suggested that areas should have been filled in to allow dry high spots for vehicles to come and go from the site, and that site grading affected the site in that it created topography to move water to other places on the site or off the site. He opined that there was not "proper grading to get the water away from the foundations and from the building" which caused "a lot of problems in with getting construction vehicles up to where they needed to do their work." (Tr. 2317-19, 2322) Reid declared that there was enough space to create a pond for the water, that a road should have been created to get vehicles to the foundation area, and that there was water ponding around the building such that it was difficult for construction vehicles to move around the perimeter. (Tr. 2320-21)

Reid agreed that there were problems with water on the site in August 2002, but stated that even if the government did not respond, a prudent contractor would do "what it takes to get the, the project done" and not stop working, because there is recourse for contractors that do extra work to ensure they are paid. (Tr. 2324). He testified that contractors could do the work

under protest and recoup the costs later. (Tr. 2324-25). He did not recall if a change order was put in as of November 12, 2002.

Reid testified regarding a document from Tevebaugh, which recommended the approval of costs or the installation of a retention pond. (Tr. 2326). He explained the process of how a change request was made. (Tr. 2327). He stated that Tevebaugh received a proposal from Wu, which it would evaluate to determine whether the change was within the scope of the work. Tevebaugh then rejected, approved, or partially approved the request, then sent the recommendation to the DOL through Dewberry. Reid testified that in analyzing the plans, he would determine the zoning of the project. In this case, "it was obvious that there's not a detention pond shown on the drawings, so it was an obvious change to the contract. So it would be more to the case of whether the amount of soils that were to be brought in and other labor that was associated with that work seemed fair for the, for the amount of work that needed to be done." Reid stated that Wu made the decisions regarding the location and size of the pond, but that there was still enough water around the site to impede progress on the project. He stated that the contractor, not the architect, is responsible for the means and methods of controlling the site. (Tr. 2328-29). He opined that the retention pool Wu constructed could have been larger without any problem. (Tr. 2330)

Reid testified as to a letter he wrote to the DOL in November 2004. (Tr. 2333). The letter was requesting additional service because the contracts closeout services were supposed to last for two months, but lasted longer. (Tr. 2334). Reid testified that the reason for the delay in the closeout of the Contract was that normally, the process from submitting a punch list to final completion was one or two months. In this case, when Tevebaugh employees arrived at the building, it was not ready for closeout inspection. He considered that list to be a complete list, not a punch list, because the building was not substantially complete. (Tr. 2333-34)

Reid testified that a letter he wrote to Kirby Wu dated August 6, 2003. (Tr. 2337). Reflected a visit to the job site which found that the construction was moving along "at a snail's pace" despite good weather. He reported that there were only a handful of contractors on site. He testified that the subcontractors also did not have enough individual staff for their job responsibilities and that the masons and the personnel for the stonework were continuously understaffed.. (Tr. 2338-40) He testified that early in the process, he was not receiving proper documentation of the progress of the site and that Wu's project superintendent, Boeckel, stated that he had too much work to do. (Tr. 2340-42). Reid testified that an assistant superintendent was hired, but that he was doing construction work as opposed to oversight and management, and that debris on the job site that may have affected the quality of the work on the project. (Tr. 2344-45).

Reid stated that even when the roof was on, there was "a lot of water on the floors." (Tr. 2349). He testified that the concrete used was not acceptable because it was not compatible with putting on floor finish. He stated that Wu did not address the problems found by him. (Tr. 2350). Reid noted that the masonry openings for the windows were not the correct size. (Tr. 2351). He testified that some of the installations, such as a curve masonry wall, were installed poorly and against his recommendations. (Tr. 2353-54). He stated that there was a large amount of rework

done because of shoddy work. (Tr. 2355). He testified that there a number of rework issues that affected the schedule. (Tr. 2356).

Reid reviewed a letter to Kirby Wu from Tevebaugh explaining that the window units were not installed in an acceptable manner. (Tr. 2360). The problem was that a mockup was never done and the masonry openings varied such that the “masonry jam varied considerably around the building.” (Tr. 2361). He stated that another problem was that the spacing of the windows, in terms of the distance from the window to the wall, was off by between an eighth of an inch and an inch such that the only remedy was to put caulk join in there. (Tr. 2363). He testified that the window openings were not fabricated off the true dimensions of the masonry openings. (Tr. 2364). There was a resolution to the issues regarding the windows, such that the windows “were removed and reinstalled so that they weren’t touching the, the steal lentils.” (Tr. 2373). It took between 3 and 5 months to resolve this issue. Reid stated that the window issue caused humidity issues around the building such that the interior work was impacted. (Tr. 2374). He testified that the critical path was impacted. He stated that the primary reason for the delay was not enough manpower. (Tr. 2377). He stated that there were complaints about the mason not having enough people or Harmony not showing up to the job. (Tr. 2379). He explained that often the crews of subcontractors did not show up. (Tr. 2380). And Reid had various complaints about the quality of the work and how it was done, though much of it would not have affected the critical path. (Tr.2378, 2383-84, 2388, 2392)

Reid discussed the installation of the handicapped ramps. (Tr. 2395). He stated that Wu’s subcontractor installed the sidewalks, curbs, and ramps without receiving approval from the City of Wilmington. (Tr. 2396). He heard that Wu had to rip out installed concrete twice because the City of Wilmington did not approve of the work. He stated that Wu should have checked with the City and its specifications before installing the concrete. (Tr. 2400). Reid stated that there was a delay in paving the blacktop around the site due to the asphalt plant closing. (Tr. 2415). The job was on schedule such that such that the paving should have been completed on time.

Reid testified that a remedial action plan was drawn up to complete some side work at the end of the project. (Tr. 2417). He said the plan involved putting in plants and putting in foundations, which should have had minimal impact. (Tr. 2418). He stated that the amount of work that had to be done was not a critical path item in that it did not have a major impact on the schedule.

Reid testified that Wu requested a substantial completion certification. (Tr. 2444). When he and other staff went out to inspect the site, “we did not consider it substantially complete or even worthy of, of a walkthrough.” Reid stated that his consultant, CCM, estimated that there was still \$367,000 in work that needed to be done. (Tr. 2453). Tevebaugh provided a complete list and there was a complete list form the “mechanical-electrical-plumbing engineer.” (Tr. 2445, 2453). Because the project was not close to complete, Reid only inspected the interior. He stated that all of the consultants contribute to the punch list. (Tr. 2446). He testified that there were a number of substantial items not completed at so July 15, 2004. (Tr. 2449). Reid stated that his office never submitted a certificate of substantial completion. (Tr. 2451). Wu was asked to get off of the site in approximately October 2004. He testified that event though the

government estimated that the cost of completion was \$26,000, not \$367,000, that did not change his mind that many of the items on the punch list were not up to standard. (Tr. 2456).

Reid acknowledged that there was an issue pertaining to the placement of additional steel columns, which required a change order. (Tr. 2471). He stated that the columns were not part of the original design. He testified that Tevebaugh did not offer DOL a credit for the additional work. He agreed that there was a “7-inch bust at the H line” which was a design error, as a result of a conflict on the drawings. However, he stated that it is the general contractor’s responsibility to verify the dimensions. (Tr. 2475).

Reid testified that Tevebaugh took the minutes of meetings. He testified that Kirby Wu often wrote to him often with objections to the accuracy of the meetings. He acknowledged that he was unaware of the process between Wu and the City of Wilmington for tying into the sewer system. (Tr. 2477). Reid was aware that Wu had to keep the water on the property. He was unaware that when the remedial action plan was finished in the summer of 2002, Wu was not instructed to put it into the schedule. (Tr. 2481). Reid stated that the environmental issues existed from the beginning to the end of the job, such that all parties involved were aware of them, if not the specifics. (Tr. 2482).

Reid said his criticism of Wu is that the site “did not seem workable to build a building.” (Tr. 2493). He testified that Wu should have controlled the site and that there are always ways to keep a site dry. He stated that the site should have been graded such that the dirt was moved so that the water flowed downhill away from the building site. (Tr. 2494). The water, according to Reid, should not have been right next to the building. Reid recalled that Wu proposed a temporary road be put in to ease the water problem, but that DOL refused to pay for it. (Tr. 2499). He stated that once DOL issued a notice to proceed, Wu should have begun work. (Tr. 2500).

Reid acknowledged that Tevebaugh committed some design errors, such as the structural steel for the bearing of the second floor and the 7-inch bust. (Tr. 2501). He did not believe Tevebaugh caused delays to the critical path. (Tr. 2504). He stated that the only critical path delay caused by DOL was the initial delay, prior to the notice to proceed, due to environmental issues. Reid testified that DOL did not charge back against Tevebaugh for design errors.

Reid agreed that due to the environmental issues at the site, the number and dollar value of COR’s was high in this case. (Tr. 2526). He stated that DOL paid Wu in an untimely basis, but also paid Tevebaugh slowly as well. (Tr. 2527). He testified that he was aware that the late payment was giving Wu problems with its subcontractors. He acknowledged that at one point, he paid Wu nothing on one invoice because he believed that Wu “had been paid more than they actually had done on the overall project and needed to, needed to get back to a reasonable point so that they were paid for the work that they did to date. (Tr. 2528). Reid stated that before verifying payment, someone from Tevebaugh goes to the job site to gauge the amount of work that has been performed. (Tr. 2529).

Laubenheim

Robert Laubenheim testified that he is a senior adviser to DOL contracts personnel, basically as an extension of the Contracting Officer, such that he performs essentially the same duties as CO Williams and her staff. He explained that he trains contract staff at DOL in FAR (Federal Acquisition Regulation) principles. (Tr. 1687, 1690) He also advises the technical and contracting DOL personnel when there are problems or claims. He became involved with the Wu project in approximately October or November 2002, when Wu appealed a lack of a decision to the Labor Board of Contract Appeals. (Tr. 1691) Laubenheim testified that he drafted the final decisions regarding Wu's two claims, and that he required assistance from the Defense Contract Audit Agency ("DCAA") with regards to the second claim.

#### Phase I Claim

Laubenheim discussed how Wu's Change Order Requests ("COR's") within Phase I were handled, noting that all of the COR's were settled, except for COR 17. (Tr. 1707) He explained that COR 17 could not be resolved because DOL took exception to the claimed increased cost to replace the masonry subcontractor. (Tr. 1708) Laubenheim found 212 compensable delay days, while Wu claimed 275 compensable delay days. He stated that DOL gave Wu the benefit of the doubt that he could not find other work, and applied the Eichleay formula to the late start of the project. (Tr. 1711)

Specifically, Laubenheim stated that DOL took exception to Wu's starting the delay days on the day after the Contract was awarded. DOL contends that it is allowed reasonable time to issue a Notice to Proceed, and contends that 30 days is a reasonable time to proceed. (Tr. 1715) Therefore, in determining Wu's award, DOL deducted 30 days from the date of award. Laubenheim stated that Wu also miscalculated the end date of the suspension period as June 30, 2002. (Tr. 1716) Laubenheim stated that Wu advised DOL that he could not begin work immediately after May 29, 2002, the day DOL deemed the suspension period to be ended. He explained that, if Wu was going to charge extended overhead, Wu should have mitigated the damages by buying pollution insurance and getting to work. As far as Laubenheim was aware, DOL did not restrict Wu from moving or working on the site. He stated that for the period of suspension, using the Eichleay formula, Wu was paid \$1,325.00 per day for 212 days, a total of \$280,900.00. (Tr. 1719) A \$100,000.00 down payment previously provided by DOL in a modification was deducted. (Tr. 1720)

Laubenheim testified that DOL received Wu's claim on October 31, 2002. (Tr. 1724) DOL did not grant any profit during the suspension, and applied a one percent bond, for which Wu was responsible to the bonding company. Later, Laubenheim discovered that 0.5 percent was the correct rate.

#### Phase II Claim

Laubenheim testified that Wu's Request for Equitable Adjustment, Phase II, dealt with the entire contract. (Tr. 1824-25) Several parties, including the Project Manager, the contract manager, supervisors, the COTR, the contract specialist, and the Contracting Officer were involved in drafting a decision. (Tr. 1822) In addition, Warner Construction Consultants and

ESCN, an architect retained specially to review Wu's claim, reviewed the technical aspects of the claim. (Tr. 1825) He stated that the claim had interface with Phase I, because Wu argued that there was a snowballing effect beginning September 28, 2001, and that "quite a few COR's that were settled" during Phase I were noted in Wu's claim.

In discussing DOL's Final Decision dated October 5, 2004 related to the claim, (Tr. 1826) Laubenheim stated that Wu's claim of superior knowledge on DOL's part was denied because DOL found that "the contractor was aware of a contaminated site through information provided it through addendums to the contract." (Tr. 1827) DOL found in its review that Wu did not diligently pursue completion of the contract work as changed in the winter of 2003. (Tr. 1829) Laubenheim declared that it takes 30 days for the government to issue a Notice to Proceed, so that construction could have begun on October 28, 2001. (Tr. 1830) In his opinion, Wu was paid reasonably for the cost of working with contamination on the site, noting that Wu was paid \$7,300,785.16, more than the original contract price of \$5,875,000.00. (Tr. 1831-32)

Laubenheim testified that the contractor was allowed 212 delay days from October 29, 2001 to May 29, 2002. (Tr. 1875) The period between the award of the contract and Notice to Proceed, approximately 30 days, should not be included in the calculation of the delay days. According to Laubenheim, DOL was entitled to "reasonable time to do their work, to get this job moving and that is to receive performance and payment bonds, review them, get them corrected, if necessary and issue a Notice to Proceed." The rate of reimbursement for the delay days was calculated by DOL as \$1,325 per day, although the DCAA computed a \$915.03 daily rate because DOL wanted to make a good faith offer as a final decision of the Contracting Officer, and a "recommendation to the client that they not adjust it for Phase I, just adjust it on Phase II." (Tr. 1876)

Laubenheim testified that there was a claim for lost profits of \$5,591,751. He acknowledged that the contractor was entitled to some lost profits and compensation with regards to the "Brendan/Trainor item." (Tr. 1878) However, he stated that there was duplication with the Contractor's lost profits claim based on his bidding no profit. Laubenheim testified that Wu expected to make a profit by negotiating and obtaining lower bids on subcontractors, such that "this is a duplication with his loss profits claim."

DOL denied subcontractor Brendan Ward's claim in the amount of \$202,998.79 due to lack of support and specificity. (Tr. 1879) DOL contends that this matter was between Wu and Ward. In addition, any delay days were deemed to be the fault of Wu, not DOL. Laubenheim stated that no cost and pricing data was provided to DOL to allow evaluation of the claim. Ward's subcontract was for \$950,000 without an escalation clause. (Tr. 1887) Laubenheim testified that Ward's COR was denied because the rates and rate adjustments were calculated based on figures before the subcontract was signed. (Tr. 1885) The Ward contract was signed in May 2002, but the bid for the job completed in 2001 used the wage rates applicable to that time. Since the work was done in 2002 and 2003, wage increases should have been added. Laubenheim testified that the delay in Ward's project was due to Wu's problems managing and executing the project. (Tr. 1886)

Laubenheim stated that Wu's record shows that he estimated the masonry work at \$1,077,129.00. (Tr. 1725) Wu had received two bids, one for \$1,243,375.00 and another for \$1,350,000.00. According to Laubenheim, Wu used Wilkerson, who bid \$1,234,000.00. Wu received subsequent bids for \$770,000.00 from Trainor and subsequently for \$950,000 from Brendan Ward. Trainor went out of business, and Wu tried to recover the difference between the two bids when he contracted with Brendan Ward. Laubenheim opined that the Trainor bid of \$770,000.00 was unreasonably low, and that it was unreasonable for Wu to accept this bid without looking at DOL's estimate, which Wu did at its peril. (Tr. 1726) DOL actually had the masonry cost estimate of Tevebaugh, its own contractor, in the amount of \$695,520. (A-283)

Laubenheim testified that some of the COR's were resolved through negotiation, but that there were disputed COR's remaining in connection with Phase II in the amount of \$44,982.34. (Tr. 1889) Laubenheim testified that the amount claimed is correct, but because the delay is the fault of Wu DOL is not liable for these COR's. (Tr. 1890, 1894) Laubenheim opined that the contract put the responsibility on Wu to provide security, and thus denied Wu's claim for \$51,000 for an on-site security guard. (Tr. 1895) Laubenheim agreed that the Contract did not specifically require a security guard on the job site, but the Contract did provide that the contractor shall "erect whatever barriers or enclosures are necessary to define the site and protect the materials, equipment, and work." (Tr. 2066) He explained that this claim was also denied in DOL's final decision because the item was delay-related.

Laubenheim testified with regards to Wu's claim for lost profits that Wu sought \$2,073.77 per day for 491 days. (Tr. 1903) DOL's position was that Wu was entitled to 37 delay days profit plus 9 additional days as provided by the Warner report. Laubenheim stated that in his experience between 8% and 10% is the norm. (Tr. 1904) In this case, Laubenheim applied a 10% profit to any direct and indirect costs allowed.

Laubenheim acknowledged that contaminated soil removal affected the critical path, but said that "Wu didn't diligently pursue this work, resulting in -- Wu partially created this problem." (Tr. 2025) He stated that there were delays aside from the 48 days he cited, but stated that those delays were "Wu's responsibility because of the manner in which he built this job." (Tr. 2026)

Laubenheim testified that there was no liquidated damages clause in the contract for this project. (Tr. 2038) No liquidated damages were assessed at any point, because Wu was cooperating by "trying to finish these add-on things at the same time he was trying to perform his own -- complete punch list work and earlier, just bring it to a substantial completion." (Tr. 2039)

### **CONCLUSIONS OF LAW AND DISCUSSION RELATED TO BREACH CLAIMS**

Appellant Contractor, Wu, contends that DOL breached its fixed price construction contract with Wu by failing to disclose superior knowledge, failing to issue the Notice to Proceed in a timely manner, issuing defective specifications, acting in bad faith and failing to cooperate in good faith, and making a cardinal change to the Contract. In the alternative, Wu claims

entitlement to equitable adjustments under the “Differing Site Conditions,” “Changes and Changed Conditions,” and “Changes” clauses of the Contract.<sup>6</sup> Additionally, Wu claims an equitable adjustment under the Prompt Payment Act because of DOL’s alleged failure to pay invoices when due. Most of the disputed Change Order Requests (“COR”s) have been separately resolved by settlement.

DOL denies that there was a breach of contract because of defective specifications, bad faith failure to cooperate, or late payments. It contends that if any such problems occurred, they were of insufficient dimension to cause a breach of the Contract. DOL contends that Wu’s slow progress was primarily due to its failure to staff the job adequately, coordinate the trades, and prosecute its work timely. DOL also contends that Wu did not seek further information or investigate as it should have before bidding the Contract, or take steps to mitigate any damages after it had entered the contract and learned of the environmental contamination, the need for remediation, and the remedial process.

### ***Failure to Disclose Superior Knowledge Claim***

Wu contends that DOL breached the Contract when it did not disclose to Wu, at the time that Wu’s bid was submitted, opened, and accepted, that the Project site for construction of the 38,000 square foot Wilmington Job Corps Training Center was contaminated and would require extensive environmental remediation, and that Wu was misled and injured by that failure. Wu contends that after the bid was submitted and accepted, DOL imposed upon Wu’s performance requirements major and extensive changes to the Contract which were necessary to implement in the course of construction the remediation to the site required by the State of Delaware.

Under the implied duty of good faith and fair dealing, the Government maintains an implied duty to disclose information fundamental to the preparation of estimates or contract performance. *Miller Elevator Co. v. United States*, 30 Fed. Cl. 662, 674 (1994). It is well settled that where the Government possesses special knowledge, not shared by the contractor, which is vital to the performance of the contract, the Government has an affirmative duty to disclose such knowledge. *Id.* (quoting *Haderman-Monier-Hutcherson v. United States*, 198 Ct.Cl. 472, 487 (1972)). If the Government fails this duty, the Government breaches the contract. *Id.*

In order to establish a Government breach by nondisclosure of superior knowledge, a contractor must establish (1) the government possesses knowledge of vital facts regarding a solicitation or contract, (2) the contractor neither knows nor should have known of the facts, by contract specification or otherwise, (3) the Government knew or should have known of the contractor’s ignorance of the facts, and (4) the Government failed to disclose the facts to the contractor. *Miller Elevator*, 30 Fed. Cl. at 675 (citing *Lopez v. A.C. & S., Inc.* 858 F.2d 712, 717 (Fed.Cir. 1988); *Petrochem Servs., Inc. v. United States*, 837 F.2d 1076, 1079 (Fed.Cir. 1988); *American Ship Bldg. Co. v. United States*, 228 Ct.Cl. 220, 228 (1981); *Sterling Millwrights, Inc. v. United States*, 26 Cl.Ct. 49, 82 (1992)). Once a party demonstrates the nondisclosure of superior knowledge, the party must still show reliance and injury by the failure to disclose. *Id.* (citing *J.A. Jones Constr. Co. v. United States*, 182 Ct.Cl. 615, 628 (1968)).

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<sup>6</sup> Because the Board finds that DOL has in fact breached the Contract, as explained below, it is unnecessary for it to address Wu’s alternative arguments under these clauses of the Contract.

In *Miller*, the Court found that the contractor had successfully established each of the elements of entitlement and could therefore recover damages. 30 Fed. Cl. 662. In that case, the contractor agreed to perform elevator maintenance services for the Government. *Id.* At the time that the parties entered into the contract, the Government failed to disclose its plans perform major renovations on the building in which the elevators were located. *Id.* at 675. The Government argued that due to publicity surrounding the anticipated renovation, constructive knowledge should be imputed to the contractor. *Id.* However, the Government had produced no evidence to support its contention that the renovation was widely publicized. *Id.* Thus, the Court found that the contractor had neither actual nor constructive knowledge of the renovation, and by withholding this information, the Government breached the implied duty of good faith and fair dealing. *Id.* at 676.

The Court further found that the contractor had satisfied its burden of proving both reliance and injury. *Miller*, 30 Fed. Cl. at 676. As to reliance, the contractor established that its monthly elevator maintenance fee did not contain a provision for the additional maintenance costs associated with the renovation of the building. *Id.* As to injury, the contractor proved that it had suffered a direct injury in the form of the significant increases in the costs of regular and routine maintenance. *Id.* Thus, the contractor had established all of the elements of entitlement and damages in its superior knowledge claim.

In the instant case, Wu satisfies all these elements of entitlement. First, it has been established that DOL possessed superior knowledge of the contamination on the work site. As the contractor points out in its post-trial brief, DOL became aware of environmental problems at the site as early as October 1997. (Wu Post-Trial Brief, p. 4). In fact, in the months preceding the opening of bids, several meetings between took place between representatives of both the federal government and DNREC to discuss the environmental contamination. (Wu Post Trial Brief, pp. 4-9). The meetings involved extended negotiations regarding the scope and timing of the environmental remediation. However, none of this information was communicated to any of the contractors preparing bids. (Wu Post Trial Brief, p. 9).

DOL does not contend that it did not have information relating to the contamination of the site; rather, it argues that it did not have knowledge relating to the extent of the contamination. (Gov't Reply Brief, p. 2). However, this argument does not defeat the Wu's non-disclosure claim. While the extent of DOL's knowledge as to the severity of the contamination might be debatable, the fact remains that DOL had knowledge that the contamination would have an impact on the construction of the facility, but did not inform the contractors of this knowledge. In its post-trial reply brief, DOL states that "[w]hile the evaluations did disclose some evidence of environmental concerns, the Department believed that these concerns could be dealt with during the construction phase of the project." This statement indicates that DOL knew that the "environmental concerns" would have some impact on the construction project, yet it consciously chose to withhold this information from the bidders. *See L.W. Matteson v. United States*, 61 Fed. Cl. 296, 316-17 (2004) ("The government's liability for failure to provide information arises from a *conscious omission* to share superior knowledge it possesses . . . .") (quoting *So. Cal. Edison*, 58 Fed. Cl. 313, 325 (2003)). In fact, when Wu

asked about the contamination in July 2001 at the second pre-bid conference, Wu was told that the environmental issues had been “taken care of” and were “not in [Wu’s] bid.” Tr. 200.

This case is not like *Servidone Const. Corp. v. United States*, 19 Cl. Ct. 346, 375 (1990), where the Claims Court found that the Government was not liable for nondisclosure of superior information because the Government did not appreciate the uniqueness of the soil quality of the work site. Here, DOL was informed on several occasions of the possibility that the extent of the contamination would be more than “minor” and had definite knowledge that the contamination had not been “taken care of” as of July 2001. Moreover, DOL was repeatedly informed by representatives of the Delaware government that the necessary state proceedings would take much longer than DOL obdurately estimated.

Instead, this case is similar to *Hardeman-Monier-Hutcherson*, 198 Ct. Cl. 472, 458 (1972), where the Government possessed vital information concerning the severe weather and sea conditions at a site at which it had hired the contractor to build a pier. There, the Court of Claims found that the non-disclosure of this information constituted a breach of contract. *Id.* at 1372. This case is also like *Miller*, 30 Fed. Cl. 662, where the Government failed to disclose its plans to have major renovations done on a building in which the contractor was hired to maintain the elevators. There, the Court found that the withholding of this information also constituted a breach of the contract. *Id.*

The second element, that the contractor neither knows nor should have known the facts, is also established. In its post-trial reply brief, DOL concedes that “no evidence of contamination from industrial activity was identified visually during the work site.” (Gov’t Post-Trial Reply Brief, p. 2). This evidence supports that concession. Thus, Wu could not have known, by simply visually inspecting the site, that environmental contamination existed. Moreover, as explained above, when asked about the contamination, DOL informed Wu that it was “taken care of” and was not part of Wu’s bid. It is not reasonable to charge Wu with knowledge, either actual or constructive, of the impact that the contamination would have on the Project, particularly where DOL made such representations.

The third element, that DOL knew or should have known of the contractor’s ignorance of the facts, is also satisfied by evidence of DOL’s representations to Wu at the July 2001 pre-bid conference and in response to Wu’s RFIs. Certainly, by representing that the contamination had been “taken care of,” DOL intended that Wu would bid only for construction of the Project, and the bid would not include remediation of the environmental contamination. Thus, the Board finds that DOL knew of Wu’s ignorance of the fact that the contamination clean-up would constitute a major portion of the work under the Contract.

Finally, the fourth element of a nondisclosure of superior information claim, that DOL failed to disclose the facts to the contractor, is established. DOL does not suggest in its post-hearing briefs that it did so, and the evidence establishes that DOL affirmatively told Wu that the contamination had been “taken care of.” Thus, the Board finds that DOL did not disclose information that the contamination would be a major part of the construction.

Additionally, the Board finds that Wu both relied on DOL's nondisclosure and suffered injury as a result. Wu's initial bid did not include amounts that were expended in the actual clean-up process. Although most of these amounts were later recovered in substantial part in the form of change orders, none of the subsequent modifications, with the exception of one, included amounts for profit.<sup>7</sup> Thus, Wu suffered a loss of profits as a result of this breach.

Because Wu has satisfied all the requisite elements for a nondisclosure of superior information claim, the Board finds that DOL breached the Contract and Wu is entitled to recover damages, including lost profits.

### ***Delay in Issuing the Notice to Proceed***

Wu contends that DOL's failure to issue a Notice to Proceed until May 28, 2002 constituted a breach of the Contract for which Wu is entitled to recover damages. In support of its argument, Wu relies on *Ross Engineering Co., Inc. v. United States*, 92 Ct. Cl. 253 (1940) and *Marine Constr. & Dredging, Inc.*, ABSCA, 95-1 BCA ¶ 27,286 (1994). Both these cases hold that where a contract does not provide a date for the issuance of the Notice to Proceed, the Government is under an implied duty to issue it within a reasonable time. See *Ross Engineering*, 92 Ct. Cl. 253; *Marine Constr. & Dredging*, ABSCA, 95-1 BCA ¶ 27,286.

However, Wu's reliance on these cases is misplaced. The Suspension Clause of the Contract provides

The Contracting Officer may order the Contractor, in writing, to suspend, delay or interrupt all or any part of the work of this contract for the period of time that the Contracting Officer determines appropriate for the convenience of the Government . . . If the performance of all or any part of the work is, for an unreasonable period of time, suspended, delayed, or interrupted (1) by an act of the Contracting Officer in the administration of this contract . . . an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) necessarily caused by the unreasonable suspension, delay or interruption . . .

(Ex. 208, M27). Thus, a delay or suspension of work, even for an unreasonable period of time, does not constitute a breach of the Contract. Instead, if the work is suspended or delayed for an unreasonable period of time, the contractor is entitled to compensation in the form of an equitable adjustment.

In *Ross Engineering*, there is no mention of a clause in the contract similar to the suspension clause found in this Contract. Therefore, although the Court found that the government had breached the contract by failing to issue the Notice to Proceed within a reasonable time from the signing of the contract, the case is not analogous to the instant case. Further, although the Armed Services Board of Contract Appeals (ABSCA) found that the delay

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<sup>7</sup> As discussed above, although Wu submitted change order requests, some of the expenses related to the clean-up process were not paid by DOL.

in issuing the Notice to Proceed in *Marine Construction* was unreasonable, the issue was not whether the government had breached the contract by delaying the issuance, but whether the contractor was entitled to an equitable adjustment as a result of the delay.

In the instant case, Wu has been compensated for the initial delay in the issuance of the Notice to Proceed by an equitable adjustment. An unreasonable delay is implicit, though the precise extent of the delay is disputed and the compensation is subject to possible further adjustment. In any case, no breach of the Contract occurred because of the delay in the issuance of the Notice to Proceed.<sup>8</sup>

### ***Defective Specifications***

Wu contends that DOL breached the Contract by issuing defective specifications. The primary defect claimed was that the specifications to the Contract gave no indication that the site was contaminated and would require extensive remediation, nor did they indicate the manner of the remediation. Specifically, Wu contends that the specifications were defective to the extent that they contained no mention of the extensive communications between DOL and DNREC, the substantial environmental studies that had been performed revealing soil and groundwater contamination, or the substantial amount of additional work that would be required to eliminate the environmental contamination under the supervision of the DNREC.

Wu contends that defective specifications caused the start of the Project to be delayed at the outset in order to assess the contamination, satisfy applicable regulatory requirements, and develop a process for dealing with the contamination. This process included such activities as development of a Health and Safety Plan, training of workers to qualify them to work on a contaminated site, and construction of a building on a contaminated site. Construction under these conditions required, for example, special procedures for water retention to avoid contaminated run-off. None of these performance requirements were the subject of the specifications upon which the Project was bid.

Wu also contends that the 193 RFIs, 154 Clarification Sketches, and 29 contract modifications, which were attributable in significant part to the contamination cleanup process, and which increased the total price by \$1,425,000 and extended the contract performance by 2 1/3 years after it started, were the consequences of the defective specifications.

The Contracting Officer does not directly or separately respond to this claim, which can be associated with the issues of cardinal change, nondisclosure of superior knowledge, and differing site conditions.

Where the government orders a structure to be built, and in doing so has prepared the project's specifications prescribing the character, dimension, and location of the construction work, the government implicitly warrants, nothing else appearing, that if the specifications are complied with, satisfactory performance will result. *J.D. Hedin Constr. Co. v. United States*, 347 F.2d 235, 241 (Ct. Cl. 1965). However, an experienced contractor cannot rely on government

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<sup>8</sup> Although the delay in the issuance of the Notice Proceed is not, in and of itself, a breach of the Contract, as explained below, it was a consequence of the initial breach, the failure to disclose superior knowledge.

prepared specifications where, on the basis of government furnished data, he knows or should have known that the prepared specifications could not produce the desired results. *Id.* When defective specifications are inaccurate and delay completion of the contract, the contractor is entitled to recover damages for the Government's breach. *American Line Builders, Inc. v. United States*, 26 Cl.Ct. 1155, 1193 (1992).

Both the Federal Circuit and the Federal Court of Claims have decided cases in which the defective aspect of the specifications was the absence of any specification dealing with an unforeseen condition. *See Control, Inc. v. United States*, 294 F.3d 1357 (Fed. Cir. 2002); *Conner Bros. Const. Co., Inc. v. United States*, 65 Fed.Cl. 567 (2005). In *Control*, 294 F.3d at 1359, the contractor sued the Government under both differing site conditions and defective specification theories based on its discovery of quicksand on the job site. The Court treated the two claims as one because they were so closely intertwined. *Id.* at 1362. The contractor argued that because there were no specifications in the contract dealing with the quicksand, it was entitled to either an equitable adjustment or damages for breach. *Id.* The Court found that because the contractor failed to review a report incorporated into the contract, it had failed to review all of the contract documents concerning subsurface conditions. *Id.* at 1364. Therefore, recovery was precluded because it could not show that it reasonably relied on the Government's description of soil and water conditions. *Id.*

Similarly, in *Conner Bros.*, 65 Fed.Cl. at 683, the Claims Court found that because the contractor had failed to examine two drawings accompanying the contract, it could not recover on a defective specifications theory. In that case, the contractor bid on a contract for ductwork. *Id.* at 662. During the course of its performance, the contractor found that in order to complete the job, it was required to demolish parts of the existing ductwork. *Id.* Because there were no specifications in the contract dealing with the demolition of the existing ductwork, the contractor argued that the specifications were defective and requested compensation for the extra work related to the demolition. *Id.* at 683. The Claims Court denied the contractor's claim, finding that, had the contractor reviewed the drawings, it would have noticed the omission of the demolition specification and would have resolved the issue. *Id.* at 683-84. Because it did not, it could not prove reliance on the defective specifications and recovery was therefore precluded. *Id.* at 684.

DOL contends that it did not breach the Contract because Wu was actually on notice of the environmental contamination and failed to sufficiently investigate and inquire. However, this argument is not persuasive. In fact, Wu made extensive inquiries when it analyzed the Contract prior to bid. The responses which Wu received from DOL's representatives were incomplete and misleading with respect to the contamination and its remediation, particularly considering the state of DOL's knowledge and its plan, undisclosed to Wu, to issue change orders after the Contract had been accepted, to deal with the site contamination. *See Clearwater Constructors, Inc. v. United States*, 71 Fed.Cl. 25, 32 (2006) (holding that defective specifications must mislead the contractor). Moreover, Wu's principals did in fact visit and inspect the site. The record makes clear that such a site visit and inspection would not have disclosed, and did not in fact disclose to various qualified observers, the nature and the extent of the contamination with which Wu would have to deal. *See J.D. Hedin*, 347 F.2d at 241. Thus, the Board finds that Wu has satisfied its burden of proving a breach of the Contract vis-à-vis defective specifications.

### ***Bad Faith Claim***<sup>9</sup>

Wu contends that DOL breached the contract by acting in bad faith in denying CORs without explanation, issuing a change directives for a much lower price, and then delaying the issuance of modifications for many months; agreeing to pay for extra work and then denying the claim after the work was completed; and waiting until two months prior to trial to settle disputed claims for extra work.

In its post-hearing brief, DOL cites *Kalvar Corp. v. United States*, 543 F.2d 1290 (Ct. Cl. 1976). In *Kalvar*, the court held that

An analysis of a question of Government bad faith must begin with the presumption that public officials act “conscientiously in the discharge of their duties.” The court has always been “loath to find the contrary,” and it requires “well-nigh irrefragable proof” to induce the court to abandon the presumption of good faith dealing. . . . In the cases where the court has considered allegations of bad faith, the necessary “irrefragable proof” has been equated with evidence of some specific intent to injure the plaintiff.

543 F.2d at 1302 (quoting *Librach v. United States*, 147 Ct. Cl. 605, 612 (1959); *Knotts v. United States*, 121 F. Supp. 630, 631 (Ct. Cl. 1954)) (citations omitted).

When government officials contract out not only contract management, as DOL has done here with Dewberry, but essentially defer totally to a contract management contractor the role of decisionmaker, government officials risk losing the benefit of the presumption that *Kalvar* confers. As we stated in *Midwest Envir. Controls, Inc.*, LBCA, 93 BCA ¶ 12 (1996), “[t]he Contracting Officer cannot insulate himself from the operating level by lawyers of managers, architects, and consultants, then disclaim responsibility for the actions of . . . his agents . . . .” Here, as in *Midwest*, our reading of the entire record persuades us that the Contracting Officer was removed from the project by layers of consultants and was unlikely to act contrary to the advice of O’Malley, who the record shows was, in turn, unlikely to act contrary to the advice of his Dewberry consultants. We have, accordingly, examined the record for evidence of bad faith, not only by DOL, but by DOL consultants whose actions, under the particular circumstances evident in this record, may be imputed to the Contracting Officer. We conclude that DOL’s contract management consultants misjudged, mishandled, and misguided the project, not in bad faith, but rather as a consequence of inexperience, inflexibility, and a lack of appreciation for problems associated with constructing a job corps facility on an environmentally contaminated site. The turmoil that resulted is evident in this record, but bad faith by the non-governmental contract managers or the government officials has not been established.

### ***Failure to Cooperate in Good Faith Claim***

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<sup>9</sup> In its briefs, Wu seems to equate the prohibition against bad faith with the duty to act in good faith. As explained below, there are two separate concepts. Therefore, the Board will address the bad faith analysis and the good faith analysis separately.

Wu contends that DOL breached the its implied duty to cooperate in good faith by denying COR's without explanation, issuing change directives for a much lower price, and then delaying the issuance of modifications for many months; agreeing to pay for extra work and then denying the claim after the work was completed; and waiting until two months prior to trial to settle disputed claims for extra work.

Every contract includes the implied covenant of good faith and fair dealing. *Centex Corp v. United States*, 935 F.3d 1283, 1304 (Fed. Cir. 2005); *Orlosky, Inc. v. United States*, 68 Fed.Cl. 296, 311 (2005). Two closely related aspects of the covenant of good faith and fair dealing are 'the duties to cooperate and not to hinder the contractor's performance.'" *Orlosky*, 68 Fed.Cl. at 311 (quoting *C. Sanchez & Son, Inc. v. United States*, 6 F.3d 1539, 1542 (Fed.Cir. 1993)). Under the duty to cooperate, the Government must do whatever is necessary to enable the contractor to perform. *Id.* (quoting *Lewis-Nicholson, Inc. v. United States*, 213 Ct.Cl. 192, 550 F.2d 26, 32 (1977)). The specifics of the Government's duties under this covenant are dependent upon the particular circumstances of the case. *Id.*

In the instant case, the record is replete with instances in which DOL did not act with the requisite good faith. Specifically, DOL, in not taking the necessary steps to ensure that Wu was paid for its work on a timely basis, created a situation in which Wu's relationships with its subcontractors became very contentious because Wu was unable to pay them. In some cases, as a result of the non-payment, the subcontractors walked off the job.

In support of its contention that DOL failed to cooperate in good faith, Wu points to Appellant's Exhibit 215, which is comprised of various pieces of correspondence between Wu and O'Malley, Banks, Tevebaugh. These letters and e-mails reveal that in many cases, Wu did not receive payment for its monthly progress invoices until 45 or more days after the invoice was initially submitted to Tevebaugh. The main reason for the delay was that after receiving the invoices for review, Tevebaugh did not forward them to DOL in a timely manner. Banks was advised several times of this problem; however, he did nothing to alleviate it, as evidenced by Wu's correspondence pertaining to invoices for work done in subsequent months which were still not being paid in a timely fashion.

Moreover, Exhibit 215 reveals that both Tevebaugh and DOL were aware of the problems that the delay in payment were causing between Wu and its subcontractors. In addition to the multiple warnings that Tevebaugh and DOL received from Wu, Comfort Zone, one of Wu's subcontractors, sent inquiries regarding payment to Tevebaugh, and Wu forwarded Comfort Zone's inquiries to Banks. However, it appears that no attempt was made by either party to speed up the approval and payment process.

In addition, the correspondence in Exhibit 215 reveals that in several instances, Wu would submit a pay request for a certain amount; however, when the late payment was received, it would be for substantially less than what Wu requested and would not be accompanied by any explanation as to why the amount was reduced.

The Board finds that the evidence contained in Appellant's Exhibit 215 is sufficient to establish a breach of DOL's duty to cooperate in good faith. By failing to pay Wu's invoices in a timely fashion, despite several warnings that the late payments were causing a strain in the relationship between Wu and his subcontractors, DOL certainly was not doing "whatever is necessary to enable [Wu] to perform." See *Orlosky*, 68 Fed.Cl. at 311. In fact, by delaying payment, DOL was affirmatively impeding Wu's performance. Thus, DOL breached its duty to cooperate in good faith, and Wu is entitled to recover damages as a result of that breach.<sup>10</sup>

### ***Cardinal Change Claim***

Wu contends that the numerous significant changes beyond the scope of the Contract which were necessitated by the environmental contamination at the site of the Project and by the design errors/changes by DOL caused a "cardinal change" to the Contract. Elements alleged by Wu to comprise the cardinal change are an increase in contract costs from \$5,875,000 to approximately \$7,300,000, an increase of approximately 24%, and an extension of completion of construction of the job corps center from one year to three years. Further, Wu points to the fact that there were over 100 changes to the Contract, which was modified 29 times, for a total price increase of approximately \$1,425,000 and \$230,000 of disputed costs. Thus, according to Wu, the Contract changed dramatically, inasmuch, for example, as Wu was forced to work through and around the environmental contamination, keep all water on site, segregate and stockpile soils, remove more than 11,000 cubic yards of soil off site, rearrange work schedules of subcontractors to address the environmental issues, all of which involved extra work and extended the time required for performance.

The result, Wu contends, was a Project very different from the construction project that Wu bid, one which called for changes outside of the scope of the contract which, therefore, were not governed by the Changes Clause, and one which did not call for essentially the same performance as that required by the contract when originally awarded.

The Contracting Officer's response to the claim of cardinal change is a denial of any change to the scope of the work project under this Contract and that the design and other changes to the Contract which related to the substantial environmental contamination that was not initially part of the contract between Wu and DOL neither caused delay on the Project nor substantially expanded the scope of Wu's work. The Contracting Officer relies upon the basic standard that the modified job was essentially the same work as the parties bargained for when the contract was awarded and that the contract called for the construction of a building of particular description, and with minor changes, the final construction substantially conformed to the initial plans, citing, *inter alia*, *Wunderlich Contracting Co. v. United States*, 351 F.2d 956, 966, 173 Ct.Cl. at 194 (1965), and *Air-A-Plane Corp. v. United States*, 187 Ct. Cl. 269, 408 F.2d 1030 (1969).

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<sup>10</sup> The Board notes that Ron McIntyre, the Dewberry Project Manager who replaced Mark Banks late in the Project, testified that he found Kirby Wu to be easy to work with and that McIntyre and Wu were able to engage in a healthy dialogue when they had disagreements. The Board finds the relationship between Wu and McIntyre to be in stark contrast with that between Wu and Banks. This finding further supports the Board's decision that DOL, through its agent Dewberry, did not act in good faith in its relationship with Wu.

The Wunderlich rule relied upon by the Contracting Officer is the basic rule for determining whether a cardinal change has occurred. It establishes that, though the contractor's performance may be lengthier and costlier than anticipated at the time the bid was submitted, if the contractor constructed essentially the same project as that described in the contract, there is no cardinal change of the contract. The question is whether the changes materially altered the nature of the bargain into which the parties had entered or caused the contractor to perform a different contract. *Wunderlich Contracting*, 351 F.2d at 966, 173 Ct.Cl. at 194. As the court in *Air-A-Plane* explained,

The basic standard . . . is whether the modified job "was essentially the same work as the parties bargained for when the contract was awarded. Plaintiff has no right to complain if the project it ultimately constructed was essentially the same as the one it contracted to construct." Conversely, there is a cardinal change if the ordered deviations "altered the nature of the thing to be constructed."

*Air-A-Plane*, 408 F.2d at 1033 (citations omitted).

*Wunderlich* involved a contract to build a reinforced concrete hospital building on a certain site, according to particular specifications, and that is what was built. Except for the substitution of materials, it was the building that had been contemplated when the contract was awarded, and so the court found no cardinal change. *Id.* *Air-A-Plane* involved a contract for the manufacture of smoke generators which involved a very large number of unexpected changes which were disruptive of the contractor's production, and the court found cause to inquire whether the modifications involved resulted in a cardinal change under the applicable standards which it articulated as

"a matter of degree varying from one contract to another" and [which] can be resolved only 'by considering the totality of the change and this requires recourse to its magnitude as well as its quality'. *Saddler v. United States*, *supra* note 2, 287 F.2d at 413, 152 Ct.Cl. at 561, see *J.D. Hedin Constr. Co. v. United States*, *supra* note 2, 347 F.2d at 257, 171 Ct.Cl. at 105, 106. "There is no exact formula . . . Each case must be analyzed on its own facts and in light of its own circumstances, giving just consideration to the magnitude and quality of the changes ordered and their cumulative effect upon the project as a whole." In emphasizing that there is no mechanical or arithmetical (sic) answer, we have repeated that "(t)he number of changes is not, in and of itself, the test."

*Air-A-Plane Corp.*, 408 F.2d at 1032-33 (citations omitted). In prescribing a nonexhaustive list of issues to be tried in determining whether a cardinal change had occurred, the court identified the timing of the changes and the extent of the engineering, research, and development the plaintiff had to do as relevant, thus suggesting that the process of manufacture as well as the configuration of the ultimate product were relevant to the issue of cardinal change. *Id.* at 1037.

The Board considers a basic issue in this case to be whether the environmental contamination component of work which was added after the contract was let was so pervasive and substantial and consequential a change and beyond the scope of the contract so as to comprise a cardinal change to the contract, even though there is no dispute that the physical building itself, as ultimately built, did not differ substantially from that specified in the contract. No cases have been cited, and the Board has found none, where extensive contamination of a construction site or other environmental problems have required extraordinarily extensive revisions to a construction contract. The language of the case law, however, harbors some latitude for recognition of a cardinal change reflected in changes beyond the physical construction of the building.

The Board concludes that if ever there were such a case, this case, under all the circumstances, would qualify. Nevertheless, in a case where the contractor's experience was remarkably similar to Wu's because of faulty government-drawn specifications for installation of concrete piles, spread footings, and a sewer system inappropriate for erroneously assessed subsurface conditions, the Court held that the series of changes cumulatively did not result in alteration of the physical results in the perspective of the overall project, notwithstanding unreasonable disparity in the time and cost of the changes, and so there was no cardinal change of the contract. Rather, the faulty specifications were held to cause a breach of the government's implied warranty, nothing else appearing, that if the specifications are complied with, satisfactory performance will result. *See J.D. Hedin*, 347 F.2d at 171.

Similarly, in *Servidone Constr. Corp. v. United States*, 19 Cl.Ct. 346, 376 fn. 9, (1990), the Court held that a cardinal change could not be established under the *Air-A-Plane* standard because the contractor was required to complete a dam by excavating, processing, and placing approximately 10,000,000 cubic yards of fill material taken from borrow areas on site, and although it was considerably more difficult than could reasonably have been anticipated because of the tough quality of the soil, the contractor was called on to do "essentially the same work." The Board finds in the instant case that *Servidone* and *J.D. Hedin* are distinguishable, because quantity or difficulty in doing the specified contractual work such as earthmoving was not the gravamen of this case. Rather, fundamentally different environment and site conditions for construction of a building for use as a training facility were imposed upon the Contractor, with human health and safety concerns to be resolved, which radically expanded the contract scope by the specified site remediation process under the oversight and control of the Delaware environmental authority. The Board holds in this regard that, as a result, DOL breached the Contract by creating a cardinal change.

#### **FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DISCUSSION RELATED TO DELAY CLAIMS**

In resolving Wu's Delay Claims the Board has concluded that neither fairness nor accuracy is served by dissecting the individual disputes, even if it were practical, which persisted throughout the entire Project. There are too many such disputes and the truth in the details too elusive. Wu's burden of proving detailed damages proves to be virtually impossible, conceptually or practicably. Therefore, in evaluating Wu's delay claims, and the Government's responses, the Board has relied on certain major considerations which compel its findings that

the fault for the delays, directly or indirectly, for the most part lies with DOL because of the overarching breaches of the Contract.

The Project and its problems are *sui generis*, so that the approach the Board has felt compelled to take in this case is probably not precedential. The Project and Contract was conceived and executed in circumstances of pervasive breach of the Contract beginning with the solicitation, opening of the bids and award of the Contract, without disclosure to the bidders or the Contractor of the known contamination or the contemplated means and requirements of remediation. None of the responsible individuals from DOL or its operational contractors had experience with such contamination or the remediation process. Wu disclaimed such experience, and indicated that it would not have bid the Contract had it known the site was contaminated.

The Board concludes that, despite his limited qualifications and inexperience with contaminated site remediation, Banks, Dewberry's designated Project Manager until he was relieved in the Spring of 2004, wielded *de facto* authority over virtually all of the operational responsibilities of the Contracting Officer because of the management structure relied upon by DOL. The DOL Contracting Officers were remote from the Project, and dependent upon Banks because of their remoteness and disparate responsibilities. In addition to Steenbergen, initially, and Williams subsequently, there were other persons who wielded authority such as Monica C. Gloster, who signed the two partial NTP's as CO. The Board concludes that Banks' relatively unsupervised management of the Project as DOL's operational agent was not effective, was misdirected, and was prone to serious and costly error. Wu's recourse to the higher authority of O'Malley, the COTR, who was also remote and involved with a large number of other projects, and the CO, Williams, in dealing with him was slow and time consuming, and problematical, to the extent that higher authority was dependent upon Banks.

Hindsight makes clear that an enormously costly error by Banks and those who relied upon him was the decision to reject the advice of EA and Wu and others to clean up the contaminated site prior to construction and to force Wu to work through the contamination by means of ad hoc Change Orders. The record establishes that the Job Corps Center building was substantially completed in almost three years instead of less than a year as planned, and DOL incurred over \$3.3 million in additional costs, plus the expensive process of sorting out the disputes over blame. The Board find's DOL's categorical refusal to allow additional time for performance or delay days, except for the 33 or 34 days allowed for the suspension of time required to respond to the first encounter with contamination soils, and three weather delay days, untenable. The Board also finds DOL's attribution of the delay to Wu's mismanagement and inability to coordinate its subcontractors, charging Wu with responsibility for "means and methods" under the circumstances, disingenuous. There is ample proof of record that the site conditions involving contaminated soils, accumulating contaminated water, and obstructionism and delays in resolving issues and obtaining payment for contract work and Change Orders were attributable to DOL's errors and omissions.

There is no evidence which establishes how much time or treasure it would have required to have remediated the site prior to construction, so that Wu could have performed the contract as bid. EA's early recommendation of contaminated soil removal from the Project site for an estimated sum was rejected out of hand by DOL. However, the Board has no difficulty in

assuming that such preliminary remediation prior to the commencement of construction would have involved substantial cost and time, though probably far less than what actually occurred. The Board also finds Wu's purported and consistent inability to estimate the time required for performance of Change Orders, and reservation of rights to claim delay after the fact, entirely reasonable because of the proof of the conditions under which he worked and his difficult relations with DOL. Therefore, the Board rejects DOL's denial of delay time and look to such proof as Wu has offered to explain and justify the delays which occurred in reaching Substantial Completion of the Project.

Wu Is Entitled to Compensation for the Initial Delay  
Under the Phase I Claim from October 6, 2001 to June 30, 2002

Wu claims compensation pursuant to its Phase I Claim for 63 additional days of delay preceding the unrestricted start of Project construction based on a compensable suspension of work under the Contract. Wu contends the delay from the unreasonably delayed NTP amounted to 275 days from September 28, 2001, when the Contract was awarded after the August 16, 2001, bid opening, through June 30, 2002. Wu mobilized its subcontractors and actually started construction on July 1, 2002. (Appellant's Statement of Costs and Lost Profits, A-308) The Contract provided for "substantial completion" in 300 calendar days after the NTP; full completion in 356 calendar days. (Tr. 248; G-208) In her final decision of May 13, 2004, the CO awarded Wu 212 delay days from October 29, 2001, the date that DOL issued the first partial NTP, through May 29, 2002, when DOL issued the full NTP. The delay damages, including extended home office overhead, which DOL has paid to Wu, amounted to \$280,900 at the calculated rate of \$1,325 per day for 212 days. (G-2, AF-I, B4)

The CO declared in her Final Decision that DOL was entitled to take a reasonable time to expect submission of the bonds, to review the bonds, and to prepare the NTP, and, therefore, to issue the first NTP on October 29, 2001. DOL asserted no other justification for a delay of thirty days after the contract award before it issued the first partial NTP. Wu, on the other hand, contends that most government contracts begin construction in thirty to forty-five days after bid opening, which occurred on August 16, 2001, in this case. Wu contends, therefore, that construction should have begun approximately September 28, 2001, and that the suspension of work and resulting delay claim should be calculated from that date. Wu contends that DOL's knowledge that construction could not begin for many months, would implicitly justify a determination that the suspension of work began immediately after the Contract was awarded. Wu contends that DOL's thirty day delay after the contract award and approximately two and a half months after its bid was opened is an unreasonable and excessive delay, and that the period between September 28 and October 29, 2001, should subject to compensation as part of Wu's Phase I Claim.

After the Final Plan of Remedial Action was approved by DNREC in May 2002, DOL issued the full NTP on May 29, which was confirmed as received by Wu on May 30, 2002. At that time there were two open COR's which had not been approved by DOL. One sought payment for hazardous monitoring by a third party contractor, as required by the applicable Health and Safety Plan, and the other sought payment for pollution insurance. (Tr. 288-89; G-26; G-218, Tab 1) After DOL issued a Construction Change Directive in response to those two

COR's on June 17, 2002, Wu notified its subcontractors and began work on July 1, 2002. (Tr. 290-91) Wu contends that it could not begin construction on the site until the hazardous monitoring and pollution insurance were provided for. These requirements were attributable to DNREC's oversight of the contamination cleanup. Wu contends that, because there was no advance warning that it would receive the NTP on May 29, 2002, it could not start work immediately after eight months delay, despite having the job trailer on site, the utility hookups, and shop drawing submittals, which Wu contends actually provided no significant time saving. Wu thus accounts for the month between receipt of the NTP and the start of construction. (ARBr. at 14)

The CO contends that to include as compensable delay the month before the first NTP was issued and a month after the full NTP was issued was unreasonable and, as a consequence, allowed only 212 compensable delay days in relation to Wu's Phase I Claim. The CO asserts that it was improper for Wu to refuse to do any work until June 30 after the NTP was issued on May 29, 2002. Laubenheim testified that Wu had a "nice advantage" at the end of the delay period from having issued RFI's and shop drawings for review. He also noted that DOL paid Wu for a superintendent who was in the office but could not be assigned to other work, and so was deemed a government obligation. DOL concedes that the two COR's cited by Wu were not approved until June 17, 2002, but contends that Wu should have mitigated potential damages by negotiating an earlier start date with applicable subcontractors and proceeded to work on the Project, rather than waiting for written correspondence from DOL. DOL does not explain how Wu could have negotiated earlier start dates when it had no advance warning of the NTP, and could hardly have predicted when DOL would actually approve the pending COR's some two weeks after the NTP. The Board holds that Wu should be compensated for delay from May 29 through June 30, 2002, the day before Wu actually started work.

Warner simply declared that the delayed start of critical footing work from June 19, 2002, as indicated on the adjusted Baseline Schedule, to "early July" "was due to Wu not starting the work timely." In fact, after an eight month delay, Wu could not begin work when it received the NTP because it had two open COR's for hazardous third party monitoring by an environmental contractor as required by the Health and Safety Plan and for pollution insurance, both reasonably and properly viewed as essential to Wu's safe and efficient operations. When DOL issued a CCD to proceed with the two open COR's by letter dated June 17, 2002, Wu mobilized its subcontractors and commenced work on July 1, 2002. (Tr. 288-91; G-218 at 8; A-274) Warner's treatment of this problem, besides rendering a misassessment of blame, impairs Warner's credibility, because it fails to account for all relevant factors.

The Board finds that DOL caused or was responsible for this delay, and not Wu. The Board finds further that after eight months of delay for which DOL was entirely to blame, and more than two weeks of unpredictable additional delay while HUD resolved the problem of the two open and essential COR's, after the NTP was issued, apparently without advance notice upon which Wu could reasonably rely, Wu was not at fault for taking two weeks to mobilize its contractors to begin work on the site.<sup>11</sup> Because of the prior eight month delay caused by DOL,

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<sup>11</sup> Warner and DOL contend that the two partial NTP's were advantageous to Wu because they allowed Wu to engage in certain time saving activities. Warner faults Wu for its failure to exploit the opportunity to engage its

DOL's failure to have processed the essential COR's timely, and the unpredictable delay in issuing the CCD related to those COR's, the Board concludes that the suspension of work for which Wu has been partially compensated extended through June 17, 2002, when the CCD was issued, to July 1, 2002, to include the approximately two weeks Wu required in order to mobilize after eight months in suspended status.

The Board also finds unpersuasive DOL's rationale for not including most of the initial delay within the compensable period of suspension of work. Thirty days after the contract was awarded DOL issued the partial NTP, which it used to establish the beginning of the suspension of work and compensable delay. The Board concludes that thirty days in this instance was arbitrary and unreasonable. DOL had already delayed nearly forty-five days after the bids were opened to award the contract to Wu. A "partial Notice to Proceed" signed by Monica C. Gloster as Contracting Officer, as opposed to Steenbergen or Williams, is not a creature of the Contract, and is, at best, of dubious legal status and effect. It tends to confirm, however, that Wu was on standby, but also suggests that DOL knew or should have known that an NTP would not issue for some indeterminate period. However, Wu is not entitled to claim compensable delay before it had submitted its bonds in proper form on October 5, 2001.

In determining what would be a reasonable time for issuance of the NTP, the Board relies for guidance upon *Ross Engineering Co., Inc. v. United States*, 92 Ct.Cl. 253, 1940 WL 4077 (Ct.Cl. 1940), which involved an unreasonable delay in issuing a notice to proceed when a contractor was ready to begin work in three or four days after execution of the contract to commence construction of a post office building to be completed within 300 days. The court held that the notice to proceed should have been issued twelve days after the contract was executed. A performance bond had been provided the day after the contract was executed. However, subsequent to the award of the Contract to Wu on September 28, 2001, Wu resubmitted requisite evidence of insurance and bonds on October 5, 2001, a week after the award, because of a clerical error. The Board thus holds that Wu's compensable delay under its Phase I Claim should begin October 6, 2001, eight days after the contract award and one day after the acceptable bonds were provided. DOL has advanced no reasonable justification for a later date.

The Board holds that Wu is entitled to Phase I Claim for 24 additional days of excusable and compensable delay due to suspension of work from October 6 through 29, 2001, and 32 additional days of excusable and compensable delay due to suspension of work in May and June 2002, or a total of 56 additional days of excusable and compensable delay.

#### Delays Claimed After Commencement of Construction

Wu delineates nine particular delays to the critical path of the Project after construction began on July 1, 2002 pursuant to the full NTP. It is settled law that compensable delay must be

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subcontractors within the applicable bid guarantee periods. This is a false premise, however, because, as Wu points out, it did enter into a masonry subcontract with Trainor on November 12, 2001, before it knew there would be a significant delay before start of the Project, which Trainor abrogated because of the extent and unpredictability of the delay, forcing Wu to engage two substitute masonry subcontractors. (Tr. 274-75; A-42)

proved to have adversely affected the Critical Path of the Project. See *Sunshine Constr. & Eng'g, Inc. v. United States*, 64 Fed. Cl. 346, 368 (Fed. Cl. 2005); *Mega Constr. Co., Inc. v. United States*, 29 Fed. Cl. 396, 425 (Ct.Cl. 1993); *Wilner v. United States*, 23 Cl.Ct. 241, 244 (Cl.Ct. 1991); *G.M. Shupe, Inc. v. United States*, 5 Cl.Ct. 662, 728 (Cl.Ct. 1984); *Haney v. United States*, 672 F.2d 584, 595 (Ct.Cl. 1982). The Critical Path is recognized as being subject to change and updating as a project progresses. See *Fortec Constructors v. United States*, 8 Cl.Ct. 490(1985).

In general, Wu's proof related with particularity to the effects of events and circumstances upon the Critical Path. Wu correctly contends that DOL's proof was more general, to the effect that Wu did not properly coordinate the work of its subcontractors, the subcontractors did not provide enough workers, and delays were caused by Wu's deficient work, but that DOL did not establish the extent of such delays allegedly caused by Wu, or prove with particularity that they affected the Critical Path. Such proof is critically important because DOL's breaches of the Contract and several implementing decisions pervasively and adversely affected Wu's ability to work efficiently upon the Project and perform its operations in their planned sequence. The Board finds that virtually all of the performance problems of which DOL complains had their origins in the contamination on the site and its unforeseeable environmental and managerial consequences, including DOL's response to them. Critical to this assessment is the dramatic fact that, despite DOL's early estimate that the environmental remediation would cost approximately \$125,000, it had cost DOL approximately \$3.3 million by the time of the hearing, which obviously reflected a huge increment of additional time and materials in additional and altered work not included in the original 300 day contract which Wu had bid and to which DOL, despite Wu's warnings and complaints, sought to hold Wu to with minimal accommodation.

The Contract provided for Substantial Completion 300 days after NTP was issued. After the initial delay it was effective May 30, 2002, after the full NTP was issued. The Substantial Completion date thus became March 26, 2003, and Final Completion date, May 21, 2003. In fact, the Contract was not substantially completed until October 25, 2004. DOL issued Contract Modification #11 on September 22, 2003, which extended the time of performance by three days. DOL issued Contract Modification #22 on October 19, 2004, which extended the time for performance 37 days. The effect of these extensions totaling 40 days deferred the contractually prescribed Substantial Completion date to May 5, 2003, and Final Completion date to June 30, 2003. Warner calculated that Substantial Completion on October 12, 2004, was achieved 566 days after the original Substantial Completion date and 526 days later than the contractually extended Substantial Completion date, and that Final completion had not been achieved on October 27, 2004, when DOL exercised its right to accept nonconforming work. (G-218 at 2) Warner used the "Planned vs. As-Built Schedule Comparison Method" of analysis, purportedly because of its ability to demonstrate the actual impact of different events and circumstances on the planned performance.<sup>12</sup> For its own convenient analysis Warner divided the project into

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<sup>12</sup> Warner explained in its Schedule Analysis dated May 9, 2005, that the technique "consists of identifying a baseline schedule which represents the Contractor's intended performance of the work required by the Contract and comparing it to the Contractor's actual performance. Where deviations appear between the plan and actual performances that affect the completion of the Project, they are identified and quantified. The events and circumstances that caused such deviations are then studied to determine the root cause and ultimately the party

three periods: First, from May 30, 2002, NTP to January 10, 2003, start of Structural Steel; Second, from January 10, 2003, to October 17, 2003, start of Drywall; and Third, October 17, 2003, to October 12, 2004, Substantial Completion. (G-218 at 4)

DOL relies primarily upon Warner's Schedule Analysis dated May 9, 2005, which used a methodology which Wu contends was not tied into the Critical Path, among other deficiencies. Warner, as DOL's consultant, attributes virtually all of the delay to Wu's inept management, and simply ignores the existence and consequences of the contaminated site, the additional work and time that was required to deal with it, Wu's inability to discharge the accumulated contaminated water off the site, the initial indefinite delay before DOL issued the NTP, the preemptive operational decisions imposed by DOL, and the administrative and supervisory overlay those conditions and the remedial action imposed upon Wu's contract performance. Warner also ignored particular considerations that adversely affected Wu's performance or caused Wu to seek directions or appropriate assurances. The record as a whole creates a strong impression that, so far as DOL and its contractors were concerned, the environmental remediation process was to be ignored or circumvented and minimized, as much as possible, and the problems it generated for the Contractor were not to be recognized unless DOL was compelled to do so.

#### Wu's First Delay Claim – Contaminated Soil, Counting Error

The first compensable delay claimed by Wu of 34 days from July 8 to August 12, 2002, related to the discovery and management of contaminated soil on the Project site. DOL concedes this delay was compensable for 33 days delay, and the CO allowed 34 days of delay, but Warner apparently miscounted 33 rather than 34 days between July 8 and August 12, 2002, and the Board finds 34 days delay to be compensable. However, the discrepancy is simply clerical, because Warner declares that Wu's performance at that point was critically delayed 34 days in the text and Conclusion to its report, and the Board finds that Wu has been adequately compensated for this delay. (G-36 at 4, G-34 at 7; G-218 at 8, 16)

This first delay, the consequence of the discovery of contaminated soil and, separately, unsuitable soil during initial excavation at the site, caused Wu to stop work and to request instructions from the CO.<sup>13</sup> (A-86) This sequence of events gave DOL written notice of a differing site condition. It occurred after the preparation and final approval of the Remedial Action Plan (RAP) which provided all parties with notice of the existence of contamination

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responsible (either Contractor or Owner)." The plan used was Wu's schedule Version 5.0 dated May 1, 2002, the most recent prior to the NTP. The as-built data were purportedly obtained "primarily from the Contractor's Schedule Update Version 26.0 dated April 23, 2004." (G-218 at 4) Warner stated that the Baseline Schedule was a Critical Path Method (CPM) network, but that it was deficient in software and detail. The critical path on the Baseline Schedule was described by Warner as starting with the foundations and CMU bearing walls, through the structural steel to the roof, and to the interior finishes. (G-218 at 6-7)

<sup>13</sup> Although 34 days of compensable delay were allowed to WU, Warner inexplicably declares in its report that Wu could have and should have proceeded with critical footings in areas unaffected by the unsuitable soil in the interim, and that the extra work to remove and replace the unsuitable material was performed concurrently with the footings in areas that were not affected by the unsuitable soil. Wu's discovery of the unsuitable soils and contaminated soils related to excavation for the footings was unexpected. The extent of such unsuitable soils and contaminated soils was unknown. And at that time, the parties had to develop procedures for dealing with the contaminated soils because the Remedial Action Plan was not being implemented. (G-218 at 8)

which had not been disclosed to Wu or provided for by specifications or other notice in the Contract. DOL directed that 11 test pits be dug to determine the extent of the unsuitable and contaminated soils. (Tr. 321, 318; G-42; A-260, photos 91-99) Wu had recommended removal of the contaminated soil at the site prior to construction at the July 11, 2001, Progress Meeting, and in subsequent correspondence to the CO, Dewberry, and Tevebaugh. Banks asserted DOL's right to insist upon work out of sequence, that is, through the contamination. Wu predicted to the CO, Dewberry, and Tevebaugh that there would be very great costs in Change Orders if the work were performed out of sequence, and reserved the right to compensation for consequential financial losses. (Tr. 323-24) Wu was directed to stockpile and cover excavated soils considered contaminated on site until removed or used, and to submit a COR. (AF II, E67-68; Tr. 332-337) Wu had to re-excavate much of what had been excavated between July 1-9 for the footings. (Tr. 502-05) Ultimately, DOL's allowance of 34 delay days for this process, and 3 subsequent weather delay days were the only time extensions DOL allowed Wu in performing the Contract.

#### Wu's Second Delay Claim – Excavation, Unsuitable and Contaminated Soils

The second delay, after Wu's August 12, 2002, resumption of work, of 11 days more than the projected 42 days for excavation for footings was attributed by Wu, first, to discovery of unsuitable soil which required deeper excavation by Wu than the Specifications required, under immediate on-site supervision by Duffield, DOL's geotechnical engineer, to prepare for the footings. Second, contaminated and unsuitable soils at the location of footings for the southeast corner of the building required Wu to dig a pit approximately 20 feet deep and 35 feet in diameter, to remove all contaminated and unsuitable soils, wrap them with polyethylene, and replace with clean fill. The work was performed by Harmony between August 13-30, 2002, initially pursuant to a Change Directive for less than a third of the invoiced costs.

DOL did not pay a disputed balance totaling approximately \$79,000 against Wu's COR of \$86,517.49 until a year later. (COR 16 rev., A-140; Tr. 359-61, 461-62; A-260, photos 129-130, 132; 478-79, 461-63; A-9; 393-95, 471-75; Schedule 12.0, A-304) Manifestly, substantial time consuming work was required to deal with the problem in addition to the work prescribed in the contract, but DOL gave no time allowance. The Board finds that the nature of the problem, including the undefined extent of the unsuitable soils, made time projections patently unreliable, and, given the way the problem was handled by DOL makes actual experience described by Wu probative of the extra time that was actually required for performance and entitlement. Wu is entitled to compensation for the 11 days of delay attributable to DOL, caused by the contamination and DOL's response to the previously undisclosed contamination on the site.

#### Wu's Third Delay Claim – Impediments from Soil Management

Wu attributed the third delay of 44 days from August 24 to October 7, 2002, when ECG's removal of soil stockpiled on the Project site permitted Wu to start construction of Concrete Masonry Unit (CMU) walls. (Tr. 408-19; Schedule 5.0, Schedule 12.0) Wu complains that the forced stockpiling and covering of separate categories of "contaminated," "excessively contaminated," and "unsuitable" soils preempted workspace for Wu's masons, including lay-down areas, storage areas, areas for lifts and other equipment, storage of blocks, and other purposes. (Tr. 401-08; A-260, photos 77-90; A-92) Such stockpiling was under the supervision

of Duffield, which was Tevebaugh's contractor, and therefore an agent of DOL, who determined in the field which excavated soils went where, until ECG, another DOL contractor, took the excessively contaminated and unsuitable soils off the site. ECG did not complete the soil removal until October 4, 2002. (Tr. 411-13; A-304)

The problem was exacerbated by the conflict, brought to the CO's attention by Wu's letter dated September 10, 2002, between Banks' concern about the cost of bringing clean fill onto the site, and Duffield's directions to Wu regarding soils that were acceptable or not acceptable for reuse. (A-92; Tr. 481-82, 486-88) Because the new soils were brought on site faster than unusable soils were removed, Wu's subcontractors' movement of equipment and storage of materials was further hindered. The site was required to be balanced, so that soil replacement had to balance soil removal. (Tr. 505-07; A-300, ¶9) The Board finds Wu's delay claim of 44 days net to be reasonable. The Board finds that Wu is entitled to compensation for the 44 days of delay claimed, because these several factors which hindered and delayed Wu's operations are attributable to the procedures and methods for dealing with on site contamination imposed by DOL.

#### Wu's Fourth Delay Claim – Impediment from On-Site Contaminated Water

The fourth significant delay claimed by Wu stemmed from Wu's inability to remove or otherwise manage excessive water on the site. The water was contaminated, and its accumulation, and Wu's inability because of DNREC restrictions to discharge it from the site, caused severe delay of the masonry work by creating ponds and extremely muddy conditions from October 2002 until spring 2003, which impeded access, mobility, storage of materials and equipment, and other essential functions. The delay from that cause in turn delayed structural steelwork from September 1, 2002, to January 10, 2003, a net delay of 46 days. (Tr. 430-34).

That delay was attributable to a chain of causation beginning with DNREC's directive that all water on the site was contaminated and could not be allowed to run off into the street or off the Project site. The requirement, to the extent that it hindered Wu's operations, as it clearly did, was imposed without Wu's knowledge or involvement pursuant to DOL's agreement with DNREC. The water had to be contained on the site where the soil was saturated and the water table high, in part by constructing berms on one side of the site. Wu could not install needed underground piping designated as "site laterals" to discharge water from the site into the City of Wilmington's storm sewer system because Tevebaugh was changing the design of the site laterals; the location of soil stockpiles prevented installation under them until they were removed; DOL changed its position and decided to have the City perform the tie-ins of the laterals to the City storm sewer system, which was delayed by the City of Wilmington until May 2003. The weather was unusually wet from October 1 to December 13, 2002. The masons were forced to work piecemeal, where work could actually be done on a site where the mud was sometimes 18-20 inches deep. (Tr. 528, 530)

The problem was exacerbated by DOL, which refused until December 20, 2002, to approve Wu's COR 22 submitted on August 27, 2002, to install the detention pond. The detention pond was ultimately installed by Wu under protest on November 14-15, 2002. (Tr. 423, 534; A-98; A-369 at 3) As installed, the detention pond was too small for the amount of water

on site because available construction space on site was so limited. This circumstance caused Wu to recommend that 5000 gallon Baker tanks be used to empty the detention pond and remove the water from the site. Despite several notices to the CO from Wu including one on December 27, 2002, that the pond was full, DOL did not authorize ECG to use the 5000 gallon water tanks until February 28, 2003. (Tr. 531-33, 577-78, 580-92) Wu had to make repeated requests to DOL to get ECG to remove water from the detention pond. (Tr. 615-16; A-108; A-109) In addition Wu was required to pump water from one part of the site to another to allow work to proceed. (A-98; Tr. 526; A-260, photos 1-76)

Because of ponding water and muddy conditions, Wu recommended installation of a temporary stone access road for men and equipment on site, and submitted a COR for the purpose. DOL refused to approve it. Wu finally installed a temporary road on January 8, 2003, under protest at a cost of \$20,378.52, because it was essential for the safe movement of workers and equipment. (Tr. 579, 437; A-103; A-143) The \$20,378.52 disputed cost of that temporary installation was not resolved until two months prior to trial. (Tr. 580, 608) Thus Wu was in effect required to finance this remedial action attributable to the site contamination. This series of factors establishes the continuation of a problem initially caused by DOL and exacerbated by DOL's intervening decisions and refusal to cooperate with Wu's reasonable methods devised, and largely vindicated, to cope with the excess water problem caused, in turn, by DNREC's requirements. The Board finds that Wu's claim of 46 days of work on the Critical Path is reasonable and excusable, and attributes its cause to DOL's intransigence. Wu is entitled to compensation for the 46 days of delay claimed.

#### Delay Assessment of First Period Delay by DOL's Consultant

Wu's second, third, and fourth claimed compensable delays total 101 days from the August 12, 2002, recommencement of work after the initial delay following discovery of unsuitable and contaminated soils, until January 10, 2003, the scheduled date for start of Structural Steel erection. Warner contends that there were 148 days of critical delay in the first period from August 15, 2003, when structural steel was to start according to the Baseline Schedule, to January 10, 2003, when it actually started. The Baseline Schedule provided for structural Steel erection to begin 77 days after NTP. Warner declared 34 delay days to be attributable to unsuitable soil conditions and 3 due to unusually severe adverse weather, and therefore excusable; 111 delay days were declared not excusable. Warner declared that Wu's "inability to progress as planned for the balance of the First Period was primarily due to its failure to man the job adequately, coordinate the trades and prosecute its work timely."

Warner did not refer to such delay factors as the two pending and essential COR's for hazardous monitoring and pollution insurance that had not been approved by DOL when the NTP was issued and caused y more than two weeks delay. Warner cited incompetence and understaffing as characterizing concrete pours related to footings installation in a number of particular instances, and delayed performance which delayed the start of CMU until October 7 and into winter weather. Warner reported that Ward, the masonry subcontractor, had only two masons working during October, increased to three or four in mid November, when there was room on the Project for additional masonry crews. But Warner never mentioned or assessed the impact of the problems which were caused by retention of the contaminated water on the site,

Wu's need to install the detention pond or the temporary access road because of site conditions. Nor does Warner address the effects of project management interactions or problems of timely responses, approvals, or payments.

In comparison with Kirby Wu's testimony, Warner's assessments are lacking in specificity, especially as to cause, and simply do not treat the problematic conditions prevailing on the site. The source of Warner's information and data is not disclosed, but Wu refutes the assertion regarding the number of masons working on site with certified payroll data that shows that six to eight masons were on site on workdays from October 7-31, 2002, except October 11, which was rained out, October 16, when there were only three due to rain, and October 31, when there were eight. Similarly, with similar exceptions, there were six to ten in November. (Tr. 536-41; A-271) Wu's evidence in this regard is accepted as more credible.

Warner does not effectively refute Wu's contention that the number of men on the Project was limited by DOL which limited the number of workers scheduled for the 40 hour Hazardous Materials training necessitated by the contaminated site and DNREC's requirements, and prevented bringing additional workers to work on site. (Tr. 703-04; A-121) Kirby Wu's testimony was generally convincing with respect to the hindrance caused when Wu was compelled by DOL to agree to hazardous materials training for fewer personnel than Wu recommended as necessary while working through the contamination. In addition to the intervention of environmental issues and DOL's delays in issuing CCD's when required, which Wu contends impacted the work, Warner did not treat the problem of excavated soils which could not be reused as structural backfill, and which, in turn, resulted in large piles of unusable soil on site which crowded the construction site. This condition hindered Wu's efficiency and prevented the masons from mobilizing until after removal of the soil piles by another DOL contractor, ECG, on October 4, 2002. (Tr. 411-13; A-304)

Nor does DOL or Warner effectively refute, or even acknowledge, Wu's contention that working conditions on the compromised site were not suitable to more workers, in particular masons, because of the large areas of pooled water and mud which limited the ability to stage materials on site and prevented proper mobility of workers and equipment. (Tr. 408, 481-82, 528, 530, 580-82; A-103) Warner does not deal with Wu's contention that the necessity of keeping all water on the site had a major impact on the site work, concrete work, and masonry work during this first period, as described by Kirby Wu and reflected in Schedule 14.0.

Wu convincingly refutes Warner's assertion that adverse weather had a minor impact on work progress through November 2002, because Warner did not acknowledge that the watery and muddy conditions on site were a function not only of the rain, but also Wu's inability to dewater the site with its high water table and reduced working and staging areas caused by the stockpiled soils and pools of water. Moreover, the muddy working conditions and inconveniently stockpiled soils prevented Wu from installing the underground storm sewer system. Wu cites evidence of Schedule 12.0, A-304, Task 2090, "Wait to Remove Excess Soils") Wu also cites its loss of control over the process and timing of connecting the on site laterals to the City of Wilmington's storm sewer system when DOL unilaterally transferred responsibility for the tie-ins to the City of Wilmington, which did not do them until May 2003. (Tr. 421, 622-23; A-112) To deal with this problem, Wu had to install a detention pond to deal with the

contaminated water on site. It was completed on November 15, 2002, under protest, because DOL would not approve it. Because of physical constraints on the site, the detention pond had insufficient capacity, so that DOL had to contract with ECG to remove the water offsite from the pond by 5000 gallon water trucks. That process, however, was delayed until February or March 2003, and required continuing pressure from Wu. (Tr. 531, 577-78; A-101)

Wu contends that the water and mud on the site impacted the structural steel contractor because they limited space available for “lay down” areas critical for the steel installation. In addition Wu points to DOL’s obstruction of Wu’s remedial action in building a temporary stone road along the eastern and southern portions of the site to permit movement of workers and equipment around the mud and water on site. The road was finally constructed by Wu under protest on January 8, 2003, and DOL refused to pay for the temporary road until May 2005, two and a half years after the work was completed. (Tr. 580) Wu contends that DOL did not hire ECG to bring the 5000 gallon tanker to pump water out of the detention pond to increase capacity until February 28, 2003, despite the fact that DOL had been notified that there had been excess contaminated water impeding work on the site for the five month period since October 2002. Because the ground was saturated, and proper compaction impossible, Wu had to delay pouring of the floor slab indefinitely, resequence the second floor deck to precede installation of the floor slab, and propose a detail change at the elevator shaft so that the Steel contractor could continue to work, as reflected in Schedule 14.0. (Tr. 531, 577-78, 580-82; A-101, A-103)

Wu contends that, because of the delays caused by DOL, as reflected in Schedule 16.0, the masons could not begin work on certain exterior and interior CMU bearing walls (Task 1130) until April 1, 2003, 161 days after the originally scheduled start on October 22, 2002 (Schedule 5.0) because of the saturated ground conditions which prevented seepage, and Wu’s inability to get the excess contaminated water off of the site. Wu contends that after the masons resumed work in April 2003, problems with the Architect’s design emerged, and ultimately resulted in 131 COR’s issued by Wu, with at least 100 changes, amounting to more than \$1.4 million in additional work, acknowledged by DOL as valid, as well as 154 Clarification Sketches and 192 RFI’s. Wu notes that there was substantial additional work performed by ECG, DOL’s contractor engaged to handle contaminated materials on site. Wu contends that most of the changes remedied poor design and DOL’s failure to deal effectively with the contaminated soils. (ARBr. At 25-26) Thus, Warner’s assessment does not effectively refute Wu’s second, third, and fourth delay claims which relate to Warner’s first analytical period.

#### Wu’s Fifth Delay Claim – Impediments to CMU Foundation/Bearing Wall Construction

The fifth major delay claimed to be compensable by Wu relates to the delay of completion of the CMU foundation/bearing walls. Completion of those CMU walls was scheduled for November 18, 2002, which was 42 calendar days after October 7, 2002, but was delayed until March 11, 2003, a total of 113 calendar days, because of excessive water on site. (Tr. 440-44) The net delay attributed by Wu to the CMU walls was 38 days, because of overlapping delays (Tr. 443); Wu calculated 173 total cumulative days of delay as of April 2, 2003. (Tr. 442-44) This delay was caused by the excessive water on the site, caused by DNREC’s restrictions on water management, which in turn created the necessity for the

temporary stone road under protest, and muddy conditions and difficult working environment for the masonry workers. (Tr. 437, 579; A-103; A-143)

As of April 14, 2003, Wu notified the CO that 650 cubic yards of unsuitable soil was still stockpiled on site near the chimney, was restricting Wu's ability to work, and needed to be removed since Duffield had declared the soil unusable. DOL had stockpiled the soil for ten months for possible reuse in August 2002 when the southeast corner was completed, and refused to remove it until May 13, 2003. It occupied "lay down" and storage space needed by the subcontractors. (Tr. 619-22; A-111) Thus, DOL bears responsibility for the hindrances and delays which it caused. There is evidence that the technical competence of the masonry subcontractor and workers was questionable, and DOL contends that this was the cause of the delays. The Board, however, is confronted by a contractor's performance under extraordinarily adverse and unpredictable site conditions in the aftermath of DOL's breach of contract, extensive delays, and inept management by DOL, and where the extent of any delay caused by the contractor not attributable to conditions caused by DOL is far from clear. The Board concludes, therefore, that under the circumstances Wu should not be penalized for this delay which should be excused, and, as part of the larger allocation of responsibility, be compensable to Wu.

The labor needed to cover the stockpiled soils on a daily basis as required by the Soil Management Plan taxed Wu's restricted manpower which was limited by the Hazardous Materials Training restrictions. Wu's site subcontractor was also forced to alter its process because of the requirement that contaminated and unsuitable soils which were excavated and identified had to be segregated in separate piles for removal. Because they could not be used for structural fill as originally contemplated, and because DOL did not follow its soil engineer's recommendation that all unsuitable soils be removed prior to construction, Wu was required to incur additional time and costs to prepare the soils for proper disposal. (Tr. 309-11, 313, 462) The reduced work area caused by the site contamination forced Wu to delay large portions of the site work in the Spring of 2003 until the masons were off site, which in turn delayed installation of storm drains and asphalt paving. (A-305, Schedule 17.0, Task 2380)

As Wu also contends, the excessive water on site because of DNREC's restrictions for contaminated water delayed work and required additional work to dehumidify the soils beginning April 7, 2003, so that the floor slab could be poured. Wu had to provide labor and equipment to weatherproof and dehumidify the first floor, in order to pour the concrete slab because of the effects of the excessive water. When the slab on grade work started on April 21, the seven month delay had prevented Wu from building any of the interior CMU walls. Wu's COR #85 in the amount of \$12,671.18 to recover these costs was denied by DOL because DOL contended they constituted "means and methods." The Board is persuaded, as Wu contends, that these extra costs and the related delay were reasonably attributable to the contamination of the site and resulting dewatering restrictions. (Tr. 617-18; A-169)

The excessive water problem was also caused by DOL's unilateral decision to remove the work of sewer connections from Wu's contract and to transfer the process to the City of Wilmington, rather than asserting Federal sovereignty. Wu thus lost control over the work. So long as the sewer tie-ins were not performed, Wu could not discharge water from the site. Wu was unable, despite due diligence, to schedule the sewer tie-ins with the City of Wilmington

from March 27 to May 8, 2003. Since DOL stopped paying for the water trucks of ECG, DOL's contractor, to remove water from the detention pond, the Project site remained compromised by water and mud throughout the spring of 2003. (Tr. 419-23, 622-23; A-112, A-95) The Board finds that the hindrance of Wu's operations caused by the water and mud at that time were directly attributable to DOL's decisions and actions, and that Wu is entitled to compensation for the 38 days of excusable delay claimed..

#### Wu's Sixth Delay Claim – Building Misalignment and Dimensions

The sixth claim is for ten days of delay that was nonconcurrent with other delays in the Critical Path. It involved clarification of a mistake in the dimensions of the building reflected on two architectural drawings in respect of the "7" bust H line" which caused misalignment of the exterior wall on the first and second floors. This mistake by Tevebaugh delayed completion by the masons of the eastern half of the second floor for ten calendar days. The eastern half of the second floor had to be redesigned by Tevebaugh, which limited work by the masons to one part of the building, and delayed installation of the roof from April 22 to May 2, 2003. DOL paid the \$11,521.21 cost of addressing the design error. (A-147; Tr. 444-47; Schedule 17.0; A-305)

There was conflicting testimony regarding how long it took to correct the error, but the Board finds Wu's version more plausible and convincing. As Wu contends, the Architect was first notified of the 7" dimensional bust on November 13, 2001 during the submission of its rebar shop drawings. Because no remedial action was taken Wu renotified the Architect on April 22, 2003, seventeen months later. Although this task was on the Critical Path as indicated by Schedule 17.0, the issue was not resolved until May 2, 2003, by issuance of CCD #19. The delay required design changes to second floor classrooms, which impacted the interior wall construction on the second floor because the masons did not know where to locate the walls. (A-305) The Board finds that this delay was attributable to DOL and not to Wu, and that Wu is entitled to be excused and compensated for the 10 days delay on the Critical Path.

#### Wu's Seventh Delay Claim – Untimely Implementation of Remedial Action Plan

Wu claims a seventh nonconcurrent substantial delay of 61 days from October 30, 2003, the designated substantial completion date, to December 30, 2003. Wu attributes this delay to DOL's deferred decision to implement the Remedial Action Plan ("RAP") to July 2003, rather than fourteen months earlier at the beginning of the Project in the summer of 2002, when construction began. DOL had known that implementation of the RAP's provisions was required as soon as the document was prepared and approved in May 2002. Nevertheless, DOL unilaterally directed Wu to defer implementation of the RAP. By July 2003 Wu had coped with the excess water and extraordinarily muddy site over the winter, and was finally able legally to discharge water on the site into the City of Wilmington's storm sewer system. The timing of DOL's directive to implement the RAP hindered the restoration of momentum to construction and further delayed the site work. In July 2002, shortly after it was approved, the RAP could and would inevitably have been incorporated into the site contractor's schedule. (Tr. 456, 678-79; Schedule 17.0, A-305) Significantly, Wu contends, and the Board finds, that DOL's directive to implement the RAP in July 2003 shifted the RAP to the Critical Path. It incidentally insulated the alleged deficiencies in Wu's performance identified by DOL's representatives from

adversely affecting the Critical Path. (Tr. 452-56) Thus, the timing and adverse effects of DOL's decision to implement the RAP imputes the 61 days of delay to DOL and excuses Wu, which is entitled to claim compensation therefor.

The delays that occurred when implementation of the RAP was belatedly begun were caused by the need to resurvey the site to determine how much soil had to be removed, which took from July 16 to August 6, 2003, and the time required from August 7 to August 26, 2003, to prepare a cost proposal for implementation of the RAP, a total of 46 days. (Tr. 448, 451-52; Schedule 22.0, AFII, N-10; A-149) Performing the part of the RAP requiring removal of excess soils at a cost of approximately \$90,000.00 increased the total delay to 61 days. (Tr. 456-5, 681-82; Schedule 23.0, AFII, N-11) Wu contends that when Schedule 22.0 was prepared on October 8, 2003, Substantial Completion had been delayed until January 8, 2004 from October 24, 2003, as reflected in Schedule 19.0 by the implementation of the RAP, which accounts for 76 days of delay and extended the Project into a second winter, with consequential adverse impacts on necessary site work.

There were other significant delays cited by Wu that were concurrent with these 61 days and were attributable to DOL. First, Tevebaugh's belated changes to the design of the fire dampers, which were originally designed to conform to an obsolete building code, caused delay in August 2003. Wu had notified the Architect of the problem by letter dated August 22, 2002, and Wu's HVAC subcontractor attempted to notify the Architect and to supply dampers conforming to the current Wilmington code. The delay caused by Wu's inquiry and Tevebaugh's resistance and eventual decision to use the new fire dampers, while blaming Wu for not supplying the original dampers, delayed Wu's duct work and close up of some masonry chases on the second floor. The original dampers would not have passed inspection by the City of Wilmington. These delays were concurrent with delays on the critical path. (Tr. 651-52, 654; A-276) Warner, incredibly, stated that the "failure to submit building components for approval and a complete lack of coordination on site by the Contractor resulted in mistakes like installation of improper fire dampers, which had to be removed and replaced with fire dampers which met code" is contradicted by the record and suggests an unreliable investigation of the matter by Warner. (G-218 at 14).

Second, Wu was delayed in September 2003 by Banks' initial insistence that Wu should not remove more than 1064 cubic yards of excess soils, until DOL ultimately agreed to pay Wu to have its contractor haul all of the contaminated soil to ECG's trucks. (Tr. 671-73; A-118).

Third, on October 20, 2003, when Wu struck a hidden foundation while grading the site, DOL disputed Wu's and its subcontractor Harmony's stated cost for removal of that debris. (Tr. 685-89; A-260, photos 148-150) Because of prior experience with disputed payments, Harmony refused to perform additional change order work without an agreement with DOL. Consequently, Wu was required to hire a second site contractor to perform the work with concomitant delay and expense, since he could not get the agreement from DOL in time. (Tr. 689-91) The Board concludes that this circumstance was the exclusive fault of DOL, which had not disclosed the site conditions, in this case caused by DOL's demolition and site preparation contractor, ECG, prior to letting the Contract, and which had caused the delayed payment

problems which caused Wu's site contractor to refuse to do the work without a prior commitment to payment.

Fourth, Wu conceded the error by Wu's masons who during the fall of 2003 constructed the masonry window openings larger than the shop drawings specified. The issue was finally resolved after a protracted and contentious delay caused by Reid's insistence on a quarter inch joint around the windows, which was tantamount to insistence that all of the windows be replaced. The problem was finally and belatedly resolved by centering the windows in the existing space, and adding an additional half inch of caulk around the perimeter of the windows in accordance with a preferred procedure recommended by the windows manufacturer. (Tr. 2975-78) In addition, Reid's insistence that Wu install window receptors at the jambs was also contradicted by the window manufacturer. However, Wu has established that the windows were not on the Critical Path, because DOL's directive to implement the RAP in the summer of 2003 put site work on the Critical Path. Thus, delays to the interior of the building, including window openings, electrical issues, problems with ordering carpet, or other interior items, as well as the corrective work were immaterial to completion of the Project on the Critical Path. (Tr.691-94, 2979) Wu contends, however, that inadequacies in the design of the Project by Tevebaugh reflected in the more than 128 RFI's, over 109 Clarification Sketches issued by Tevebaugh, and more than 50 Change Orders continuously and adversely impacted the construction schedule. (A-279, A-280)

Fifth, as Wu was attempting to complete the site work, on November 11, 2003, Wu had to request an expeditious Change Directive to accommodate the last of several changes by Tevebaugh to the garden wall design which required a long lead time to order precast stone. Site work completion depended upon installation of the wall, and was delayed by it. (Tr. 694-95; A-152) Sixth, the discovery in December 2003 of a large concrete slab related to prior demolition and provision of a Change Order for its assessment as a hazard delayed completion of the site work. (Tr. 698-99; A-164) Seventh, soil stockpiling was a continuing problem, though Wu was paid by DOL pursuant to a COR for the costs of wrapping and unwrapping piles of soil around the site from May through October 2003 in the amount of \$15,336. (Tr. 639-40; A-162; A-269)

Eighth, Wu contends that the problems with excessive water continued through 2003, despite connection to the City's storm sewers, because, as noted in Wu's letter to Tevebaugh's Balakrishnan on August 12, 2003, heavy rains inundated the site, the detention pond had to be made smaller in order to allow work to continue on the west side of the building, and Wu's ability to pump into the City's storm sewer line was limited by unsettled sediment. (Tr. 650-51; A-115)

In a response on December 23, 2003, to a December 16, 2003, letter to Wu from the CO implying that Wu and its contractors were delaying the Project, Wu identified items that were not Wu's responsibility that were delaying the Project, including the limited number of workers for Hazardous Operations Training authorized by DOL which limited the size of the workforce; numerous outstanding Change Orders for completed work that were unpaid and adversely affected Wu's ability to motivate its subcontractors to perform additional Change Order work; late processing of numerous invoices burdening Wu and its subcontractors; numerous changes to the Contract involving 63 COR's, more than 127 Clarification Drawings and Sketches and 160

RFI's as of December 23, 2003; and the continuing discovery of unforeseen conditions, including recent discovery of the concrete slab and foundation with asbestos tile discovered while removing a parking lot related to prior use of the site. Wu contends credibly that its allegedly defective work relating to plumbing rough-ins, sprinkler sleeves, and duct dampers and sleeves was not on the Critical Path of any schedule, and that missing sleeves did not affect the timely installation of the fire sprinkler lines and mains.

Wu does not dispute Warner's finding that the waterproofing affecting the shop wing at the northeast corner of the building and on the second level was delayed almost a year until July 2003. (G-218 at 12) Warner also found that the foundation drains outside the concrete retaining wall had made it impossible to backfill the area under the wing or continue with construction. Warner acknowledged that by early September 2003 Wu had erected the bearing walls, set the steel joints and deck, and had the shop wing under roof. Wu contends plausibly that Warner ignored the fact that the conditions on the site caused by the environmental contamination of the excessive water trapped on site. The excessive water precluded waterproofing installation or installation of foundation drains dependent upon it until the City of Wilmington completed the tie-ins to the storm drains on June 12, 2003. It was only then that proper dewatering of the site began to be possible to allow resumption of construction as workable site conditions were gradually restored.

Warner's total failure to mention such problems as the excess water and storage of unsuitable and contaminated soils on the site, the delays caused by the City of Wilmington after DOL waived sovereignty during the Contract performance, and DOL's slow responses to COR's and payments, impeaches the credibility of its analysis when contradicted. The credibility of Warner's assessments is also impaired by its assertion that the changes made by DOL and Tevebaugh during this Second Period were "minor" and had "negligible" impact on the progress of construction (G-218 at 13) Warner contends that during the Second Period, from January 11 to October 17, 2003, Wu caused 117 days of delay in the commencement of drywall installation. Warner contends that drywall was scheduled to start 163 days after structural steel installation was scheduled to start on June 22, 2003. Wu's subcontractor started drywall construction on October 17, 2003. Warner attributed the delay to Wu's repairing defective work, poor site cleanliness, and lack of manpower. Wu is far more credible in claiming very substantial impact attributable to 54 Change Orders issued by October 17, 2003. These Change Orders totaled \$1,203,798.08 or 21 percent of the Original Contract value, exclusive of Wu's Phase I delay claim. In addition, 145 RFI's and 117 Clarification Drawings, and substantial delays in payment were the cause of delays. (ARBr. At 31; A-278, A-279, A-280) Warner's credibility in this regard is also impaired by evidence of the huge additional costs attributable to environmental remediation which inevitably required a great deal of time to accomplish. The Board finds that Wu is entitled to the 61 days of delay to the Critical Path claimed by Wu as attributable to DOL, not Wu, and that Wu is entitled to compensation accordingly.

#### Wu's Eighth Delay Claim – Asphalt Paving Delayed by Delayed RAP

Wu claims an eighth nonconcurrent delay of 98 days because the RAP was added to the Contract, but not implemented until a year later in July 2003. Wu has proved that decision by DOL delayed installation of the asphalt paving on the site. It is not disputed that asphalt paving

can only be done when the temperature is above freezing, and that the asphalt plant shut down on December 5, 2003, until the end of January 2004, consistent with general practice in the industry. After the asphalt plant reopened, Wu could not complete paving until mid March 2004 because of intermittent freezing weather. (Tr. 887-89, 1024-29) Wu contends that concurrent delays were caused by DOL's request in January 2004 that Wu demolish and remove the large concrete slab, Wu's submission of a COR for the work on January 14, 2004, and DOL's Change Directive related to that request which was delayed until March 12, 2004 (Tr. 710-15; A-157); discovery and replacement of a leaking eight inch valve in the water line (Tr. 716-17; A-158); the COR submitted January 26, 2004, to demolish concrete footings discovered near the main entrance on Vandever Avenue (Tr. 717-18; A-159); and the discovery in February 2004 by Wu's subcontractor of trash and debris in soils during grading of the site which had to be removed, all of which delayed completion of the site work. (Tr. 719-20); A-179). The Board finds those delay claims derive from site conditions for which DOL, and not Wu, is responsible, and that Wu is entitled to be compensated for the 98 delay days claimed.

#### Wu's Ninth Delay Claim – Punch List Management to Substantial Completion

Wu claims a ninth substantial delay caused by DOL extending from approximately March 2004 until substantial completion on October 25, 2004, which was coextensive with and caused by the DOL's management of the punch list phase approaching the end of the project, completion of which was a condition precedent to issuance of a Temporary Certificate of Occupancy for the Project. Wu contends the punch list phase would normally have required approximately 30 days. (Tr. 722, 889-90) Wu cites two particularly significant factors contributing to the delay: first, DOL's belated decision not to take sovereignty from the City of Wilmington, so that Wu was unexpectedly required to satisfy standards imposed by the City of Wilmington well after the Contract was executed and partially performed; and, second, the reluctance of Wu's subcontractors to perform punch list work when they had not been paid for prior work, because of DOL's numerous and varied payment delays or refusals to fully pay for necessary work. (Tr. 889-90).

Wu established that there were numerous added tasks requiring changes to the Contract, and related delays caused directly or indirectly by DOL and beyond Wu's control, but Wu did not make individual assignments of delay days. Wu has attempted to prove that collectively these additional tasks required time and caused the protracted resolution of substantial Completion and issuance of the Temporary Occupancy Permit by the City of Wilmington. Wu has established that these tasks or instances extended over the entire period from March to October 25, 2004. Instances specifically cited by Wu include a requirement in March 2004 that was not in the original Contract for Wu to install phone lines connected to the mechanical and elevator work. On March 10, 2004, Banks asserted that Wu was required to install phone lines to the fire alarm system and the elevator under the original Contract, but DOL abandoned the contention when it was established that the Contract did not provide for Wu's installation of any telephone lines. (Tr. 722-23; A-160) To mitigate delay caused by DOL's position, Wu installed the two telephone lines under protest to satisfy a condition precedent to final testing of the fire alarm system and elevator necessary for a TCO. (Tr. 736-38; A-127, A-128) In early April 2004 DOL asked Wu to add installation of a telephone line to the elevator. (Tr. 762; A-175)

DOL's untimely decision regarding the master keying system required doors to be rekeyed on site in April 2004. Programming and installation of locks by the manufacturer prior to delivery to the site would have been substantially more efficient and less costly. (Tr. 724; A-174) In addition, site work was delayed by ECG's use of only three trucks to transport approximately ten truck loads of concrete foundation round trip from Wilmington, Delaware, to Allentown, Pennsylvania, requiring three hours travel each way. (Tr. 729-30)

Wu cites a design error by Tevebaugh related to the ceiling of Stairway No. 2 discovered by the City of Wilmington on inspection not to be a proper fire-rated ceiling. Wu was provided a Change Order for reinstallation, which required time and delay. (Tr. 725-26; A-166) In early March 2004 City inspection disclosed that the ceiling above the second floor corridor, which required a smoke ceiling not in the original design, did not meet Code, and DOL issued a Change Order. (Tr. 733-34; A-172) On February 26, 2004, the City of Wilmington's inspector stopped installation of the garden wall because Tevebaugh has not submitted the new design for City approval. (Tr. 731; A-126) The City Health Inspector refused to perform the health inspection on March 29, 2004, because appropriate drawings for the kitchen and culinary arts had not been submitted by Tevebaugh, who subsequently submitted the drawings necessary to deferred health inspections. (Tr. 740-42; A-130) Following discovery by the Wilmington Fire Marshal in early April that strobes and heat detectors were missing throughout the building, DOL issued a Change Order for this extra work not shown on the original drawings. (Tr. 753-54; A-176)

Wu also cites a host of "items of extra work, none of which were individually significant, but which collectively delayed the issuance of a TCO" which depended upon substantial completion. These were installation of a smoke seal in Stair No. 2 (Tr. 765; A-177); installation of a closure on the elevator machine roof door not shown on the drawings (Tr. 766; A-181); installation of plywood panels on handrails, which Wu asserts DOL had initially indicated would not be Wu's responsibility (Tr. 767-68; A-131); provision of additional fill at garden wall (Tr. 775, 777; A-182, A-189); repair of ceiling tiles damaged by a DOL contractor (Tr. 777-78; A-132); installation of various equipment needed to meet City of Wilmington Code (Tr. 780, 782-84; A-183, A-133, A-184); covering soil stockpiles and loading soil for removal pursuant to the RAP (Tr. 786-88; A-194); installation of water gong (Tr. 789-90; A-188); installation of strobe in Room 111 and smoke detector in elevator shaft (Tr. 792; A-185); relocate coffee urn (Tr. 796-97; A-186); install emergency lights in a few rooms (Tr. 797-98; A-190); rewire and repair dishwasher and kettle (Tr. 799-800; A-191); install baseboard heaters to rectify design error (Tr. 800-01; A-192); delay planting because of discovery of additional contaminated soil (Tr. 802-03; A-197) Wu also complains of delayed inspections by the City of Wilmington. (Tr. 805-06; A-135)

#### Contrary Assessment of DOL's Consultant Regarding Delays in Third Period

Warner blamed Wu for 270 days of delay during the Third Period from October 17, 2003, start of Drywall, to October 12, 2004, Substantial Completion. Warner declared that based on Wu's Baseline Schedule, Substantial Completion was to be effected on December 31, 2003, 75 days after the start of drywall, after adjusting for prior delays. Wu was not blamed for an additional 16 days of delay from September 28 to October 12, 2004, attributable to a contentious dispute between the City of Wilmington inspectors and Tevebaugh regarding the installation of

handrails. Warner simply attributes the delay to improper work by Wu, the time required for correction, and failure to coordinate work on the site, and does not take into consideration any of the extra work required by the Government Change Orders, with its concomitant delays identified by Wu.

Wu contends that these Third Period delays cited by Warner were caused by the factors cited in its Delay claims Nos. 7, 8, and 9, including the 47 RFI's, 37 Clarification Drawings, 77 COR's totaling \$343,035.26, 19 Modifications issued by DOL encompassing the 77 COR's, numerous Change Orders that were paid late, numerous invoices that were unjustifiably reduced by Tevebaugh including a May 2003 invoice where Tevebaugh caused no payment to be made to Wu and its subcontractors; and numerous citations by the City of Wilmington for noncompliant designs, especially with respect to the City of Wilmington Fire Marshal and Health Inspector, which were not caused by Wu. The Board finds that Warner's failure to assess the significance of noncompliant designs by Tevebaugh fairly and realistically when it asserts the importance of satisfying the occupancy requirements of Wilmington's Office of Licensing and Inspections is another basis for questioning Warner's credibility. (G-218 at 14).

Wu contends that the implication that delay of elevator certification until July 14, 2004, was due to insufficient manpower and lack of coordination is refuted by COR's ##94, 102, 104, and 109, which reflected extra work to complete elevator installation, acknowledged by DOL but not by Warner. (A-175, A-181, A-183, A-185) Similarly, Wu contends that Warner's implication that the delay until the July 28, 2004, approval upon inspection of the fire alarm system was due to insufficient manpower and lack of coordination is refuted by the extra work reflected in DOL's approval of COR's ##95, 104, 105, 106, 108, 109, and 115. (A-176, A-183, A-185, A-190) Wu contends that the delayed kitchen inspection, which approved the work, on July 28, 2004, was likewise attributable to additional work acknowledged by DOL, but not by Warner, as extra work under the Contract reflected in Cor #111. (A-186)

As Wu contends, Warner does not acknowledge that the delayed certification of the water system on September 13, 2004, was the second test done on the system at the request of the City of Wilmington, and that the initial test completed on March 18, 2004, was satisfactory. Under the applicable Specifications, DOL was required to pay for the second successful test as reflected in COR #120 and MOD #23. Warner's failure to acknowledge and deal with the considerations and simplistic assessment of blame by repeated allegations of lack of manpower and coordination under circumstances that are obviously more complex seriously impairs Warner's credibility as to these assessments.

Wu contends that, since DOL did not prove at trial that Wu caused any delays to the completion of the Project, there is no issue of "concurrent delay." Wu identifies certain inaccuracies in various contentions by DOL and its representatives that undermine any validity of those contentions and the credibility of the individual representatives. Wu validly imputes to Banks an attitude throughout the Project that DNREC was imposing unreasonable requirements and that Wu should ignore them. (Tr. 3000-02) Wu cites Banks' contention that Wu could have avoided the excess water problems on site by discharging the excess water off the site by using a hose, rather than holding the water on site, a position patently contrary to DNREC's prohibition against contaminated water leaving the site. (Tr. 2996-97) Wu refutes Banks' complaint that Wu

did not make recommendations to deal with the environmental problems on site by citing Wu's recommendation that the RAP be implemented immediately in the summer of 2002 to avoid having to work out of sequence, as well as its recommendations for installation of the detention pond, installation of the temporary road, and having DOL bring tanks to discharge water out of the detention pond as needed. (Tr. 2979-91)

Wu points out that Reid was unable to suggest what Wu could have done differently to deal more effectively with the excess water problem on site. (Tr. 2493-99) Wu contends that no DOL representative declared during or after construction that Wu should have been handling the water differently. Some witnesses suggested that the problems could have been improved or solved by different on site grading, especially around the building. This assessment is not persuasive in the context of this record, because of the demonstrated extent and nature of the excess water necessarily treated as contaminated, and Wu's actual experience.

Wu also points out that Reid, like Banks, Chiu, and O'Malley, and the other DOL representatives including the Contracting Officers had no experience with construction involving pervasive contamination like the Project or with projects where water had to be contained on site during construction. (Tr. 2501-02) The Board finds that the lack of such knowledge and experience caused DOL to take actions, delay actions, or refuse to take actions repeatedly, which created or exacerbated hindrances to Wu's operations affected by the environmental contamination on the site.

Wu challenges Reid's testimony that the design problem with the 7" bust H Line did not affect the schedule by citing the applicable Schedule 17.0, which reveals that the design error delayed installation of the roof. The roof installation was on the Critical Path at that time. Thus, that design problem did cause a delay to the Project. (Tr. 2503-04; A-305) Wu also contradicts Reid's testimony that there was only a "handful" of contractors on site on August 6, 2003, when Reid said he visited the site by citing the Daily Report for that day revealing that 29 or 30 workers were on site. (Tr. 2337, 3031-34; A-345) Since the credibility of Reid's testimony was impaired by a variety of inaccuracies and inconsistencies, the Board is not persuaded by Reid's testimony that the Project was undermanned on that date or typically.

Nor is the Board persuaded by Reid's suggestion that better management or construction methods by Wu would have easily overcome the environmental problems which were encountered. Indeed, DOL's complaints of undermanning were, as Wu contends, rather more general than specific, and were shown to be erroneous when confronted with particular reliable evidence in the nature of business records. (ABr. At 18-25) Wu also contends without particularity that any personnel shortages would probably be explained by DOL's restrictions on the number of workers that could be provided Hazardous Materials training. Wu was compelled, in effect, to agree to a significantly smaller number of trainees than Wu recommended. Wu contends, again without specificity, that the size of its work crews was often limited by environmental conditions on the Project, and that subcontractors sometimes did not react as promptly as possible because of DOL's long payment delays.

Wu points out that DOL's management oversight of the Project was less than optimum, and that indications of those problems are reflected in the fact that Banks was dissatisfied with

Balakrishnan, who was eventually taken off the Project, and O'Malley was not satisfied with Banks' performance, and had him removed from the Project. (Tr. 2898-2900, 2754-59) In this regard, justification for such removal seems to have stemmed in part from a personality conflict between Banks and Kirby Wu, who often, of necessity, had to challenge Banks' actions and determinations, a process which tended to cause delays, as well as Banks' suboptimal qualifications for a project of this complexity involving environmental contamination.

Wu claim of substantial Delay No. 9 covering the period from late March to October 25, 2004, poses difficulty because different factors affect the various delays which occurred over several months. Wu professes inability to quantify the delays involved. The delay period which Wu claims is the fault of DOL commences in March 2004 when Wu first summoned Dewberry for a punch list walk through the Project and continues to Substantial Completion on October 25, 2004. DOL by its contractor Dewberry conducted a walkthrough, but concluded that the Project had too many uncompleted items to be ready for a punch list. Dewberry compiled a list of items which required completion or correction which filled many pages and identified total costs in excess of \$350,000. Wu contends, however, that it reduced the list substantially within a very short time, but that DOL added a substantial amount of extra work to the Contract during the period which required time and delay. Wu also contends that DOL's decision during performance of the Contract to waive sovereignty and transfer inspections to the City of Wilmington created significant additional delays because of design conflicts, slow or conflicted scheduling, and other factors. During the period that these items were being completed or corrected, the remaining site work was on the critical path, and a number of substantial delays to that site work were caused by contamination related problems which required remediation.

It appears that the causes of the critical path delay and concurrent delays involving interior work during this period are varied and tangled, and could be assignable both to Wu and to DOL, or in some cases to both. Wu contends that the items required action by its subcontractors who resisted returning to the site because of the continuing payment problems caused by DOL. Wu contends that the impact of contaminated soils, Tevebaugh's design flaws which in many instances were noncompliant with the requirements of the City of Wilmington's Office of Licensing and Inspections, Fire Marshal, and Health Inspector, which were controlling because of DOL's belated waiver of sovereignty, DOL's failure to issue MOD's promptly, an invoices that were reduced or denied by Tevebaugh without explanation, which caused subcontractor payment and cooperation problems for Wu, were among the continuing problems that caused delays. Wu asserts that there were 47 RFI's, 37 Clarification Drawings, 77 COR's totaling \$343,035.26, encompassed in 19 MOD's, as well as numerous citations from the City of Wilmington for noncompliance related to designs. Wu also credibly impugns Warner's assessments by showing, for instance, that Warner did not refer to four change orders involving additional work related to certification of the elevator in July 2004, when it assessed delay due to insufficient manpower and lack of coordination to that item. Similarly, Warner did not refer to seven change orders involving extra work related to final inspection of the fire alarm system at the end of July.

Because the Board finds Kirby Wu's testimony generally and consistently more credible than the testimony of Banks and Reid because of demeanor, level of preparation, security of recollection, and plausibility of substance, and well as apparent quirks of personality and

motivation, the Board tends to believe Wu's versions of the continuing disputes that persisted through the course of the Project. The Board also finds Wu's assessments of situations causes, and consequences more credible than Warner's because of Warner's simplistic method of analysis, and calculated failure or refusal to consider obviously relevant factors affecting outcomes. Moreover, the Board concludes that Wu, an experienced contractor, had every incentive to finish the Project as quickly as possible, since performance was extremely taxing, and it is obvious that Wu was suffering increased and substantial financial loss the longer the delays continued and the Project was incomplete. The Board concludes under these distinctive circumstances and on the record as a whole that on balance DOL was overwhelmingly the cause of the delays stemming directly and indirectly from the breaches of contract, and that what DOL characterizes as Wu's mismanagement and understaffing is almost entirely attributable to the quality of DOL's inept interference, misdirected oversight, and persistent lack of cooperation by personnel with limited qualifications and admittedly no familiarity with construction on a contaminated site, and especially in accordance with state and local requirements.

Wu has established that a Certificate of Occupancy granted by the City of Wilmington was indispensable to Substantial Completion. Two items delayed the certificate of occupancy, substantial completion, and Wu's departure from the Project until October 25, 2004. One was certain sidewalks and handicap ramps, and handicap parking stalls, whose construction was delayed by design flaws of Tevebaugh and their failure to satisfy certain Wilmington procedures. The Board concludes that based on the testimony of Ron McIntyre, Mark Banks's successor, DOL is at fault for this delay. When questioned about the sufficiency of Tevebaugh's design specifications for the handicap ramps, McIntyre admitted that "what [Wu] was working from the first couple of times he put the concrete in place was . . . inadequate to do a good job." Moreover, McIntyre stated that "[Tevebaugh] did have to provide a refinement to his design and get it approved by the city before it made sense for [Wu] to go back and pour it the third time." Tr. 1990.

The second item was the design of the guard rails on stairs in the building, which also was exclusively the fault of DOL because DOL had early notice, resurrected in August 2004 followed by many meetings, that the design was unacceptable to the City of Wilmington and had to be modified. DOL and Tevebaugh failed and refused to accommodate the City, which would not bend, to the extent that City was threatening to have the police arrest anyone who attempted to take full occupancy of the building. Wu was caught between the disputing parties, whose dispute and timing would have moved the item to the critical path, but Wu provided a temporary solution involving plywood that satisfied the City until redesign could be effected, and allowed Wu's exodus. (A-224; A-251; Tr. 895-904) Thus, the Board concludes that this delay was critical and the fault of DOL, and so strategically timed that when the other problems and extra work which occurred during the period are also considered, renders the delay excusable and compensable to Wu under the ripple effects of the breach claims to strive to make Wu whole. As the Interior Board of Contract Appeals has noted,

If an even that would constitute an excusable cause of delay in fact occurs, and if that event in fact delays the progress of the work as a whole, the contractor is entitled to an extension of time for so much of the ultimate delay in completion that was the result or

consequence of that event, notwithstanding that the progress of the work may also have been slowed down or halted by a want of diligence, lack of planning, or some other inexcusable omission on the part of the contractor.

*See Chas. I. Cunningham Co.*, IBCA, 57-2 BCA ¶ 1,541 (1957) (citing *Robinson v. United States*, 261 U.S. 486 (1923); *Sun Shipbuilding Co. v. United States*, 76 Ct. Cl. 154, 173-74, 184-88 (1932)). *See also* Cibinic & Nash, ADMINISTRATION OF GOVERNMENT CONTRACTS, 3d ed., 578.

Wu has not established a precise starting date for this Delay No. 9, but refers to March 2004, and refers to extra work assigned in late February and early March as causes for delayed completion. However, McIntyre testified that each of the failed City of Wilmington inspections occurred between June and October 2004. The Board finds that because McIntyre testified on behalf of DOL, in effect making accurate concessions against interest, McIntyre's testimony is the most credible on this point. Therefore, the Board finds that the delays due to DOL's inability and, in some cases, unwillingness to cooperate with the City of Wilmington began on June 1, 2004. Consequently, a total of 147 delay days are determined to be excusable and compensable under Delay No. 9 from June 1 through October 25, 2004, the date of substantial completion.

Total excusable and compensable delay days allocable to Phase II construction are calculated as follows:

The Board finds that there were 342 excusable and compensable delay days established in Wu's Delay Claims Nos. 1-8; and 147 delay days excusable and compensable under Wu's Delay Claim No. 9. DOL already compensated Wu for 34 delay days for the work stoppage during Phase I because of the discovery of contaminated and unsuitable soils and the need to develop procedures for soil handling. Thus, the Board finds that Wu is entitled to 489 days of compensable and excusable delay.<sup>14</sup>

## **DAMAGES**

### ***Direct Costs***

As a result of DOL's breaches, Wu is entitled to recover direct costs associated with the remediation of the contamination and with DOL-caused delays. In addition, Wu is entitled to recover profits that it lost under the Contract as a result of DOL's breach. However, before the amount of profit to be recovered can be determined, the Board must first determine which direct costs Wu is entitled to recover and has not yet recovered.

The Board finds that Wu is entitled to recover the costs associated with certain disputed change orders because DOL has not disputed the reasonableness of the amounts, but has contended that the delays that gave rise to them were caused by Wu, so that DOL is not liable.

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<sup>14</sup> The Board recognizes that by finding that 489 days of delay are excusable, in any future action against Wu for liquidated damages, Wu will not be liable to DOL to the extent that the delay is excusable. *See* 48 C.F.R. § 52.249-10; M43.

As explained above, the Board has found that these delays were attributable to DOL and are compensable and excusable. Accordingly, Wu is entitled to recover the following amounts:

<b>Description of work</b>	<b>Cost amount</b>
Snow removal (one winter)	\$ 1,292.00
Additional cleaning costs	\$ 35,259.00
Masonry winter protection	\$ 9,302.03
Installation of dehumidification equipment	\$ 12,671.18
Extension of builders' risk insurance	\$ 5,972.74
Wage increases for electricians	\$ 11,552.97
Pour concrete haunch at elevator	\$ 2,812.92
<b>TOTAL</b>	<b>\$178,994.23</b>

In addition, Wu claims entitlement to the following direct costs, which the Board either accepts or rejects as follows:

1. *Full-time security guard*

Kirby Wu testified that he intended to install a security fence to safeguard the site during construction and had no intention of hiring a security guard. (App. Post-Hearing Brief, 37). However, due to the soil contamination, the Health and Safety Plan recommended that a security guard be present at the site in order to prevent people from entering the site unknowingly and being exposed to the contaminated soil. (App. Post-Hearing Brief, 37; Tr. 353). According to Wu, DOL knew that this was an extra cost to Wu's Contract and accordingly, it requested for a change order to provide a security guard. (Tr. 353). According to Michael O'Malley, the issuance of a change order is an acknowledgment by DOL that it is requesting work that is extra to a contract. (Tr. 2808-09). Wu stated that Banks was willing to approve a COR for a full-time security guard, provided that Wu assumed liability, but was not willing to approve payment otherwise. (Tr. 354). Wu contacted a number of security companies who were interested in working at the site, but none of them were willing to assume the liability if someone broke onto the site and was injured by the contaminated soil. (Tr. 353-54; A-90).

Wu stated that he discovered some evidence of people breaking onto the site in July 2003. (Tr. 985-86). At that point, he felt he had no choice but to hire a security guard and seek payment from DOL later. (Tr. 985-86; A-51). He testified that DOL later reversed course and stated that it would not pay for the security guard because job site security was Wu's responsibility. (Tr. 988). Wu pointed out that O'Malley testified that he thought DOL should pay Wu for the security guard costs, but he was overruled. (Tr. 2777). According to Kirby Wu, Wu's security guard costs for the project totaled \$100,131.39. (Tr. 984; A-51). He testified that no COR was prepared for this item because DOL had already rejected Wu's proposal. (Tr. 985).

DOL states that under the contract, the cost of a security guard is the Wu's responsibility and the condition of the site has no impact on the allowing of these costs. (Gov't Reply Brief at 44). Mr. Laubenheim testified that "that site security is really the contractor's responsibility, in accordance with G-5 [G-208, M 30] of the contract." (Tr. 1897). As such, DOL argues that the

claim for the security guard should be denied in total because it lacks specificity and because site security was Wu's responsibility under the contract.

DOL should have issued Wu a change order. Wu's testimony that that he discovered evidence that people were breaking onto the site in July 2003 has not been challenged or rebutted by DOL. Had an intruder on the site become injured or ill from the contamination or flooding on the site, Wu could have exposed itself to significant liability. Therefore, Wu was reasonable in hiring a security guard to protect the condition of the site and itself from liability. The question is whether this type of security was intended by the parties when entering into the contract. While DOL correctly points out that the contract stated that Wu provide site security, the record makes clear that neither DOL nor Wu contemplated the extent to which the site would be contaminated and flooded. As a result, Wu has demonstrated that the contract did not contemplate security more protective than a security fence. Wu's hiring of the security guard was therefore outside of what the contract required such that DOL should have issued a change directive to compensate Wu for that expense.

Kirby Wu testified that the security guard for the project cost \$100,131.39. (Tr. 984). He also provided documentation itemizing the security guard expenses over time to support that assertion. A-51. DOL has not argued or provided any evidence that Wu's costs associated with hiring the security guard were unreasonable. Therefore, this tribunal finds that Wu is entitled to the full amount requested, \$100,131.39.

## 2. *Brendan Ward Claim*

Wu seeks compensation from DOL for extra costs Brendan Ward Masonry, Corp., its subcontractor, claims it incurred as a result of constructing the Project through the contamination and the water problems on the site, as well as additional costs incurred due to the fact that the Project began late and took much longer to complete than anticipated. (App. Brief at 42). Ward filed claims against Wu pertaining to these issues, and "Wu has correspondingly passed through those claims to DOL. Since DOL denied these claims, they are part of this appeal." (App. Brief at 42). According to Wu, Ward submitted a formal claim against Wu on or about September 23, 2004. (Tr., 1073-1076; A-50). The total amount of Ward's final claim against Wu is \$202,998.79, which is the amount Wu seeks against DOL for this claim. (Tr., 1073-1076; A-50). Wu cites no legal authority for passing through Ward's claims to DOL.

DOL argues that Wu is not entitled to compensation for several reasons. Initially, it agrees with the Final Decision of the CO, dated October 5, 2004, which denied Ward's claim "for lack of specificity and supporting documentation." (G-34, B; App. Brief, 66). However, upon receipt of this decision, Wu revised and resubmitted the claim to the Contracting Officer, who found that the "claim . . . is essentially a delay claim based upon the extended time that it took the masonry Contractor to complete its work [and] . . . is a matter between this subcontractor and Wu." (G-221; Gov't Brief, 66-67). DOL's last argument is that Wu, not DOL, was responsible for delays in the Project such that it is not liable for Ward's claims. (Gov't Brief, 68).

The Court in *E.R. Mitchell Constr. Co. v. Danzig*, 175 F.3d 1369, 1370-71 (Fed. Cir. 1999) explained the circumstances under which a pass-through suit, like the one claimed by Wu, is allowable:

The hornbook rule is based on the proposition that the 'government consents to be sued only by those with whom it has privity of contract, which it does not have with its subcontractors.' The hornbook rule, however, is tempered to permit a prime contractor in certain circumstances to sue the government on behalf of its subcontractor, in the nature of a pass-through suit, for costs incurred by the subcontractor. In *Severin v. United States*, 99 Ct.Cl. 435 (1943), *cert. denied*, 322 U.S. 733, 64 S.Ct. 1045, 88 L.Ed. 1567 (1944), a prime contractor sought to recover from the government for direct field costs incurred by its subcontractor. Our predecessor court held that the prime contractor lacked standing to bring the suit, because the prime contractor could not prove in fact that it was liable to the subcontractor for the costs in suit. **If the prime contractor proves its liability to the subcontractor for the damages sustained by the latter, then the prime contractor itself can show injury to it from the government's action. Such a showing overcomes the objection to the lack of privity between the government and the subcontractor.**

(emphasis added) (citations omitted).

It is the Government's burden to prove that the prime contractor is *not* responsible for the costs incurred by the subcontractor that are at issue in the pass-through suit. *See Blunt Bros. Constr. Co. v. United States*, 171 Ct.Cl. 478, 346 F.2d 962, 964-65 (1965); *Josh McShain, Inc. v. United States*, 188 Ct.Cl. 830, 412 F.2d 1281, 1283 (1969). The *Severin* doctrine can only bar the prime contractor's pass-through suit against the Government if the Government first asserts at trial, and then proves, that the prime contractor is not liable to the subcontractor for the costs in suit. *E.R. Mitchell Constr.*, 175 F.3d at 1371.

In *J.L. Simmons Co. v. United States*, 158 Ct. Cl. 393, 304 F.2d 886, 888-89 (1962), the Court explained that the contractual terms between the contractor and subcontractor determine whether a pass-through suit is allowable. If the subcontract contains a clause completely exonerating a prime contractor from liability to its subcontractor for the damage complained of, suit cannot be maintained by the prime contractor against the Government. *Id.* On the other hand, if the subcontract is silent as to the ultimate liability of the prime contractor to the subcontractor for the damages complained of, suit by the former against the Government on behalf of the subcontractor will generally be permitted. *Id.* Lying between these extremes are those cases involving situations wherein the prime contractor has agreed to reimburse its subcontractor for damages it has suffered at the hands of the Government, but only as and when the former receives payment for them from the Government. *Id.* Such clauses do not preclude suit by the prime contractor on behalf of its subcontractor. *Id.*

In this case, the contract between Wu and Ward does not contain a term "completely exonerating" Wu from liability to Ward. (A-44). However, Wu must prove that DOL was at fault for the extra costs accrued by Ward and must document those expenses. In Wu's brief, it does not specify the reasons Ward accrued more costs than expected. Wu states only that

Wu has set forth in detail in prior sections of this Brief some of the extra costs incurred by Wu and its subcontractors caused by having to construct the Project through the contamination and the water problems on the site, as well as additional costs incurred due to the fact that the Project got started late and took much longer to complete than anticipated. The primary Wu subcontractor affected by these issues, Ward, has filed

claims against Wu pertaining to these issues, and Wu has correspondingly passed through those claims to DOL.

(App. Brief, 42). Wu does not elaborate on its claim that DOL was fault for Ward's additional costs. DOL argues that "subcontractor, in a number of instances, has identified inefficiencies by the prime Contractor." (Gov't Brief, 67).

Ward provided an analysis of the Project in which it explained the reasons for the delays and extra costs. (A-50). Ward stated that Wu's construction sequence did not work properly because of "Wu's inefficiency in scheduling and construction procedures." (*Id.* at 2). It also explained that "Wu's inefficient methods caused delays to Ward." (*Id.* at 3). In process of filling the concrete footings, Ward stated that "Wu did not clean the footings in a timely manner." (*Id.*). It alleged that Wu was unable "to get the job ready for Ward's masonry work" and caused delays. (*Id.*). According to Ward, during the process of backfilling walls, Wu had a "lack of personnel" such that the work was not done promptly. (*Id.* at 4). It noted that the erection of steel and the second floor deck was stopped due to "lack of coordination by Wu." (*Id.*). Ward described "cash flow shortages" caused by "inefficient job performance caused by Wu." (*Id.* at 11). It faulted Wu for "not scheduling or preparing the work properly." (*Id.* at 12). In its analysis, the only fault Ward found with DOL was a delay claim. (*Id.* at 11).

Wu has not proven that DOL was at fault for Ward's extra costs. In fact, for most of Ward's claims, it places the blame on Wu, not DOL. Wu cited no specific documentation or testimony in its blanket assertion that DOL caused the extra costs. Therefore, Wu's pass-through claim on behalf of Ward is not compensable.

It is important to note that although Ward does not have a cause of action against DOL, the contract between Ward and Wu specifically allows either party to go to arbitration to recover disputed costs from the other party. (A-44). Section 6.2 of the contract explicitly states that either party can file a claim with an arbitrator. (*Id.* at 8).<sup>15</sup> Therefore, Ward has other means of recourse to recoup extra costs allegedly caused by Wu.

### 3. *Direct Costs for Kirby Wu, Raymond Wu, and Robert O'Reilly*

Wu contends that it sustained damages due to the substantial delays on the Project in the form of direct costs attributable to the extra time Kirby Wu, Raymond Wu, and the time Bob O'Reilly were required to spend on the Project dealing with the consequences of the environmental problems; DOL's decision to force Wu to work out of sequence; DOL's decision not to take sovereignty over the Project and to cede local building and other code and regulatory enforcement affecting completion of the Project to the City of Wilmington; design changes, Change Orders issued by DOL, and other problems. Wu contends that because of these factors Kirby Wu spent substantial time in addition to the anticipated 15 hours per week out of his regular 50 hour work week for a period of one year; that Raymond Wu was required to spend time on the Project after Kirby Wu assumed responsibility in November 2002 that, similarly, had

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<sup>15</sup> Wu has not provided Section 6.2 in its entirety, as it only provided the even-numbered pages to the contract, A-44. However, from the portion Wu submitted, it is clear under Section 6.2.2 of the contract states that "claims not resolved by mediation shall be decided by arbitration." A-44 at 8.

not been anticipated; and that O'Reilly, who was an employee of Arch Design, a related entity partly owned by Kirby Wu, had not been expected to spend any time on the Project, but was required to spend substantial time on the Project. Wu's damage claim for these direct costs allegedly caused by DOL's actions totaled \$322,537.55. (Tr. 1002-03, 1004-06; A-262)

The Board finds it highly probable that substantial extra time was spent on the Project by these individuals as alleged because of the decisions and delays caused by DOL. However, the claim is not sustainable on the record before the Board because there is a failure of reliable proof. Support for the claim is essentially speculative. Although most of Kirby Wu's testimony of record is carefully grounded in demonstrable fact, there is virtually no factual support for these alleged costs. The assertion that Kirby Wu would have spent just 15 hours per week on the Project; that his father would have had no involvement in the Project after Kirby Wu assumed responsibility for the Project; and that O'Reilly would have had no involvement in the Project at all, is not proved to be other than a best estimate or pure, if reasonable, speculation.

In addition, because it is undisputed that there were no time sheets or other business records of actual time spent by these individuals on the Project as alleged, Wu's estimates of extra time spent on the Project are just that. Third, as pointed out by the DCAA Auditor, the claim for the time of the two Wu's as direct costs reflects an impermissible change in accounting methods in the course of the Project. Wu's normal practice was undisputedly to have included the costs of Raymond and Kirby Wu, as President and Vice President, as Wu's General and Administrative Expenses. The claim for O'Reilly's costs, on the other hand, encounters restrictions on costs payable between related business entities under the FAR, since O'Reilly was not an employee of Wu the Contractor.

The claim as pertains to O'Reilly's work is set forth simply as whole hourly increments, with one exception, by dates beginning on February 18, 2003, and ending August 12, 2004, tallied by year, but without described activities, amounts to 963 hours at \$73.00 per hour, totaling \$70,299.00. (A-308, Tab 12) A tally presented in such a manner is inherently suspect as to accuracy and reliability. But the entries for the direct costs related to the Project for Kirby Wu and Raymond Wu are tallied by the year for the years 2002 through July 31, 2005, at a pay rate of \$57.69 per hour for each throughout, and a constant number of hours per week throughout the year. Thus, Kirby Wu's direct costs for the Project were claimed for 10, 20, 20, and 20 hours per week for the years 2002, 2003, 2004, and 2005, respectively. Raymond Wu's direct costs for the Project were claimed for .50, 1.25, 1.50, and 1.50 per week for the years 2002, 2003, 2004, and 2005, respectively. Kirby Wu's Labor Cost plus Labor Overburden at 28.07% was calculated to total \$236,427.47 and Raymond Wu's was calculated to total \$15,811. Together with O'Reilly's \$70,299.00 the claim totaled \$322,537. In a pertinent note, Wu indicated that that total would be deducted from G&A for Eichleay calculations. Wu also calculated a Direct Cost-Adjusted for 1 year/weighted average for the three individuals of \$98,209.14, which Wu suggests would be added to annual General & Administrative Expenses if the Direct Costs were not awarded to Wu. (Tr. 1044-45; A-308, Tab 12). That would appear to be a matter for Wu and its accountants to be settled in accordance with generally accepted accounting practices.

#### 4. *Differential In the Defaulted Masonry Contract and its Replacement Contracts*

Wu's masonry contract with Trainor Construction Company (Trainor) for \$770,000 was executed and effective November 12, 2001, two days before the "partnering meeting" attended by Wu and Trainor which first disclosed to Wu that there were significant environmental problems at the Project site. Tevebaugh had provided DOL on July 24, 2000, with a cost estimate for the Project masonry work of \$695,520. By letter dated March 13, 2002, four months after its contract with Wu was executed, Trainor notified Wu that, because of the delay, it was unable to perform the contract. (Tr. 274-75; A-42, 43) The delay in question is effectively conceded by DOL to have been caused solely by DOL. The Board infers that Trainor could not sustain the economic losses inherent in such indefinite and extended standby status.

On April 26, 2002, still well prior to a full NTP, Wu executed a replacement masonry subcontract with Brendan Ward Masonry, Inc. (Brendan Ward) for \$950,000. Wu also subcontracted with Samson's Stone Company (Samson's) to supply and install slate sills, which had been included in Trainor's contract, but not Brendan Ward's, for \$16,552.80. (Tr. 277-78; A-44, 45) Wu claimed a loss of \$196,552.80, the differential between Trainor's contract amount and the total replacement contract amounts. (A-308, Tabs 1, 2; App. Br. 15) The claim was disallowed in its entirety by the CO, using cost or pricing data obtained from Wu. *See* FAR 15.801; *Cutler-Hammer, Inc. v. United States*, 189 Ct. Cl. 76, 416 F.2d 1306 (1969)(vendor quotations qualify as cost or pricing data). The rationale for the disallowance was apparently provided by Laubenheim, who principally drafted the CO's final decision. (Tr. 1858)

Wu's Brendan Ward subcontract claim for \$180,000 was not reviewed by the Auditor because it had been included in Wu's Phase I claim. However, the Auditor questioned Wu's total claimed amounts pertaining to the Trainor contract and its replacement as unreasonable in accordance with FAR 31.201-3 because the amount of the combined replacement contracts with Brendan Ward and Samson's, though higher than Trainor's, was less than Wu's original bid estimate for masonry work in the amount of \$1,234,000. The CO's disallowance in the May 13, 2003 Final Decision tracked the auditors' conclusion that the Trainor bid was unreasonably low based on cost or pricing data from Wu disclosing amounts for masonry identified in Wu's bid, Wu's bid calculation sheet which showed an internal estimate of the masonry cost in the amount of \$1,234,000, Wu's independent estimate for masonry costs of \$1,077,129, and quotes from other masonry subcontractors in the amounts of \$1,243,375 and \$1,350,000, all of which substantially exceeded the aggregate amount of the replacement contracts with Brendan Ward and Samson's. Having accepted \$1,234,000 as the fair value of the masonry work, the CO contends, in effect, that no genuine loss occurred, and that to pay Wu the differential between the failed Trainor contract and the combined Brendan Ward and Samson's contracts which replaced it would give Wu a windfall, either as a duplicate claim for lost profits, or undeserved recovery because the Trainor contract was unrealistically low and high risk, and Wu should have known that, as such, it was unlikely to be performed. (G-2; Tr. 1725). The Board concludes, however, that the evidence does not support the CO's finding that the Trainor bid was "unreasonably low."

The CO contends that Wu had not required Trainor to post performance and payment bonds, a circumstance which established Trainor as a high risk subcontractor. The CO also contends that at the time the Trainor contract was executed, both Wu and Trainor knew that environmental problems would substantially delay the start of performance. (GBr. at 65) That contention, however, is at odds with the facts of record, in that Wu, and presumably Trainor, did

not learn of significant environmental problems until the “partnering” meeting at which they were present on November 14, 2001. The CO also implies that the Trainor contract was underbid because it peculiarly contained no progress schedule or starting date, which Laubenheim testified would have been an integral part of such a contract. (GRBr. at 38; Tr. 167-68; AF II, N-1).<sup>16</sup>

Wu cites Tevebaugh’s July 24, 2000, cost estimate for DOL in the amount of \$695,520 for “Masonry Exterior Wall,” in support of its claim.<sup>17</sup> Wu suggested that the high masonry subcontractor quotes were effectively just quotes and might have involved collusive practices in the industry, and that Wu customarily culled its profit from such negotiated disparities, so that the Trainor contract bid amount was not necessarily unreasonably below the cost estimates for the masonry work on the Project cited by DOL. Wu claimed to have had satisfactory prior experience with Trainor, and to have conferred with Trainor in detail regarding the contract requirements, although Wu had not required Trainor to execute performance or payment bonds. Under the circumstances, setting a particular starting date in Trainor’s contract would have been an exercise in futility, since only a partial notice to proceed had been issued which allowed very limited activity not including Trainor’s.

The CO’s claim that the parties knew of a pending delay of unknown extent can be reconciled with the absence of a definite starting date in the Trainor contract, because at the time the Trainor contract was executed a partial NTP had been issued by DOL to uncertain effect. The Board concludes from the remarkable consistency of Tevebaugh’s cost estimate of \$695,520 for the masonry work provided to DOL and the \$770,000 amount of Trainor’s contract, as well as the pertinent circumstances as a whole, establish that the Trainor contract was not unreasonably low in amount under the circumstances, and that Wu is entitled to be paid the differential between the original and the replacement contracts in the amount claimed of \$196,552.80, because DOL is exclusively at fault for the delay which evidently caused the Trainor default. (A-283)

### ***Indirect Costs***

In addition to direct costs, Wu claims entitlement to indirect costs associated with DOL’s breach, including home office overhead, field overhead, and lost profits.

#### ***1. Home Office Overhead***

Wu claims additional compensation related to its claim for Extended Home Office Overhead related to its Phase I claim, which involved a suspension of work after the Contract was awarded on September 28, 2001, until Wu commenced work after the full NTP on July 1,

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<sup>16</sup> Wu’s tentative schedule at that time showed a planed start for the masonry subcontractor in January 2002. (Tr. 1867-68; AF-II, N-1) Neither Trainor nor Wu would have known the extent of any delay at the time, and there is no evidence that even DOL knew the extent of any delay which could have been anticipated or communicated with the Contractor or subcontractors, who were only told to stand by until the environmental approval could be obtained..

<sup>17</sup> If the estimate were low, it could be evidence of a propensity of Tevebaugh to underestimate costs of which Wu repeatedly complained.

2002. In addition, Wu claims that it is entitled to recover damages in the form of Extended Home Office Overhead for 491 days of delay which occurred during Phase II of the Project from July 1, 2002, when Wu actually began work, until October 25, 2004, when Wu left the site upon Substantial Completion, but before Final Completion. (A-308, Tabs 13, 20; A-254-259) The Contract provided for Substantial Completion in 300 days from NTP. Wu contends that, because it could only work on a limited number of projects in any time period, it needed to allocate its home office expenses such as salary for all administrative staff, rent, utilities, and other costs to its ongoing projects. (Tr. 1013-14) Wu contends that the Project occupied half of Wu's management for much of three years, precluding work on other projects, and these circumstances justify recovery of damages in the form of extended home office overhead as well as lost profits essential to making Wu whole.

In this case, Wu contends, it bid a project that it anticipated would take 300 days to Substantial Completion, and which would begin approximately September 28, 2001. (Tr. 1008-10) Wu claims recovery for 491 days of delay during Phase II in the amount of \$1,389,043.61. (A-308, Tabs 13, 20; A-254-259; Tr. 1009-15, 1029-53). Extended home office overhead is a major component of those damages claimed by Wu, along with lost profits and interest, and certain direct costs. The CO ultimately allowed Wu only 37 delay days attributable to DOL, and three delay days attributable to unusually severe weather, despite the enormous costs for extra work attributable, directly or indirectly, to removing or coping with the contamination on the Project site.

A great deal of Wu's performance time was inevitably associated with change order costs on the Project because of the contamination on the site. The more than \$3.3 million costs of addressing the environmental problems at the site are established of record. Wu points out that it removed over 11,000 tons of soil equal to approximately 357 truckload from the Project site; 200 RFI's resulting in 150 Clarification Sketches from Tevebaugh to address design mistakes and deficiencies; 29 Modifications which increased the total price \$1,425,000; \$230,000 of extra work is disputed before the Board; ECG performed \$656,000 of work which Wu plausibly characterizes as an extra to its contract, since it involved movement of contaminated soils, and removal of contaminated water, among other things, after January 2003; the value of Tevebaugh's Contract more than doubled in significant part if not primarily because of the environmental problems (A-227; Tr. 2462-68 (Reid)); Wu suggests that approximately 40% more work was done on the combined Wu and ECG contracts over Wu's original contract price of \$5,875,000, which was substantially more than the 3-4% of change order work which O'Malley testified was normal for new construction (Tr. 2789 (O'Malley)); and adding so much extra work piecemeal caused delays in construction and Contract performance.

DOL has settled and paid Wu in respect of Wu's Phase I claim for an essentially pure suspension of work from October 29, 2001, the date that the CO recited in her final decision dated May 13, 2003, that DOL issued a partial notice to proceed, until May 30, 2002, when Wu received a full notice to proceed. In respect of that claim, DOL paid Wu for unabsorbed overhead pursuant to an Eichleay formula pragmatically calculated on the basis of available data. The Board finds in regard to that claim that there is merit in Wu's assertion that in order to be made whole in a breach situation it was entitled to additional compensation in regard to the Phase I claim for the two periods from October 6, 2001, when the Wu submitted requisite

evidence of insurance and bonds, to October 29, 2001, when, according to the CO, the partial NTP was issued, and from May 30, 2002, when the NTP was issued, until July 1, 2002, when Wu was able to begin work. Since DOL compensated Wu for the period of suspension under Phase I at the rate of \$1,325.00 per delay day, Wu is entitled to be compensated for an additional 56 days at that rate, or \$74,200.00.

With respect to the home office overhead for the Phase II claim, the Board has already found that DOL is responsible for the 489 days of delay. The Board must also determine whether such delay qualifies as suspension of work, and whether Wu would be entitled to damages in the form of extended unabsorbed home office overhead; additionally, if Wu is deemed to be entitled to extended unabsorbed home office overhead for delays not qualifying as suspensions of work, whether the Eichleay formula could properly be applied to calculate the amount of such extended unabsorbed home office overhead.

At issue also is the application of the Eichleay formula. *See Appeal of Eichleay Corp.*, ASBCA No. 5183, 60-2 BCA ¶2688 (1960); *Capital Electric Co. v. United States*, 729 F.3d 746 (Fed. Cir. 1984). O'Malley testified that DOL uses the Eichleay formula to calculate compensatory payments related to delay, even when a complete suspension of work is not involved. (Tr. 2780-83) Wu cites *Wilner v. United States*, 23 Cl.Ct. 241, 259 (1991) as an example of an award of Eichleay damages for unabsorbed home office overhead where the Government caused miscellaneous delays by inaccurate specifications, untimely responses to requests for information, and other causes, rather than a suspension of work.

To recover unabsorbed overhead costs using the Eichleay formula, Wu must prove delay caused by the Government, and that the delay period has an element of uncertainty that required Wu to “stand by” and prevented Wu from performing other work in order to mitigate damages and replace the revenue stream that is delayed. *Wickham Contracting Co. v. Fischer*, 12 F.3d 1574, 1580 (Fed. Cir. 1994). Wu also has the burden of proving that it suffered some damage as a result of the Government delay. *Debcon, Inc.*, ASBCA No. 45050, 93-3 BCA ¶25,906 at 128,861. Once Wu has established a prima facie case with respect to these elements, as it has, the Government must prove either that the contractor could have obtained “replacement work” during the delay or that Wu’s inability to obtain replacement work was caused by a factor other than the Government’s delay. *Nicon, Inc. v. United States*, 331 F.3d 878, 883 (Fed. Cir. 2003).

Wu also seeks recovery of damages in the form of extended unabsorbed home office overhead pursuant to the Eichleay formula for delays attributable to the Government in its Phase II claim. Resort to Eichleay and unabsorbed home office overhead, however, is not appropriate to the circumstances of the Phase II claim. The Federal Circuit has strictly limited application of Eichleay in *P.J. Dick Incorporated v. Principi*, 324 F.3d 1364 (Fed. Cir. 2003), to delays of contract performance caused by a formal notice of suspension or Government action which requires the contractor to remain on standby. For the contractor to be on standby the delay must be substantial and indefinite in duration, and not concurrent with delay caused by the contractor or some other reason. The contractor must have been required during the delay to resume work on the contract at full speed immediately, normally with at least some of its workers and necessary equipment ready at the site. There must have been a suspension of much, if not all, of the work. And it must have been impractical for the contractor to obtain replacement work.

The purpose underlying application of the Eichleay formula is the recognition that, if the Government suspends the contractor's performance, and the contractor cannot obtain replacement work, he loses the revenue stream that he would have generated from the stopped work to cover that portion of his total home office overhead applicable to his whole business which would have been allocable to the suspended contract. If the contractor's work is not suspended and he is performing some aspect of the subject contract, or other work during the period of suspension, he is generating the income stream necessary to cover the home office overhead, which, therefore, is not unabsorbed. Pertinent to the instant claims, DOL has recognized two suspensions and compensated Wu accordingly. The first suspension was the delay between the first partial NTP on October 29, 2001, and the NTP on May 30, 2002. The second was from July 8, 2002, when contaminated soil was encountered until the issue was resolved and Wu could resume his only construction work then in progress at the Project on August 12, 2002.

The record is replete with evidence of extensive and pervasive delays caused by the Government, and which extended the contract performance period from the originally prescribed 300 days for Substantial Completion to almost three years, but are not proved to have involved suspensions of work and standby status that would properly invoke the application of Eichleay as a remedy. Wu performed the Contract under the umbrella of the DOL's concurrent breaches, but having continued to perform the contract at DOL's direction, has remedies for the breaches to the extent that he can prove his damages, but also contract remedies and constraints under the Contract. For the most part, Wu's remedies for delays attributable to the Government must look to the Contract.

The delays caused by the Government occurred in a context which is clearly established. They stem from the initial breach stemming from the Government's unfair nondisclosure that the Project site was contaminated and would require extensive remediation under DNREC oversight and direction. They stem from the cardinal change of the Contract from construction of a public building to construction of such a building upon an unanticipated contaminated site that has been remediated by an arduous and expensive process overseen by a state environmental agency and directed by the Federal contracting officer. The contractor did not bid such a contract or hold himself out to be qualified for environmental remediation, and the CO's representative had no prior experience with such site contamination or remediation. The delays also stem from the Government's decision to effect the necessary remediation by *ad hoc* change orders, in effect a sole source procurement of the environmental remediation work, rather than resubmission of a contract incorporating the necessary and appropriate specifications to deal with the contamination to competitive bidding. And they stem from the requirement that Wu work through the contamination with its ancillary effects upon the site, and cope with DOL's erratic management.

The process has proved to have been hugely expensive, at more than \$3.3 million more than twenty-six times the original estimate. The time for completion extended from less than one to almost three years to Substantial completion. DOL has paid Wu for an very large amount of extra contract related work, change orders amounting to approximately \$1,425,000, most of it related to coping with, or eliminating the contamination, but has allowed no extra time for

performance of that work. Indeed, in a separate related appeal pending before this Board, but in suspended status, the CO has recognized that Wu claimed 338 delay days for the period 7/1/02 through 3/31/04, but recognized only 37 delay days as compensable by DOL. She has held the remaining 301 delay days to be inexcusable and, accordingly, has assessed liquidated damages against Wu in the amount of \$150,000. The record before this Board establishes that the 37 days allowed as compensable reflect the initial suspension of work after the NTP when Wu first encountered contamination on the site, and a three day allowance for weather. In the circumstances, the Board finds the disparity to be so anomalous as to pervasively undermine DOL's position regarding the delay claims. But these considerations do not establish a proper application of Eichleay under *Principi*.

Wu has not established any method other than Eichleay for calculating extended home overhead losses. In its briefs, it does suggest a method which it calls the "modified Eichleay." However, the Board finds no legal support for this suggested method of calculating home office overhead and, accordingly, declines to adopt it. Without a suitable and legal accounting method at its disposal, the Board is unable to calculate the amount of home office overhead Wu is entitled to for its losses during Phase II of the Project. In other words, while the Board has found that the delays in Phase II are both excusable and compensable, the damages for these delays have not been proven. Therefore, because of this failure of proof, the Board is unable to award Wu any home office overhead for the Government-caused delays in Phase II.

## 2. *Extended Field Overhead*

In addition to home office overhead, Wu seeks to collect extended field overhead as damages for DOL's breach. Extended field overhead represents those costs associated with supervising the actual job site. (Gov't Post-Hearing Brief, 70). Typically, extended field overhead is recoverable where there has been an extended period of delay and the contractor was forced to supervise the site for additional days because of government delay. *Id.*

The Board has found that the delays in the completion of the Project occurred because of DOL's initial breach, i.e., the failure to disclose to Wu during the bidding process that remediation of the environmental contamination would be a necessary step in the construction process. Thus, Wu is entitled to recover extended field overhead.

Unlike home office overhead, DOL has stipulated to an amount of \$349.77 per calendar day for any award of extended field overhead. (Gov't Post-Hearing Brief, 70). Thus, the Board finds that Wu is entitled to recover \$19,587.12, representing extended field overhead for the 56 days of additional delay in Phase I. In addition, Wu is entitled to \$171,387.30, representing extended field overhead for 489 days of compensable delay in Phase II.

## 3. *Lost Profits*

Wu seeks lost profits as damages for the Government's breach. (Wu Post-Hearing Brief, pp. 47-50, Wu Reply Brief, 39-41). The Government contends that Wu is not entitled to profits because (a) the FAR prohibits profits as a measure of recovery when the Government causes a delay of contract work, and (b) Wu's lost profits are too speculative to be recovered. (Gov't

Post-Hearing Brief, pp. 56-59, Gov't Reply Brief, p. 42). The Board concludes that both of the Government's responses are without merit.

The FAR provides

A suspension of work under a construction . . . contract may be ordered by the contracting officer for a reasonable period of time. If the suspension is unreasonable, the contractor may submit a written claim for increases in the cost of performance, excluding profit.

48 C.F.R. § 42.1302. In addition, the Contract incorporates 48 C.F.R § 52.242-14, which provides that

The Contracting Officer may order the Contractor, in writing, to suspend, delay or interrupt all or any part of the work of this contract for the period of time that the Contracting Officer determines appropriate for the convenience of the Government . . . If the performance of all or any part of the work is, for an unreasonable period of time, suspended, delayed, or interrupted (1) by an act of the Contracting Officer in the administration of this contract . . . an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) necessarily caused by the unreasonable suspension, delay or interruption . . .

(Ex. 208, M27). Thus, by the terms of the contract, a delay of work caused by the Government does not constitute a breach, even if the delay is for an unreasonable period of time.<sup>18</sup>

The Government argues that these provisions prohibit Wu from recovering any profits. However, the essence of Wu's nondisclosure claim is not that the Government simply delayed work on the Contract without breaching it; rather, the claim is that Wu was damaged because the Government breached the Contract by, among other things, withholding superior knowledge related to the contamination of the work site. Wu contends these breaches injured Wu and caused the subsequent delays. Thus, because of these breaches, Wu is entitled to recover lost profits. *See North Bonneville v. United States*, 11 Cl.Ct. 694, 726 (1987) (holding that in the event of a Government breach, damages may include compensation for pecuniary loss, such as profits that could have been realized but for the breach, that are the consequence of the breach); 64 AM.JUR. 2d, Public Works and Contracts § 150.

Wu's claim is for anticipated profits under the Contract, not profits which could have been earned under other, collateral contracts. Anticipated profits under the contract breached are

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<sup>18</sup> In its brief, the Government cites "FAR 52.2417." (Gov't Post-Hearing Brief, p. 56). However, section "52.2417" does not exist in the FAR. The Board finds that the Government was actually referring to 48 C.F.R. § 52.242-17, which is a government delay clause that is mandatory for a fixed-price contract for supplies and optional for a fix-price contract for services. The clause has no application to construction contracts like the Contract at issue in this case.

a proper element of damages. *Ramsey v. United States*, 101 F.Supp. 353, 358 (Fed. Ct. Cl. 1951); *Northern Helex Co. v. United States*, 207 Ct. Cl. 862, 524 F.2d 707, 721 (1975); *A-I Garbage Disposal and Trash Serv.*, ASBCA, 93-1 BCA ¶ 25465. As the *Ramsey* court pointed out,

“If the profits are such as would have accrued and grown out of the contract itself, as the direct and immediate results of its fulfillment, then they would form a just and proper item of damages to be recovered against the delinquent party upon a breach of the agreement. These are part and parcel of the contract itself, and must have been in the contemplation of the parties when the agreement was entered into.”

101 F.Supp. at 358 (quoting *Myerle v. United States*, 33 Ct.Cl. 1, 26 (1897)). Therefore, Wu’s claim for anticipated profits is a proper element of damages.

In *CACI International*, ASBCA, 05-1 BCA ¶ 32948 (2005), the Armed Services Board of Contract Appeals (“ASBCA”) explained the elements that the contractor must establish in order to recover profits:

“(1) the loss was the proximate result of the breach; (2) the loss of profits caused by the breach was within the contemplation of the parties because the loss was foreseeable or because the defaulting party had knowledge of special circumstances at the time of contracting; and (3) a sufficient basis exists for estimating the amount of lost profits with reasonable certainty.”

(quoting *Energy Capital Corp. v. United States*, 302 F.3d 1314, 1325 (Fed. Cir. 2002)). The ASBCA further explained that both the causal link between the breach and loss of profits must be “definitely established.” *Id.* (quoting *Rumsfeld v. Applied Companies*, 325 F.3d 1328, 1340 (Fed. Cir. 2003)). As to the foreseeability prong, the Board explained that while “uncertainty as to amount will not, of itself, defeat a lost profits claim, the measure of damages must be reasonably certain.” *Id.* This standard requires reliable proof of the factual basis of the claim. *Id.* In other words, the court must be able to look either to the actual performance of the contractor or to the experiences of the industry to ensure the profits being claimed are accurate. *Id.*

The Board finds that the evidence satisfies the three-prong test for entitlement to lost profits set forth in *CACI International*. However, Wu’s method of calculating its lost profits is inappropriate. Wu appears to argue that it is entitled to 10.6% of the total final contract price, including all the equitable adjustments awarded to it during the construction process, as well as the direct costs at issue in this litigation. (Wu Post-Hearing Brief, p. 40). The Board finds that the 10.6 percentage rate is appropriate, but the application of this rate to the entire contract price is not.

Wu arrived at the 10.6% figure by examining Wu's profit history from 1996 through 2001 and averaging the rates of profit it earned during those years. (Exhibit A-308, Tabs 5 and 15; Tr. 1056-1057). The Government does not suggest that this rate is unreasonable; rather, the Government contends that Wu is prohibited from collecting any profits.<sup>19</sup> The Government's argument fails because anticipated profits under the breached contract are a proper item of damages. *See Ramsey*, 101 F.Supp. 353; *Northern Helex*, 207 Ct. Cl. 862, 524 F.2d 707, 721; *A-1 Garbage Disposal*, ASBCA, 93-1 BCA ¶ 25465. The Government has produced no evidence which discredits Wu's determination of a reasonable profit rate. Therefore, the Board finds that the 10.6% profit figure is reasonable. Furthermore, as Professors Cibinic and Nash point out, a profit rate of 10% is often treated by the courts as more or less standard. Cibinic & Nash, ADMINISTRATION OF GOVERNMENT CONTRACTS, 3d ed., 754.

Although the Board finds that the rate of profit is reasonable, the method by which Wu calculated the profits due to it is not reasonable. Wu argues that it is entitled to 10.6% of the final contract price. (Wu Post-Hearing Brief, p. 40). However, Wu is entitled only to 10.6% of the increase in its costs due to the Government's breach. *See Big Chief Drilling Co. v. United States*, 26 Cl. Ct. 1276 (1992). In *Big Chief*, the Government was held to have breached the contract by including a defective specification. 26 Cl. Ct. at 1301. In calculating the profits lost to the contractor, the Court determined the amounts which the contractor was forced to expend to correct the problem and applied the profit rate to that amount. *Id.* at 1321.<sup>20</sup>

In the instant case, as a result of the Government's several breaches of the Contract, the Contract was modified 29 times, and these modifications increased Wu's costs of performance by over \$1 million. Of these costs, \$564,426.98 can be attributed to the Government's breaches related to the site contamination and its remediation. Review of the 29 modifications, discloses that the breakdown of the increased costs due to the Government's breaches as follows:

<b>Modification Number</b>	<b>Date</b>	<b>Description of work</b>	<b>Cost</b>
Mod. 2	07/22/02	OSHA training required by Health and Safety Plan	\$77,179.54
Mod. 3	10/11/02	Prepare Health and Safety Plan; Contractor's pollution liability insurance; Provide	\$19,912.18

<sup>19</sup> In part, the Government focuses its argument on profits from collateral contracts. (Gov't Post-Hearing Brief, p. 57-58). It is well-established that such profits are speculative and are therefore not recoverable. *See Ramsey*, 101 F.Supp 353; *Quality Plus Equip., Inc.*, ASBCA, 96-2 BCA ¶ 28595 (1996); *Rocky Mountain Const. Co. v. United States*, 218 Ct.Cl. 665 (1978); *CCM Corp. v. United States*, 15 Cl.Ct. 670 (1988). However, Wu does not argue entitlement to profits it lost on collateral contracts. Rather, Wu argues that it is entitled to recover profits that it would have realized under the Contract but for the Government's breach. (Wu Post-Hearing Reply Brief, p. 40).

<sup>20</sup> Despite the Board's best efforts, it found very little caselaw, aside from *Big Chief*, in which profits were awarded and the method of calculation was clearly set forth. In most cases, the tribunal found entitlement to profits and then remanded the case for a determination of the amount of profits to be awarded. Therefore, the Board adopts the *Big Chief* method of calculating profits.

Mod. 4	12/20/02	survey for inconsistencies of contract documents Stockpiling contaminated soil; store fill at deep excavations; site design modification; modification of laterals and vehicle wash station; deep detention pond; consulting services; Health & Safety Plan	\$91,962.00
Mod. 6	06/09/03	Hazardous material monitoring; hazardous and unsuitable soil removal; additional meeting for Ten Bears; additional hazardous materials training	\$97,266.00
Mod. 8	07/08/03	Extra work for temporary fence required by state of Delaware; site design modification; stockpiling contaminated soil	\$15,382.00
Mod. 10	07/08/03	Wrap contaminated soil in poly	\$12,000.00
Mod. 11	07/08/03	Hazardous materials monitoring (Days 112-140)	\$18,399.27
Mod. 12	07/08/03	Hazardous materials monitoring (Days 101-120); additional OSHA safety training	\$25,329.59
Mod. 13	09/30/03	Site survey for grade elevations; Removing and replacing additional surface soil;	\$28,200.29

		Extension of pollution liability insurance	
Mod. 14	12/10/03	Additional soil removal	\$24,000.00
Mod. 15	02/11/04	Additional environmental monitoring for Days 140-180	\$36,798.54
Mod. 16	03/19/04	Undercutting soil; additional hazardous materials training (fence/landscape); demolition of slab staging area; demolition of concrete footings	\$51,081.16
Mod. 17	04/26/04	Extension of pollution insurance	\$7,696.13
Mod. 18	05/19/04	Load hazardous pipes onto truck; Additional hazardous monitoring (Days 181-200)	\$20,065.77
Mod. 19	06/25/04	Additional dewatering	\$10,000.00
Mod. 21	09/04/04	Cover stockpiles of dirt; Supply additional fill around garden wall	\$2,610.75
Mod. 23	10/28/04	Wrap, unwrap, and stockpile soils; Extension of pollution insurance; Supply clean fill for garden wall; Additional signage; Additional water test and sterilization	\$22,603.33
Mod. 25	05/03/05	Soil handling due to Remedial Action Plan; Added costs due to landscape work stoppage	\$3,940.43
<b>TOTAL</b>			<b>\$564,426.98</b>

Based on these costs, Wu is entitled to recover profits of \$59,829.26, or 10.6% of \$564,426.98, which is the total cost reflected in the modifications to the Contract as it related to the site contamination and remediation. Additionally, Modification 22 contained an amount for Wu's certified claim dated March 24, 2004, which included amounts for certain disputed change orders. The Contracting Officer awarded a partial payment for these change orders of \$9,994.44 representing payment for bringing in select fill for the foundation wall of the building and for maintaining the temporary roadway which provided workers' access to the building. The Contracting Officer awarded only a 10% profit on this charge. Therefore, the Board finds that Wu is entitled to recover an additional \$59.97, or .6% of \$9,994.44.

In addition, the Board has found that Wu is entitled to recover \$475,678.42, representing direct costs sustained as a result of the DOL-caused delays, i.e., disputed change orders and the masonry contract differential. Accordingly, Wu is entitled to recover a profit of 10.6% of this amount, or \$50,421.91.

With respect to indirect costs, the Board has awarded Wu \$74,200.00 representing home office overhead for Wu's Phase I delay claim. Additionally, the Board has awarded Wu \$190,624.65, representing extended field overhead for both the Phase I and Phase II delay claims. Wu is entitled to collect 10.6% of these amounts, or \$26,032.25, as lost profits under the Contract as well.

Therefore, Wu is entitled to an additional \$138,322.58 in lost profits, or 10.6% of \$1,304,930.05 plus an additional \$59.97, so that the total amount that Wu may recover as lost profits is \$138,382.55.

### ***Interest***

Wu claims entitlement to interest for both undisputed invoices paid late, disputed invoices later settled, and those made a part of this litigation. Interest on amounts owed by the Government is payable only to the extent authorized by statute or contract provision. *James Lowe, Inc.*, ASBCA, 92-2 BCA ¶ 24835 (1992) (quoting *United States v. Thayer-West Point Hotel Co.*, 329 U.S. 585 (1947)). With regard to government contracts, a contractor may statutorily collect interest on amounts payable by the Government under either the Prompt Payment Act or the Contract Disputes Act. The Contract does not provide for any additional interest.

#### ***1. Interest Under Prompt Payment Act***

A contractor may collect interest under the Prompt Payment Act ("PPA"). The PPA applies only to "invoice payments." 48 C.F.R. § 32.901. "Invoice payment" includes all payments under fixed-price construction contracts. §§ 32.001; 52.232-5. If the Government fails to pay a properly submitted invoice within the time periods prescribed by § 32.904, interest automatically accrues on the amounts due. § 32.907. The interest rate is computed at the rate established by the Secretary of the Treasury. 31 U.S.C. § 3902.

The PPA does not apply if the delay in payment is due to a dispute over the invoice amount, contract compliance, or amounts temporarily withheld in accordance with contract terms. § 32.907. *See also James Lowe, Inc.*, ASBCA, 92-2 BCA ¶ 24835 (“Since all of the delayed payments for which [the contractor] claims interest involved disagreements over the amount due or other issues of contract compliance, PPA interest penalties are not applicable.”); *R.F. Lusa & Sons Sheetmetal, Inc.*, LBCA, 04-2 BCA ¶ 32780 (2003) (holding that when a dispute over contract compliance exists, only CDA interest is available); *Wilner v. United States*, 23 Cl.Ct. 241 (1991) (holding that in analyzing a PPA claim, the relevant inquiry becomes whether a dispute exists). *But see Sterling Millwrights, Inc. v. United States*, 23 Cl.Ct. 49 (1992) (“Merely alleging the existence of a dispute, or raising a frivolous dispute, is insufficient to deny the contractor its right to interest for late payments under the Prompt Payment Act.”).

In the instant case, Wu claims PPA interest for numerous invoices which it claims were paid late. However, the evidence which it offers in support of its claim is far from sufficient. The evidence consists of merely a spreadsheet compiled by Wu indicating the invoice number, amount due, due date, amount and date of payment, and the amount of interest due. A-253; A-308, Tabs 19. Wu has not submitted any of the original invoices. There is no indication in this “evidence” of when the invoice was submitted for payment. Without such information, the Board is unable to determine which payments were in fact late, the number of days the payment was late, nor the amount due in interest. *See* 48 C.F.R. § 32.904 (providing that the payment is not due until 14 days after the invoice is received by the “designated billing office”). Therefore, the Board is unable to award any PPA interest.

## 2. *Interest under Contract Disputes Act*

A contractor may collect interest on any amount found due in a claim against the Government. 41 U.S.C. § 611; 48 C.F.R. § 33.208. Interest on the claim begins accruing on the date that the contracting officer receives the contractor’s claim. *Id.* The rate of interest is that fixed by the Secretary of the Treasury. *Id.* Interest is available under the CDA when the Government refuses to grant an equitable adjustment which an adjudicatory body later finds Government liability. *See Caldera v. J.S. Alberici Constr. Co.*, 153 F.3d 1381 (Fed. Cir. 1998) (allowing interest under CDA where contractor submitted letter requesting equitable adjustment and received payment three years later); *Reflectone, Inc. v. Dalton*, 60 F.3d 1572, 1577 (Fed. Cir. 1995) (allowing interest under CDA where contractor submitted a written request for compensation due to Government delays).

In the instant case, Wu filed two separate claims. The first claim was received by the contracting officer on October 31, 2002; the second was received on March 24, 2004. The October 31, 2002 claim relates to Wu’s Phase I claims, including the differential in the defaulted masonry contract and its replacement contracts and home office overhead. With respect to Wu’s Phase I claims, the Board has found DOL liable for the differential in the masonry contracts, as well as home office overhead and extended field overhead for the additional 56 days of delay. Therefore, Wu is entitled to recover CDA interest on the amount of \$321,082.77 (sum of

amounts awarded for the differential, home office overhead, and extended field overhead, plus 10.6% profit), to be computed as follows:<sup>21</sup>

October 31, 2002 – December 31, 2002: 61 days @ 5.25 per year = \$2,815.62  
January 1, 2003 – June 30, 2003: 181 days @ 4.25 per year = \$6,883.71  
July 1, 2003 – December 31, 2003: 184 days @ 3.125 per year = \$5,049.69  
January 1, 2004 – June 30, 2004: 181 days @ 4.00 per year = \$6,475.41  
July 1, 2004 – December 31, 2004: 184 days @ 4.50 per year = \$7,292.43  
January 1, 2005 – June 30, 2005: 181 days @ 4.25 per year = \$6,883.71  
July 1, 2005 – December 31, 2005: 184 days @ 4.50 per year = \$7,292.43  
January 1, 2006 – June 30, 2006: 181 days @ 5.125 per year = \$8,316.10  
July 1, 2006 – December 31, 2006: 184 days @ 5.750 per year = \$9,342.42  
January 1, 2007 – date of payment: x days @ 5.250 per year

The March 24, 2004 claim relates to Wu's Phase II claims. These claims include direct costs incurred because of DOL's breach and lost profits. The Board has found that DOL is liable for the majority of those claims which were denied by the contracting officer. Therefore, Wu is entitled to recover CDA interest on the amount of \$497,880.44 (\$450,163.15 plus 10.6% profit), representing the amount due to it for direct costs incurred because of DOL's breach, to be computed as follows:<sup>22</sup>

March 24, 2004 – June 30, 2004: 106 days @ 4.00 per year = \$5,330.67  
July 1, 2004 – December 31, 2004: 184 days @ 4.50 per year = \$11,307.86  
January 1, 2005 – June 30, 2005: 181 days @ 4.25 per year = \$10,674.08  
July 1, 2005 – December 31, 2005: 184 days @ 4.50 per year = \$11,307.86  
January 1, 2006 – June 30, 2006: 181 days @ 5.125 per year = \$12,895.18  
July 1, 2006 – December 31, 2006: 184 days @ 5.750 per year = \$14,486.63  
January 1, 2007 – date of payment: x days @ 5.250 per year

## CONCLUSION AND ORDER FOR PAYMENT

The Board finds that DOL breached the Contract by failing to disclose superior knowledge, failing to act in good faith, issuing defective specifications, and making a cardinal change. The Board further finds that as a result of these breaches, Wu's performance of the Contract was delayed by a total of 489 days. Therefore, Wu is entitled to collect, as damages for the various breaches, and the Contracting Officer is directed to pay the following amounts:

### Direct Costs

Disputed change orders:	\$279,125.62
Differential in masonry contracts:	196,552.80

### Indirect Costs

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<sup>21</sup> The Board arrived at the following amounts using the compounded monthly interest calculator available at <http://www.fms.treas.gov/prompt/ppcalc2.html>.

<sup>22</sup> The Board arrived at the following amounts using the compounded monthly interest calculator available at <http://www.fms.treas.gov/prompt/ppcalc2.html>.

Home office overhead:	74,200.00
Extended field overhead:	190,624.65
Lost profits:	138,322.58

**Interest**

October 31, 2002 claim:	60,351.52
March 24, 2004 claim:	<u>66,002.25</u>

**TOTAL RECOVERY<sup>23</sup>                      \$1,005,179.42 (plus interest owing on date of payment)**

**A**  
Edward Terhune Miller  
Judge, LBCA

Concur:

John M. Vittone  
Chairman, LBCA

Stuart A. Levin  
Judge, LBCA

The annexed signature page bearing the signatures of all three Members of the Labor Board of Contract Appeals is appended hereto as part of this Decision.

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<sup>23</sup> In addition to direct costs, indirect costs, lost profits, and interest, Wu has claimed entitlement to attorneys' fees and consultants' fees. FAR 31.205-47(f)(1) prohibits recovery of such fees incurred in prosecution of claims against the Government; therefore, the Board cannot award such fees. However, nothing in this decision shall be interpreted to prejudice Wu's right to file with the Civilian Board an application for fees associated with his successful prosecution under the Contract Disputes Act.