Expert Report regarding issues presented in:

LENNAR MARE ISLAND, LLC v.
STEADFAST INSURANCE COMPANY, AND RELATED CROSS CLAIMS,
No. 2:12-cv-02182-KJM-KJN (E.D. Calif.)
No. 2:16-CV-00291-KJM-KJN (E.D. Calif.)

by

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Introduction

As an insurance broker, corporate officer and attorney who has practiced in the relatively narrow and specialized areas of guaranteed fixed price contracts ("GFPCs"), environmental insurance ("EI") and related agreements ("Agreements") for over 18 years (since virtually the inception of insured GFPC cleanups), I have been asked to prepare a report stating my opinions regarding:

(A) The Remediation Stop Loss ("RSL") and Environmental Liability Insurance ("ELI") policies (collectively, "Policies") issued by Steadfast Insurance Company ("Steadfast") to CH2M HILL Constructors, Inc. ("CH") and Lennar Mare Island LLC ("LMI") to support the remediation and redevelopment of the former Mare Island Naval Shipyard ("Mare Island");

(B) Agreements that the RSL and ELI policies support, including: (1) the Environmental Services Cooperative Agreement ("ESCA") between the United States Navy and the City of Vallejo, CA ("City"); (2) the Mare Island Redevelopment Agreement ("MIRA") between the City and LMI; and (3) the GFPC between LMI and CH; and

(C) The incentives created by the Policy and Agreement structures, and the manner in which those incentives accentuated the need for the Insureds to act cooperatively and otherwise fairly with each other and with the Insurer, consistent with industry custom and practice, and the degree to which the Insureds did so act.

The use of EI, GFPCs and related Agreements to achieve remediation and redevelopment is a practice that emerged in the late 1990's, largely ended by 2011, and has unique or near unique coverage and related provisions and practices that are unusually complex.

As set forth more fully below, in the context of EI and GFPCs and related Agreements, I have represented or otherwise assisted remediation contractors in roles similar to that of CH ("Contractors") at Mare Island; property owners and prospective owners with interests similar to those of LMI ("Owners"); and the United States Air Force in a position similar to that of the United States Navy. Between 1998 and 2002, I represented (as outside counsel) and then joined as a senior officer one of the two Contractors that, for those years, largely pioneered and led the GFPC field; from 2002-2004, I led the EI and GFPC practice at the world's largest broker of EI; and from 2005-2015, I helped the Air Force and other Owners in the context of EI and GFPCs, and I am again helping them (and the U.S. Army) with respect to EI more generally. I have published widely on the subject of EI and GFPCs and attended (and presented at) numerous conferences discussing the emerging and somewhat fleeting (with minor exceptions, 1998-2011) practice of insured GFPCs.

For reasons stated below, my review of the incentive structures, the Insureds' actions and writings in this matter, and other information leads me to conclude that CH's and LMI's actions and writings in the context of the Mare Island remediation and redevelopment did not reflect the necessary and reasonably expected level of cooperation and fair dealing and departed sharply from industry custom and practice with regard to EI and related Agreements; and they were inconsistent with the Parties' likely intent and reasonable expectations in this matter and also with private and public policy goals of EI and related Agreements to remediate and redevelop properties.

Witness' Qualifications

I am a graduate of Williams College (1980) and Yale Law School (1984), where I was an editor of the Yale Law Journal. Immediately after law school, I served as a law clerk for the Honorable Albert W. Coffrin, Chief Judge of the United States District Court for the District of Vermont, and then worked for one year in a law firm in Burlington, Vermont. I began my career as an environmental attorney in 1986, as a Trial Attorney within the U.S. Department of Justice's Environmental Enforcement Section, where I represented EPA on sites that, like Mare Island, had been contaminated directly or indirectly by one or more Owners or other potentially responsible parties ("PRPs") and needed to be cleaned up. While at DOJ, I received Awards for Outstanding Service and Special Achievement.

I left DOJ to serve as an Associate at Covington & Burling and, later, as a Partner at Collier Shannon Rill & Scott LLP (now Kelly Drye & Warren LLP). My clients included TRC Companies, Inc., a large, publicly-traded Contractor that was among the first, and possibly the first, to provide EI-backed GFPCs for large cleanups. I believe that TRC was, at the time, among the largest if not the largest purchaser of EI in the world, and I was frequently asked to speak at EPA, Bar Association, and other conferences on the then-emerging practice of GFPCs supported by EI. After serving first as its outside counsel, I joined TRC as Senior Vice President, serving largely in a business capacity, negotiating GFPCs and participating in the manuscripting of EI policies required for environmental cleanups.

While at TRC, and approximately six months before the 2001 Mare Island transfer, I was asked to speak at EPA's National Brownfields Conference to discuss how EI and GFPC lessons learned in the private sector could be applied to remediate and redevelop contaminated military bases. Immediately following the presentation, I was approached by a senior Pentagon attorney and asked to brief the Defense Department's Deputy Under Secretary for Environmental Security as to how the Department could use EI and GFPCs to remediate and redevelop its bases. I met with the Under Secretary and other officials at the Pentagon in or about November 2000.

Also while at TRC and at roughly the same time period as the Mare Island transfer, I worked with TRC, BP and the City of Kenosha, WI to negotiate the purchase of EI and the creation and entry of an insured GFPC to enable the transfer, remediation and redevelopment of a site that was in many ways similar to Mare Island. The Kenosha project required cleanup and preparation for redevelopment of a roughly 100-year-old manufacturing plant, with structures and contamination similar to many and much of the Mare Island structures and contamination (*e.g.,* PCB contamination as a driver; old and large, brick buildings with wood block flooring).

BP was in a role similar to that of the Navy at Mare Island; TRC was in a role similar to that of CH; and the City of Kenosha was in a role similar to those of the City of Vallejo and LMI here. I led TRC's GFPC and EI negotiations on the Kenosha project; the cleanup was completed on budget (which was roughly 30% below previous estimates) and ahead of schedule (with demolition completed in one year and cleanup construction completed within four); and the site was soon and successfully redeveloped. In a jointly-written article published less than four years after the contract's signing (and a year after the cleanup's completion), BP, the City and TRC collectively hailed the project as a significant success. C. Olson et al., *Urban Renaissance: From Brass Manufacturing to Uptown Brass Center*, Air & Waste Mgt. Ass'n. (Dec. 2005) ("In the end, all parties involved benefited").[1]

During the years that I served TRC, its stock price increased significantly and attracted many other Contractors into the practice of GFPCs. In 2002, I moved to Marsh, Inc. – then the world's largest broker of EI – first as its National Leader for GFPCs, and later as Global Leader of its Environmental Practice, where I could help Owner clients not only choose from among different Insurers offering EI but also from among what were by then several Contractors competing or interested in competing for GFPCs. As a Marsh officer, I helped Marsh employees as well as its Contractor and Owner clients better understand EI and the GFPCs and related Agreements it supports.

In 2004, I created the multidisciplinary law firm and insurance brokerage where I continue to work, so that I could not only help Owners choose and negotiate with Insurers and Contractors, but also concurrently provide them insurance brokering and legal services, both of which are integral to well-structured EI, GFPCs and related Agreements. In addition to helping other clients, beginning in 2005 and through 2015, I helped the U.S. Air Force negotiate and use EI for GFPCs entered to clean up sites in California and elsewhere, much as the Navy intended to use a GFPC to clean up Mare Island. I continue to help the Department of Defense (the Air Force and Army) in other ways pertaining to EI.

At one California site in particular – the McClellan Air Force Base – I helped the Air Force use EI and GFPCs on five different occasions (in 2005, 2007, 2010, 2013 and 2015). The 2007 project was the first time that any military branch or other government entity was able to accomplish an "Early Transfer" of property that was on the U.S. EPA's National Priorities List ("NPL") of hazardous wastes sites in the U.S. Entered in August 2007, by September 2011, the cleanup had been completed and a celebration held.[2] As noted, the Air Force's needs with

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[1] While later at March (and representing BP), and to help others learn from specific aspects of the Kenosha project, I also published an article on the project. M. Hill, *Insured Fixed-Price Contracts as a Means to Quantify Costs and Obtain Funds to Clean Up Contaminated Sites: The Kenosha Model*, Int'l. Risk Mgt. Inst. (April 2003).

[2] https://www.youtube.com/watch?v=zPT9ahzWI_w&feature=youtu.be. The 2007 and subsequent McClellan transfers have resulted in thousands of jobs created and millions in local property tax and sales tax revenue generated. E.g., USAF, *Innovation Pays Off at McClellan Business Park* (2010-09-03), http://www.safie.hq.af.mil/News/Article-Display/Article/402043/innovation-pays-off-at-mcclellan-business-park/ (Air Force News Release) ("Today, it's one of the largest economic development and infill reuse projects in Northern California. Some 15,000 people live and work on McClellan Park. Sacramento County estimates that … the Park will have 35,000 jobs and generate over $6.6 million per year in local property tax and $1.1 million per year in local sales tax revenue.").

respect to McClellan were similar to the Navy's needs at Mare Island. In some respects, the Air Force's needs at McClellan were greater than were the Navy's at Mare Island, because the McClellan base's being on the NPL required each of the Early Transfers to be approved not only by California's Governor but also by EPA's Administrator.

From 2010-2012, and following my nomination by the White House Council on Environmental Quality and the U.S. Treasury Department to lead or help lead the $773M remediation and redevelopment trust ("Trust") created by the U.S. Government and 15 State and Tribal Governments to remediate and/or redevelop the 89 industrial properties left behind in General Motors' 2009 bankruptcy, I served in a part-time capacity (while also serving part-time at my own firm, Alba Risk Management) as the Trust's Chief Operating Officer and General Counsel. The Trust's principal beneficiary and overseer is the U.S. Government.

I have published several articles and given over 100 presentations (formal and informal) explaining the structures and uses of EI, GFPCs and/or related Agreements to Owners, Contractors, Governments, attorneys, brokers and insurers. Appendix C contains a list of all publications that I have authored in the past ten years (and some over ten years ago), as well as selected presentations I have made on the subject of EI and related Agreements.

The field of GFPCs and the EI that supports them is relatively small and highly specialized. I believe that the knowledge that I have gained through what are now over 18 years of experience in this field would help the triers of fact in this case understand the evidence and determine many of the important facts at issue. A complete statement of the opinions I will express and the basis and reasons for them are set forth in the balance of this Report. The facts and data upon which I have relied in forming those opinions, as well as other information that I understand to be required by Fed. R. Civ. P. 26(b), are set forth in Appendices A-D.

DISCUSSION

The actions and positions taken by CH and LMI in particular are best understood through the lens of the near unique and relatively novel economic incentives as structured under the Mare Island GFPC, related Agreements, and EI Policies. These incentives and their effects are, in turn, best understood by looking at the custom and practice of GFPCs and EI at the time of their and the other Agreements' negotiation and implementation.

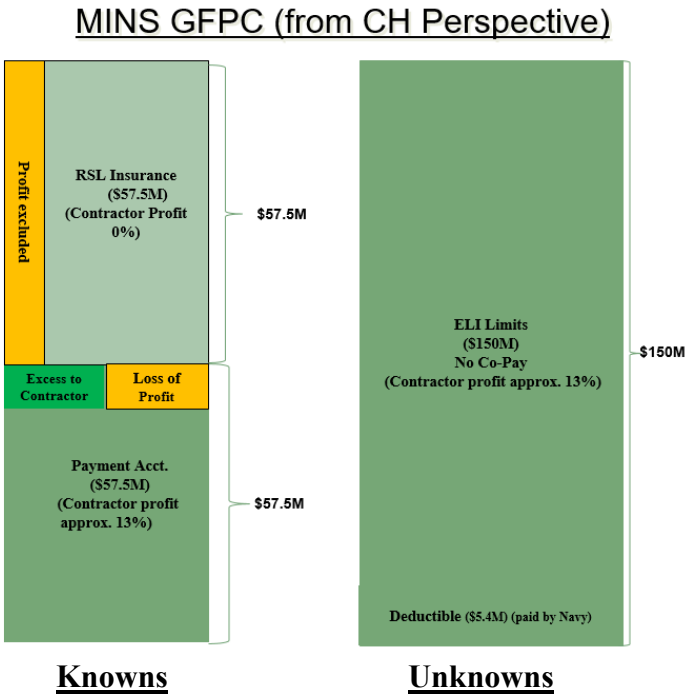
I. The Parties' Economic Incentives.

A. CH's Economic Incentives.

Taking first the most unusual incentive structure, what set CH's GFPC apart from the traditional time-and-materials ("T&M") cleanup contract was the great degree to which CH's ability to make profit depended on the *nature* (Known v. Unknown) of the Pollution Conditions ("PCs") that CH needed to address, and also on where things stood along the anticipated $57.5M range of the expected cleanup costs. From the start and increasingly, CH faced unusually strong economic incentives for PCs to be characterized as what the Mare Island Policies refer to as

Unknown Pollution Conditions ("Unknowns") as opposed to Known Pollution Conditions ("Knowns").

In this and other respects, CH's economic incentives might be best initially explained by use of the Figure below:



For cleanup of Knowns, CH had exclusive access to $57.5M from a Payment Account (which, although it had ultimately been funded by the Navy, was administered principally by the City and LMI). (GFPC Article VII). As CH accomplished any of 116 specified Milestones (e.g., completing the cleanup for a specific area), it would receive a corresponding and fixed amount (e.g., $325,000) for the Milestone accomplished. In the event that CH completed all of the Milestones at a cost that was less than $57.5M, it still received the $57.5M, presenting an opportunity for significant profit.[3]

On the other hand, if CH did not accomplish the 116 Milestones by the point where CH had spent or otherwise incurred $57.5M (measured in part by counting only those costs that were "reasonable and necessary" and excluding all of its profit[4]), CH would first lose even the normal margin of profit (e.g., 13%) that a Contractor might typically earn on a $57.5M project. That is because the second pool of $57.5M (the RSL limits) was not triggered until CH had spent

[3] As late as June 2003, CH expected to complete the cleanups for $52.7M, roughly $5M below the $57.5 it would nevertheless be entitled to receive from the Payment Account. CH Quarterly Report to Zurich (SZC 039375 – 385 (plus attachments)).

[4] This limitation is set forth in Section II.D of the RSL Policy.

$57.5M excluding profit.[5] Importantly, CH would not have faced a net loss (a true "stick") by the time the RSL was triggered (only a non-attainment of a "carrot").[6]

Once the second pool was reached, CH was foreclosed from any opportunity to make an overall profit from Known work (in part because any profit that it had made prior to that point would have been reduced to $0). Although the Known work applied against the second pool of $57.5M produced revenue that was, on balance, helpful to CH (thus providing little if any disincentive for CH to complete the work before the entire RSL pool was depleted), it produced no profit and was, of course, finite in size, thus increasing CH's incentive to shift work from the Known sphere to the Unknown.

For cleanup of Unknowns, CH had potential access to a far larger ($150M) pool of potential revenue, in the ELI Policy, and thus could bring CH's overall revenues from the initially-expected $57.5M to as much as $265M ($57.5M + $57.5M + $150M). More significantly, the Agreements explicitly allowed CH to receive profit on the entire $150M – profit that (unlike with Knowns) was not subject to later reversal in the event of cost overruns.

Assuming a margin of 13% (which was in the range of typical in the industry), the Unknowns presented an opportunity for CH to make $19.5M in profit just on the Unknowns. In this circumstance, and certainly once it became evident that CH was not going to complete the cleanup for less than $57.5M or otherwise make a profit on the Knowns, the only way for CH to make any profit[7] was for PCs to be characterized as Unknowns rather than Knowns.[8]

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[5] RSL §§ I, II.D, II.P. In what I believe was almost certainly an inadvertent error by the Parties in manuscripting the RSL (see below), Section II.D limits "Allowable Expenses" to those that CH "incurred and paid." (Emph. added). While this language would be appropriate for an Insured *Owner*, it is not appropriate for an Insured *Contractor* because much if not most of a Contractor's remediation expenses are not, in fact, "paid" because they are internal only. Were Section II.D to be read literally, it would deprive CH of substantial amounts of coverage that was plainly intended. Given the novelty and complexity of EI-backed GFPCs (especially at the time of the Mare Island Agreements), errors of this type were not uncommon (several others that occurred just in this matter are discussed below at 23 n.27), and the possibility of them underscored the need for trust, cooperation and fair dealing among the Parties.

[6] CH's avoiding a net loss on the Knowns work during the second pool was conscious on CH's part, as reflected in a 2001-02-20 draft of EI issues prepared by CH's counsel, Josh Bloom, in which he identifies the lack of a "co-payment" during the RSL layer as an issue for the parties to discuss.

[7] I do not mean to discount the existence of the "carrot" incentive, found as well in T&M contracts, of keeping costs low so as to please clients and, thus, be engaged for other projects that may generate profit. It is my opinion, however, that this incentive is far outweighed by the competing financial incentives found in GFPCs. This opinion is supported by statements, data and studies cited elsewhere cited in this Report showing that cleanups performed under GFPCs are typically done for much less than cleanups performed under T&M contracts.

[8] A caveat to the Unknown work was that, unlike the Known work, CH had to compete for it. (GFPC Article VIII). That said, consistent with custom, practice and simple efficiencies -- and as reflected in LMI's own writings -- CH faced tremendous economic advantage in being selected for the Unknown work, and it was widely assumed would be selected to perform any Unknown work that might need to be done. See 2011-09-22 email from LMI's counsel, Beth Pennington to CH's Counsel, Stephen Watson ("original intent of the parties" was for CH to perform the Unknown work) (LMI-103669 to 673); 2015-03-09 Deposition of Thomas Sheaff, at 158 ("The original intent … was that CH would do the unknown work"); 2015-04-07 Deposition of Beth Pennington, at 40 ("LMI did not want to go out and bid all of this work. We would have preferred that CH do all of the work.").

The GFPC at least superficially gave CH responsibility to determine whether a PC would be considered a Known or an Unknown. GFPC ¶ 2.5(a), (b). 2007-05-21 and 2007-06-11 letters sent by and between LMI and CH, respectively, illustrate how inappropriate and otherwise problematic it was to assign this responsibility to CH. First, at least for insurance purposes (but also, ultimately, for purposes of whether CH was meeting LMI's and, in turn, the City's cleanup obligations to the Navy), except to the extent that LMI and CH were willing to take the position that the Known v. Unknown distinction in the Policies is informed by the same distinction in the ESCA (and it appears that neither was), whether a PC is a Known for ESCA and EI purposes is to be determined by the ESCA and the EI Policies, respectively. The pre-[Policy]Inception communications between the Parties and Insurer reflect agreement on this principle, which was a common and critical element to GFPC and EI negotiations in the industry.[9] The post-Inception communications between LMI and CH show distrust (with accusations of bad faith) between the parties on this point and other points.[10]

A final problem with the Mare Island structure concerns the Self Insured Retentions ("SIRs" or "deductibles") in the Policies. Under most insurance policies, Insurers insist that, before any policy payments are "triggered," the Insured itself must pay a significant amount. This "stick" incentive helps prevent car owners from, for example, recklessly crashing their cars, as any insurance payment would have to be preceded by the car's owner paying the first $250 or so of the damage. In this case, and as discussed above, the full $57.5M RSL SIR was pre-funded not by CH or LMI but by the Navy (and none of it was returnable to the Navy). As for the ELI, the bulk of the SIR (the initial $5.4M) was also fully funded by the Navy, and any amount of the $5.4M that was not used would go not to LMI or CH (the Insureds whose incentives bore the strongest relationship to ELI costs) or even to the Navy, but to the City. E.g., MIRA §§ 502.A, B; 2001-01-23 Presentation by CH to the City, at 8 ("Navy to provide $5.4M SIR for Unknowns"). The near complete absence of this "stick"[11] removed yet another deterrent to CH, LMI, the Navy and even the DTSC from early on characterizing PCs as Unknowns.

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[9] E.g., 2001-02-22 CH counsel's Outline of Insurance Issues, as sent to LMI and Zurich (SCZ 103520 to 530), at 1 ("General Intent of the RSL and EL" is to "Ensure there are not gaps between the responsibilities assumed in the ESCA, the [NRCs in the ESCA] and insurance coverage" "RSL coverage to cover 'knowns' consistent with 'knowns' under the ESCA."); 2001-03-30 Redline Draft of RSL Policy, Comment from Insured to Zurich, in context of definition of sediment, "IT'S IMPORTANT TO HAVE THE SAME DEFINITION ON THE DOCUMENTS.") (emphasis in original) (SZC 099523); *see also* GPFC § 2.1 (CH must perform or cause to be performed the Environmental Services related to Knowns Conditions which LMI is required to cause to be performed under the MIRA).

[10] E.g., May, June and September 2011 communications between CH and LMI in particular, cited below, e.g., at 12 n.19. On at least one occasion, CH expressly took the position that the GFPC's conferring upon it the right to "determine" whether a PC was a Known (v. Unknown) was binding. E.g., 2008-01-29 Letter from CH to LMI (rejects LMI's arguments that certain PCs are not Unknowns; stating that the GFPC (and not the Policies) determine the issue, and that "[t]he GFPC assigns CH2M HILL the responsibility to decide"; refuses to proceed with work).

[11] I say "near complete" because, under one of the two Policies (the ELI), there remained minor SIRs for which LMI and CH might be liable. ELI Policy, Declaration Items 4.b-f. The risks associated with these was relatively small, because the amounts were relatively minor (e.g., $5K - $25K per claim), as were the odds that any claims related to those SIRs would be made.

B. LMI's Economic Incentives.

As the Site's prospective and then current Owner, LMI had (and still has) as its strongest economic incentive the receipt of land that is or becomes as clean as possible, thus permitting more profitable redevelopment uses (e.g., residential v. industrial),[12] and as quickly as possible. Although, as a Site Owner, LMI also shared the Navy's economic interest in maximizing long-term certainty as to cleanup costs, LMI was an atypical Owner because the Agreements contained many barriers that would, absent a wrongful act on the part of LMI or another insured (ESCA § 206), almost certainly protect LMI from itself ever needing to pay those costs.[13] In short, while LMI was the primary *beneficiary* of a cleaner site, it was not the primary *payor* of the costs to clean up the site.

To help reach its goal of a cleaner Site as quickly as possible, LMI's incentives were to maximize work and hasten review[14] under the GFPC as well as payments under the Policies, extending as far and as quickly as possible into the RSL's $57.5M and the ELI's $150M. This is because, under the Agreements – and, again, except to the extent of a denial of coverage due to an insured's wrongful act – contractual responsibilities for the cleanup would shift back to the Navy. ESCA § 206. Although LMI likely shared with the Navy *statutory* liability for the cleanup, under the Agreements, absent an insurance denial due to a wrongful act, the Navy would be contractually required to pay the cost or indemnify LMI for its costs.

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[12] As one example, the testimony of LMI's counsel, Gordon Hart, supports the fact that LMI had an interest in avoiding Land Use Controls ("LUCs"). 2015-03-30 Hart Deposition, at 85, 88 (LMI disfavors LUCs).

[13] In the ESCA, the Navy included an important exception to NRCs, excluding

> [Costs that are] not paid by the insurer pursuant to the [ELI] policy because of any dishonest, fraudulent, specifically intentional or malicious act or those of a knowing wrongful nature … by or at the direction of any insured party.

ESCA § 206. The "wrongful act" exception is important to protect the Navy from being required to pay for things that insurance did not cover because of knowingly wrongful acts by LMI, CH or the City. This provision was important to the success of all of the Agreements, as it reflects the common practice of avoiding moral hazards, hopefully deterring Insureds from engaging in wrongful acts. As examples of relevant documentation in this regard, LMI's 2007-05-21 Notice of Default by CH, and CH's 2007-06-11 response contain cross-allegations of bad faith and other misconduct that undermined insurance recoveries, thus reducing the amount of costs that could be contractually re-imposed upon the Navy. In this circumstance, the public would not be left without a PRP to pay for these costs: As is true of most "brownfield" developers, LMI assumed statutory liability for cleanup costs under Section 107(a) of the Superfund statute, as discussed in Section II.A, below.

[14] It was generally in LMI's interest for the cleanup to be completed quickly. "Brownfield" developers such as LMI are typically economically motivated to have the cleanup completed and/or the property otherwise "entitled" (e.g., to allow residential or other development) as early as possible so the developers can, as early as possible, attract prospective tenants or buyers, thus maximizing the developer's annual return on investment ("ROI").

It is possible that, in or around the time of the 2007-2008 housing and related financial crisis, LMI's incentive for the cleanup to be completed decreased. That said, any decrease in incentive to accelerate cleanup would have been reversed as the March 30, 2011 expiration date of the RSL Policy approached, because the parties would thereafter lose access to RSL limits to clean up Knowns. Documents cited in Section III.C reflect this effort to accelerate Knowns cleanup prior to the RSL's expiration date, and they indicate that the effort was not just by LMI and CH but also by the DTSC and the Navy.

C. The Navy's Economic Incentives.

While the Navy's economic incentive of getting a site cleaned up thoroughly and at lower cost was not atypical, the degree and changed nature of the incentives were novel and complex. As the Site's historical Owner (and primary polluter), the Navy faced unexpected and enormous cleanup obligations under a statutory scheme that was entirely new and highly uncertain in the 1980's but for which, by the late 1990's (as discussed in Section II), novel liability management tools had begun to emerge to help manage the uncertainties (and, in some cases, even reduce the amount of those costs).

The Navy's primary objective was to maximize certainty (if not reduction) in the cleanup costs. There was nothing unusual with that. What was unusual was that, in return for the certainty (and the possible overall cost reduction), the Navy gave up any right to any savings should the cleanup be completed for less than the expected $57.5M. At the same time, the Navy substantially reduced its risk of incurring cleanup costs above the $57.5M. In sum, the Navy had little to no incentive to have the cleanup finished for below $57.5M, and less-than-normal incentive to avoid costs rising above $57.5M. This was, in short, because, as noted (and other than under the wrongful act exception), the Navy would not be required to cover those costs except to the extent that they exceeded $114.3M for Knowns and were also not covered by the $150M ELI Policy for Unknowns, both of which were perceived as (and should have been) highly unlikely. As discussed below, these reductions in the Navy's "carrot" and "stick" incentives likely help explain why the Navy did not adequately monitor – much less endeavor to limit – the cleanup costs until 2009, when it became increasingly apparent that CH, left unchecked, would exhaust both of the two $57.5M pools of funds for Known cleanup. As common sense would dictate, Owners typically – if only because, under the CERCLA statute, they remain statutorily liable (to the EPA, the State and others) for the full cleanup – monitor costs incurred under an insured GFPC from the first month and first dollar, thus better ensuring that contractual and EI protections for which the Owner has paid will best protect the Owner from the need to spend more for cleanup.[15]

Two final notes: (1) just as CH and LMI lacked the "stick" incentive to not use the $5.4M fund for the ELI deductible, so too did the Navy (e.g., MIRA §§ 502.A, C); and (2) for reasons discussed in Section II.A, below, it was not in the Navy's economic or other interest for LMI to

[15] During his 2016-12-19 Deposition, Navy witness Jeffrey Giangiuli stated that, until 2009 (which was when the estimated costs to complete were already between $83M and $130M), the Navy did not receive regular periodic notices as to progress in terms of the estimate to clean up. Giangiuli Depos. at 14; *see* 2008-09-26 CH Quarterly Report to Steadfast, at 10, CCI00017953 ("current RSL Estimate-at-Completion (EAC) is projected to be $83.3 million") and 2009-02-13 CH Quarterly Report to Steadfast, at SJCE 091787 (EAC is $130.3M).

During her 2017-04-05 deposition, Navy witness L. Duchnak testified that, when the Navy did begin to monitor the cleanup costs, it did so without evaluating whether the PCs addressed were Knowns or Unknowns. 2017-04-15 Deposition at 67 (in rough format). If true, the Navy evaluation would have been significantly unprotective of itself, if only because the Navy had pre-funded the entire $57.5 Payment Account (and paid $3.33M for the RSL Policy to provide another $57.5M for Known work), and all Known work had to be performed at a discount because profit was not an Allowable Cost for Known work. E.g., RSL ¶ II.D; *see also* RSL ¶¶ I and II.P.

mis-use insurance funds in order to "goldplate" the remedy to something beyond that which was reasonable and necessary to protect human health and the environment.

D. The City's Economic Incentives.

The financial incentives of the City of Vallejo are also relevant. As initial recipient of the Site from the Navy, and immediate transferor of the Site to LMI as the Site Developer, the City was in a position that, while certainly not identical, was similar to that of LMI. Both shared the incentive of having the Site cleaned up as well and as quickly as possible, and neither faced much if any risk of liability for the cleanup costs.

The City's interest is particularly relevant to the RSL Policy because, under the GFPC, the City and LMI were both responsible for reviewing CH's applications for progress payments as CH worked its way through the 116 performance tasks and corresponding payment milestones with respect to the Knowns. GFPC § 7.3 and GFPC Exhibits C & D. Because neither the City nor LMI faced substantial (if any) risk of incurring cleanup costs themselves for Known, they had less incentive than might an uninsured and otherwise unprotected Owner or other responsible party to ensure that CH's applications for payments for Known work reflected costs that were, in fact, both reasonable and necessary.

As mentioned, under the MIRA, the City stood to receive any portion of the $5.4M ELI SIR that remained after the cleanup. MIRA §§ 502.A, C. In that sense, the City may at least for a time have had an economic incentive for the parties to not identify any of the first $5.4M in Unknowns costs as being for Unknowns. I have seen no documents indicating that this fact affected the City's behavior, or even that the City was aware of it. In any event, any incentive that the City may once have had in this regard would have vanished once the Unknown costs exceeded the $5.4M SIR, and it is quite possible that, from the start, the City's incentive to use the $150M in limits diminished (and possibly even outweighed) the City's incentive to preserve the $5.4M SIR.

E. Steadfast's Economic Incentives.

Steadfast's economic incentives were likely not unusual in this case. As is true of insurance underwriting in general, Steadfast's economic incentive was likely to receive revenue by participating in what was then the relatively new and rapidly growing market of EI, and do so in a profitable way. To do so, Steadfast needed to draft policies and implement a program that would allow claims at or below rough proportion to premiums demanded, thus fostering a sustainable program. In my opinion, Steadfast and the Insureds endeavored to structure the language in a manner that reflected sustainability (and reflected the wider market as a whole), rendering the chances of an RSL claim at less than 10%, and an ELI claim at less than 5%.

This effort is seen best by the Policy premiums. The premium for the RSL policy was 5.7% of the limits ($3.3M for $57.5M), reflecting a belief that claims against RSL policies should occur, very roughly, just once for every 17 policies.[16] For this reason and others, it is my

[16] The 17 number might be increased somewhat (e.g., to 20 or more policies) to cover an Insurer's operating costs (salaries, rent, fees, etc.) and to provide a meaningful expectation of some profit. Offsetting this, however, the

opinion that Steadfast and the other Parties believed at the time of Policy Inception that the odds of CH completing the cleanup for less than $57.5M was over 90%.

The premium for the ELI Policy was 3.1% of the limits ($4.68M for $150M), reflecting a shared belief that the odds of a claim under the ELI Policy were less than 5% (and very roughly, if we apply the 3.1% figure, once for every 32 or more policies).

As reflected in the pricing, the Parties almost certainly expected that, if insurance was to be triggered at all, it was likely to be under the RSL Policy, which, as the Court has ruled, reached PCs that went beyond those that were specifically listed on the Tables and Figures attached to the Policies and extended to the entire quantity and geographical extent of all PCs that were identified in the Tables and Figures. March 31, 2016 Order, at 12-13. This opinion is consistent with industry practice – expressed implicitly in the ELI policy (and is also implicit in the covenant of good faith and fair dealing), that a party cannot insure as an "Unknown" a pollutant that was, in fact, known by the party at the time it bought the Policy. E.g., ELI Exclusion ¶ IV.D; RSL ¶ VII.B, D; AIG CCC Specimen Policy, ¶ II.N (2007); Ace CCC Specimen Policy, ¶¶ IV.H, O (2008).[17]

* * *

Overview of Incentives, Their Effect and Their Source. In sum, the world of insured GFPCs presented competing economic incentives that were, especially in 2001, newer, stronger, and less well known than those in the conventional (T&M) world of environmental cleanup contracting. For this reason, it was and has remained particularly important that the parties entering into EI-backed GFPCs share a trust and honor that trust by acting in good faith and otherwise fairly throughout the cleanup. As stated by the U.S. Department of Defense in its 2004 Guide in using Early Transfers:

> These benefits [of ETAs], however, will not be realized without all involved parties investing and efforts, understanding and accepting a variety of risks, and trusting each other.

U.S. Dept. of Defense, *Early Transfer Authority: A Guide to Using ETA to Dispose of Surplus Property*, at 6 (Oct. 2004) (emph. added).[18]

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number of policies must be decreased somewhat (e.g., perhaps back to 17) to account for partial claims (that is, claims for less than the full limits of the policy). While providing a precise number is beyond the scope of this Report, for the reasons stated above, I believe that the 1 out of 17 figure provides a good starting point and that the above percentages of 10% and 5% are conservatively high. In fact, in my experience in the world of Insured GFPCs, I believe that most Insurers would not engage in negotiations with any Contractor or Owner whom the Insurer believed had expectations that the odds of a claim were higher than these numbers.

[17] To my knowledge, the Mare Island site was as well characterized as most brownfield sites, nor am I aware of any other reason (apart from the poor economic structures discussed herein and the Insureds' response to those structures) why the Known or Unknown costs should have fallen within the 10% and 5% exceptions noted herein.

[18] See also B. Maurer, *Guaranteed Fixed Price Remediation – A Paradigm Shift in Environmental Services Contracting*, written for Holland & Knight Newsletter (2nd Qtr., 2006) ("In many cases, the benefit sought by the

How CH and LMI acted in the face of these economic incentives is revealed best in LMI's and CH's own statements about each other.[19]

These and other actions are discussed in Section III, after a brief background as to how GFPCs and EI arose, what the Contractor and Insurer communities understood about them in their early days, and thus, the likely intent of the Parties as they negotiated the Mare Island Agreements and related Policies.

II. General History and Policies Behind GFPCs, EI and Related Agreements.

Beginning in the late 1990's, GFPCs and EI came to play integral and positive roles in cleaning up contaminated properties in the United States. When combined, their purpose and function were to give Owners, other PRPs and even regulators maximum certainty that environmental regulatory risks associated with contaminated properties have been quantified and contained. Providing this increase in certainty has led to the cleanup and redevelopment of hundreds if not thousands of properties.

A. Environmental Policy Leading Up to Modern Day GFPCs and EI

Environmental issues took on greater importance in the public debate beginning in the 1970's, with the 1970 passage of the National Environmental Policy Act ("NEPA") and the Clean Air Act; the 1972 passage of the Clean Water Act; and the 1976 passage of the Resource Conservation and Recovery Act governing the management of hazardous wastes. With respect to contaminated property in particular, liabilities and obligations grew exponentially following the 1980 passage of the Comprehensive Environmental Response, Compensation and Liability Act, commonly known as "CERCLA" or the "Superfund" law.

In a nutshell, CERCLA imposes strict, joint and several liability for all hazardous substances at a property for any of four classes of PRPs: any person or entity ("person") that: (1) currently owns or operates the property; (2) owned or operated the property during the time that hazardous substances (hereafter, "pollutants") were released at the property; (3) generated pollutant-containing wastes that were taken to the property for disposal or treatment; or (4) transported pollutants to the property. CERCLA § 107(a); 42 U.S.C. § 9607(a). In this case, the

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GFPR customer is not the risk transfer element, but the 'partnership' element that is created when the provider [Contractor] agrees to be paid only upon progress milestones ….") (emphasis added).

[19] Examples of such statements by LMI include: 2011-09-22 email from LMI's Counsel, Beth Pennington to CH's Counsel, Steve Watson ("CH had an internal conflict of interest that drove it to push work to the unknown side where it believed the work could be done more profitably." "Had CH spent less time finding ways to call things unknown and more time just getting the work done, most of these PCB sites would have been finished 5 years ago.").

Examples of such statements by CH include: 2007-06-11 Letter from CH's James Greeley to LMI's Tom Sheaff ("LMI failed to obtain approvals from … Zurich of all change orders prior to executing the change orders"; "LMI mismanaged the ELI policy from the very start"; and "If LMI had engaged Zurich from the beginning …, LMI could have avoided the issues raised by Zurich") (LMI_003_1_00004278-1).

Other statements by and about both LMI and CH are discussed in Section III.

Navy certainly faced liability under subsections 107(a)(1) and (2) from the outset, and LMI became liable under Section 107(a)(1) when it took ownership and began operating the Site in 2001.

CERCLA PRPs are liable even if their conduct was entirely legal (indeed, even if their conduct was mandated by the law). Moreover, in most cases, governments, neighbors, or others that had incurred or may incur cleanup costs (or otherwise require cleanup) as result of the releases could require cleanup (or payment for cleanup) by any of the above four classes of PRPs. Governments and other plaintiffs could, in most cases, pick just a small handful (or even one) of the PRPs to sue for the entire cleanup.

Because of this new law, Owners of contaminated sites suddenly faced sometimes enormous liabilities for which they had not accounted. In some cases, the expected cost of the cleanup exceeded the value of the property, and frequently those Owners abandoned the property and/or declared bankruptcy.

These new and unexpected liabilities resulted in an enormous increase in claims against pre-existing traditional insurance policies – specifically those known as Comprehensive General Liability ("CGL") insurance policies. As one might infer from their name, CGL policies covered a wide range of liability risks, such as slip-and-fall injuries, defamation (slander and libel), copyright infringement, and product liability.

Until 1984 (or, arguably, 1986), CGL coverage included liabilities from pollution that was not "expected or intended" or that had been released in a "sudden and unexpected" manner. Disputes over the meaning of these two phrases spawned literally thousands of lawsuits, with courts in different jurisdictions taking different positions. The increased risks and hard-to-quantify nature of those risks led insurers, in the 1984-1986 time period, to exclude all pollution-related risks from CGL policies.

As result of these new liability risks and particularly when coupled with the great difficulty in obtaining coverage with respect to them, businesses and other entities tried to avoid owning property that was contaminated or even might be contaminated. And as a result of that, the number of "brownfield" properties in the U.S. skyrocketed.

As stated by the United States Environmental Protection Agency ("EPA"):

> A brownfield is a property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.

https://www.epa.gov/brownfields/brownfield-overview-and-definition; see also 42 U.S.C. § 9601(39) ("The term 'brownfield site' means real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a [pollutant]").

EPA estimates that, even today, "there are over 450,000 brownfields in the U.S." (EPA website, cited above, as of 2017-05-01). They are unsightly and reduce local tax bases, decrease

employment, and encourage people to build on undeveloped ("green") land. Thus, and again, in EPA's words:

> Cleaning up and reinvesting in these properties increases local tax bases, facilitates job growth, utilizes existing infrastructure, takes development pressures off of undeveloped, open land, and both improves and protects the environment.

Id. With this enormous expansion of unused or underused land, EPA and its State counterparts (regulators) needed to do something.

Regulators responded in part by recognizing that cleanups must be "risk-based," allowing some contamination to be left in place where risks to human health and the environment could be reduced more effectively by restricting exposure pathways, through what are known as Land Use Controls ("LUCs").[20] An "institutional" example of an LUC might be restricting a site from being used for playgrounds, schools, or even residential dwellings, and instead confining it to industrial (or, in many cases, commercial) uses. An "engineered" example might be ensuring that any contaminated areas are covered with clay caps, parking lots, or even building slabs (with the latter appropriate only where steps are taken to avoid exposures through vapor or otherwise).

Coming hand-in-hand – and typically symbiotically – with LUCs were determinations as to what the future use of a property would be. Thus, for example, if a community determined that the most appropriate future use of a property was industrial in order to create jobs, regulators could reliably allow cleanup to the less-rigorous, "industrial" standards. It was here that property transfer and development agreements – such as the ESCA and MIRA in this case – were critical. For if an original Owner (e.g., the Navy) knew how a Site would be used going forward, it could better estimate the amount of funding required to meet those uses. The intent and expectations of the Navy and other Mare Island Parties appears consistent with this approach. The first page of the ESCA recites its purpose as to be of mutual benefit to the Navy and City by "facilitat[ing] early transfer and immediate reuse … by allowing the City to perform certain environmental remediation activities and redevelopment simultaneously …."). ESCA General Provisions, at 1. The ESCA identifies the "Reuse Plan" that had been adopted by the City, and directs that the City perform the Environmental Services in a manner that would not unreasonably delay the redevelopment. ESCA §§ 227, 301(A).

It was not in the Navy's interest for LMI to use the EI to spend more money cleaning up LMI's property to standards beyond what is needed for the Site's community-determined use. Such excess spending – sometimes referred to as "goldplating" – is harmful not only at the

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[20] As stated by EPA, "LUCs include engineering and physical barriers, such as fences and security guards, as well as ICs [Institutional Controls]." *EPA Guidance on Institutional Controls: A Guide to Planning, Implementing, Maintaining, and Enforcing Institutional Controls at Contaminated Sites,* at 2, OSWER 9355.0-89, EPA-540-R-09-001 (Dec. 2012). ICs, in turn, are defined "as non-engineered instruments, such as administrative and legal controls, that help to minimize the potential for exposure to contamination and/or protect the integrity of a response action."

The fact that some use of LUCs is deemed appropriate is reflected in the 2015-04-01 Deposition of the DTSC's Janet Naito, at 35 (agreeing that, "In some circumstances … at Mare Island … the DTSC will allow [pollution to remain but impose certain conditions on the use of the land").

"microeconomic" level (hurting the project at hand) but also (and likely more so) at the "macroeconomic" level, because such abuse of EI funds deters Insurers and others from participating in future Brownfield cleanups. This is not to say, of course, that one should in any way shortcut regulatory requirements. The best Brownfield cleanups are ones done in lockstep with the regulators, working cooperatively with them. Governments and the public are not well served by arbitrarily enabling a particular developer to enhance its investment's value by spending the Governments' or others' funds to go beyond the cleanup the Government has determined is protective of human health and the environment.

The State of California recognized the importance of integrating the Mare Island remediation with its redevelopment,[21] and LMI's counsel acknowledged that the GFPC and related Agreements are "interlocking and so interdependent on each other." 2017-02-10 Deposition of Gordon Hart, at 18 (as paginated in rough draft).

With regulators' increased willingness to apply LUCs and pre-determined property uses, a small number of Contractors made the business decision that, in return for the increased market share and substantial profits they might make through fixed-price cleanups, they would be willing to assume the now-reduced risks of costs exceeding the fixed price, even on large cleanups, as long as the risks could be mitigated through the use of EI.

The emergence of GFPCs and EI soon resulted in the cleanup and redevelopment of sites that otherwise might take years just to negotiate the cleanup's scope, and during those years the PRPs and regulators might spend as much in determining the cleanup than they would have spent doing the cleanup itself. Though not immediately embraced by all, the benefits of GFPCs were recognized by the Wall Street Journal, by Congressional leaders, and by the EPA and States.[22]

Although private sector Owners were first to enter into GFPCs, the Department of Defense followed relatively soon thereafter. *Site Remediation and Redevelopment*, White Paper for DoD by Lockheed Martin Corporation & The Institute For Defense Analyses, Prepared To Enable Faster Transfer Of BRAC Property (March 23, 2000) ("Given the success that industry has demonstrated in accelerating property transfer . . . the government should consider adapting industry strategies to achieve its goals [of remediating BRAC properties.]"); *Issues And Alternatives For Cleanup And Property Transfer Of [BRAC] Sites*," Paper By The Institute For Defense Analyses, App. G, at G-215 (Aug. 1, 2000) ("The private sector is typically on the

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[21] April 5, 2017 Deposition of DTSC's Laura Duchnak, at 17/19 ("[T]he early transfer focus was to try to help integrate cleanup and redevelopment so that we didn't step-wise go through the cleanup process and then transfer the property for them to go step-wise through digging it up and doing redevelopment. So, the thought was there could be some synergy there and saving the benefit, time, money, everything.").

[22] See, e.g., Wall Street Journal, *[TRC's] Maine Experiment May Point the Way to Ending Tangle of Litigation Around Superfund Law* (April 29, 1998) quoting then-EPA Administrator Carol Browner ("sounds like good old American ingenuity to me"), and then-Chair of the U.S. Senate Committee on Environment and Public Works Robert Stafford ("This is a great idea"); BNA Daily Environmental Reporter (June 8, 2000) ("[TRC's] arrangement is 'revolutionary' … A 'new model' for reducing cleanup and litigation costs."); D. Harnish, *From the State's Perspective*, Nat'l. Ass'n of Attorneys General, Natl. Envir. Enf't. Jnl., Vol. 18, No. 8, p. 11 (Sept. 2003) ("The [GFPC] approach worked well at the PBWO Site [in Maine] when traditional approaches failed.").

sidelines of BRAC property transfer, yet they are uniquely qualified to identify and create value in such property, thereby accelerating transfer.").

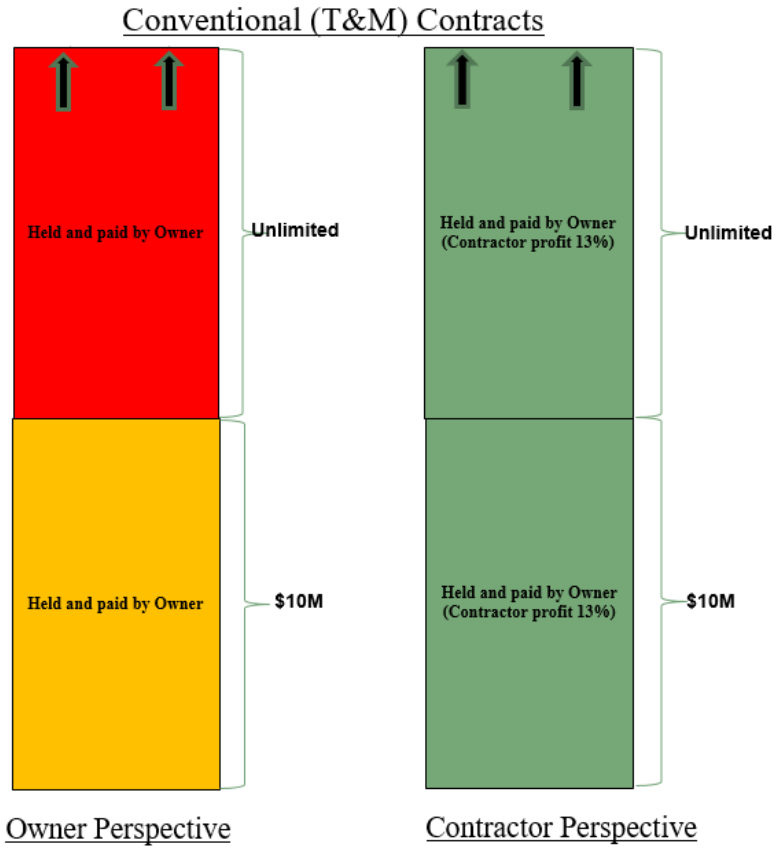
B. Overview of Guaranteed Fixed-Price Contracts.

GFPCs were the foundational building block of a larger package intended to maximize certainty regarding environmental risks associated with contaminated properties. Generally speaking, GFPCs were intended and designed to cover all costs required to address all regulatory cleanup requirements (that is, those imposed by federal, state or local governments) associated with PCs on, under or emanating (or having emanated) from a covered Site and that pre-existed the inception date of the policy.

GFPCs emerged at a time when, under traditional T&M contracts, Owners of contaminated properties had been routinely experiencing cleanup cost overruns reported to average as much as 60% above the amounts initially quoted to them by Contractors. E.g., R. Durant, *The Greening of the U.S. Military: Environmental Policy, National Security, and Organizational Change*, at 1 & n.4 (2007) ("average cleanup costs at closing [military] bases are typically 60 percent higher than estimated originally); *see also* CH2MHill, *Performance Based Contracting: Case Studies*, at 5 (PowerPoint at Federal Remediation Technologies Roundtable, May 25, 2005) ("88 of 155 BRAC sites are overbudget by an average of 45%").[23]

These increased costs may be traced at least in part to Owners' and Contractors' markedly differing economic incentives in the context of a traditional time-and-materials contract, reflected in the Figure below, using a hypothetical cleanup estimated to cost $10M:

[23] Making matters worse, with the uncertainty of cleanup costs often came increased litigation, as it was difficult to settle a dispute if the parties could not reliably estimate the amount that their agreed share of the liability would be. In addition to the uncertain cleanup costs, PRPs were spending as much as an additional 50% on litigation. See GAO, *Superfund Legal Expenses for Cleanup-Related Activities of Major U.S. Corporations,* GAO/RCED-95-46, at 1 (Dec. 1994) (corporations reported spending $1 for legal expenses for every $2 spent on cleanups).



As shown, whereas Owners, of course, hope that cleanups will be completed at or below the expected cleanup cost, Contractors face a financial incentive for the actual costs to rise above the expected costs. Under a T&M contract, the larger the cleanup, the larger the amount of revenue and profit to the Contractor.

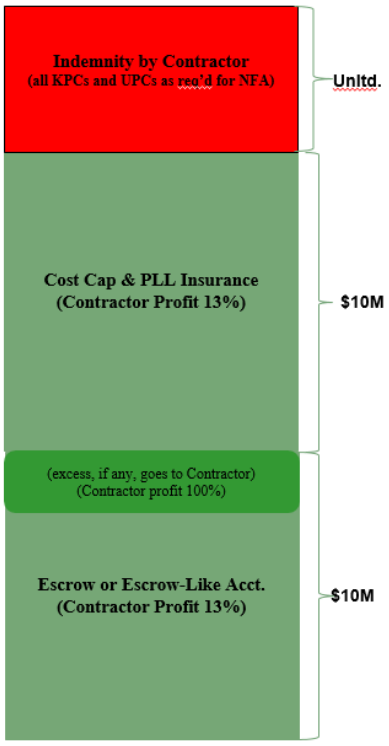
Among the primary purposes of GFPCs is to assure Owners (and regulators, who in many respects shared Owners' interests) that cleanup costs would not need to be spent beyond the amounts quoted for the GFPC. In addition to providing Owners increased cost certainty, GFPCs often offered cost savings, even below initial cost estimates. U.S. Army Environmental Command, *Tracking Performance on the Army's Performance-Based Contracts,* (May 16, 2006) (average costs savings at 42 PBCs was 21% below government's estimated Costs to Complete, or "CTC"). This finding is supported not only by common sense and anecdotal experience, but also by the (limited) data that exists, and is supported by CH's own stated expectations at a cleanup similar to that required at Mare Island. E.g., CH2MHill, *Performance Based Contracting: Case Studies*, at 4-5 (May 25, 2005) (at Charleston, CH's fixed price is 18% below Government's $35M estimate). In recognition of the cost savings from GFPCs, in March 2013 EPA's Inspector General chastised EPA for not using GFPCs more at EPA's own site. EPA Inspector General, *EPA Should Increase Fixed-Price Contracting for Remedial Actions*, Report No. 13-P-0208 (March 28, 2013); C. Olson et al., *Urban Renaissance: From Brass Manufacturing to Uptown Brass Center*, Air & Waste Mgt. Ass'n. (Dec. 2005) (article by BP,

City of Kenosha and TRC, discussing GFPC cleanup completed for $10.1M (including the cost of insurance) v. prior estimate of $15M).

To add to the needed assurances, GFPCs were typically structured from the outset so that the Contractor has a strong market incentive to complete the cleanup at or below the originally estimated cost. Perhaps the greatest such incentive (certainly the greatest "carrot") is to allow the Contractor to receive the full amount of the Contract price even if the cleanup is completed to the satisfaction of regulators before the full amount of the expected cost has been spent. The strength of this incentive to finish a cleanup below the fixed price was significant, for as discussed more fully below it presented the opportunity of turning a Contractor's typical profit margin of roughly 13% into one of 30% or even more.

Other incentives – both "sticks" – have historically come in two GFPC types. The first GFPC type, which I'll call here "Model 1," and that was employed and well known prior to and during the time of the Mare Island negotiations, was to require the Contractor to absorb all of the costs above the amount of the cleanup estimate plus the insurance. This early type of GFPC is shown in the following Figure:

GFPC Model 1



Contractor Perspective

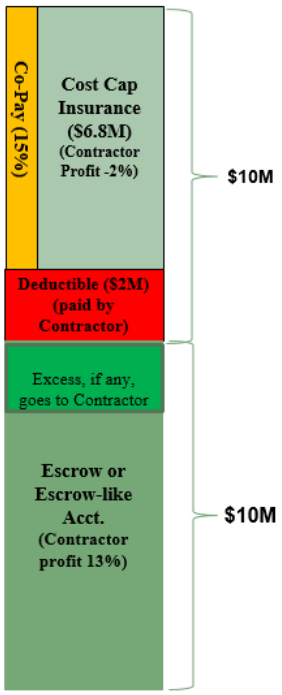
Although this GFPC Model did not require the Contractor to pay a financial penalty in the form of net loss until the amount of insurance had been exhausted, the magnitude of the loss (with the Contractor assuming 100% of the remaining environmental regulatory costs with no limitation as to dollar amount or time) that the Contractor faced throughout the cleanup was an

enormously significant "stick" incentive to complete the cleanup for as low an expense as possible while still accomplishing everything that regulators required. The leading if not sole Model 1 Contractor backed its promise to clients by becoming liable directly to the government and thus required the Contractor to do whatever the government required whenever it was required. Unlike LMI or even CH in the instant case, the Model 1 Contractor did not limit its liability through the use of a Limited Liability Company ("LLC") or other special purpose entity that would shield the parent company and its other affiliates from direct exposure. Importantly, the assurance came from a publicly-traded company – TRC Companies, Inc. (NYSE:TRR) – with hundreds of million in assets and in revenues.

As noted, the Model 1 approach was extremely well-received by the business world as well as regulators (see note 22, above), and the Contractor that pioneered it significantly grew its share of the cleanup market and grew by even more its profits. As a result, its stock price increased more than sixfold (from roughly $3 per share in April 1998 to roughly $20 at the time the Mare Island Agreements were entered three years later), attracting other Contractors into the field. CH was one of several large Contractors that entered the GFPC field in the wake of TRC's early success.

A competing type of GFPC (broadly described and identified here as "Model 2") emerged at about the same time as Model 1, and it, too, pre-existed the Mare Island negotiations. Model 2 varied greatly from project to project, but one variant of it is shown by the following Figure:

GFPC Model 2



Contractor Perspective

As shown, Model 2 also enabled Contractors to make substantial profit if they completed the cleanup below the expected cost. In return, however, the Contractor was required to absorb the full cost of an insurance "deductible" (typically on the order of a 10-20% delta above the cleanup estimate) and then absorb a "co-pay" obligation on the order of 15%. Thus, along with the strong "carrot" incentive to complete the cleanup below the expected cost, the deductible and co-pay requirements were strong "stick" incentives. In return for the Contractor assuming the risk of the deductible and co-pay, the Contractor's cleanup obligations ceased once the insurance limits were exhausted.

As noted, both Models importantly incorporated strong "carrot" and "stick" financial incentives for Contractors to complete cleanups for less than the expected cost.

C. Overview of Environmental Insurance

As reflected in the Figures above and otherwise noted, coverage from EI was critical to the entry and success of large GFPCs (e.g., those with expected cleanup costs above $5M). This is because Contractors with significant assets (and thus a meaningful indemnity) would not agree to meaningful risk transfer terms unless the Contractors could avoid a large majority (e.g., 60% or more) of the cost overrun risks through EI. U.S. Dept. of Defense, *Early Transfer Authority: A Guide to Using ETA to Dispose of Surplus Property*, at 48 ("Insurance is almost always a part of an early transfer transaction where the transferee assumes the cleanup responsibility."). As noted by LMI's counsel in this matter, even if GFPC Contractors did not insist upon EI, local governments (such as the City of Vallejo in this case) likely would. G. Hart, *Brownfield Development of Closed Military Bases*, at 928 (3d ed. 2004) ("No prudent LRA [Local Redevelopment Authority] or developer [like LMI] relies entirely on [covenants and promises of indemnity], given the availability of environmental insurance ….").

EI associated with GFPCs is principally designed as a back-up to support Contractors' cleanup obligations, and, not atypically (and as was the case at Mare Island), those obligations were limited to what was reasonably and necessarily required to bring to investigate, pursue and otherwise address to "no further action" status all pre-existing PCs. Upper limits of coverage was routinely set at twice the expected costs to clean up the Knowns, thus effectively doubling the amount of funds available to address them. See, e.g., 2017-02-07 Depos. of LMI Counsel Gordon Hart, at 23-24/29-30 ("[the RSL] had a limit which was two X of the guaranteed fixed price contract").

EI coverage for Knowns came in the form of what were commonly known as Cost Cap or Remediation Stop Loss ("Cost Cap" or "RSL") policies. Although, consistent with their customizable nature (discussed below), RSL policies varied from Insurer to Insurer and even from policy to policy, the basic notion of an RSL policy was that it covered all PCs that, at the time of Policy Inception, had been identified as requiring remediation (typically through an already-determined Remediation Action Plan or Scope of Work) ("RAP" or "SOW"), together with all PCs that are discovered *in the course of executing* the SOW, even as the SOW may change over time by Government mandate or with Insurer consent. E.g., AIG's 2007 CCC Specimen Policy; AIG 2001 Cost Cap Product Description. PCs requiring remediation that were known to or expected by the Insureds at the time of Inception but not disclosed to the

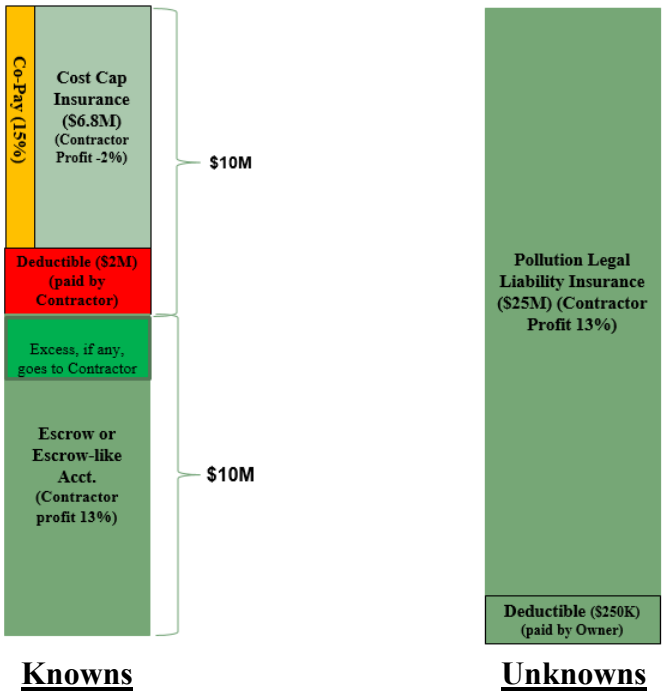
Insurer (either through the RAP or otherwise) were excluded from coverage. E.g., ELI ¶ IV.D; RSL ¶ VII.B, D; Ace 2008 CCC Specimen Policy, ¶¶ IV.H, O; AIG 2007 CCC Specimen Policy, ¶ II.N. Parties negotiating GFPCs and accompanying Policies at the time of the Mare Island transfers were generally aware of these distinctions and limitations.

Some GFPCs were supported by a Cost Cap policy alone, and neither the GFPC nor the insurance covered PCs other than Knowns. CH is aware of this, as reflected in its October 15, 2010 string of emails with its broker, noting that CH was then using "CCC" (Cleanup Cost Cap) insurance for an Air Force cleanup at the "McClellan-Davis site." The wording of the Mare Island RSL's SOW in this case is not inconsistent with a Policy that might be used alone to support a GFPC. E.g., RSL § II.N and Endorsement 6; see also RSL ¶ IV.J (Exclusion exception for changes to the SOW required by Governmental Authority).

Where GFPCs did extend Contractor obligations to PCs discovered outside of the scope of executing the SOW – or where Owners otherwise wanted protection for Unknowns – the Parties typically purchased those coverages in the form of insurance commonly known as Pollution Legal Liability or Environmental Liability Insurance ("PLL" or "ELI"). As noted above, PLL coverages were priced much lower because their risks were far less significant than those of Cost Cap. In general, PLL risks included costs from PCs that, at the time of Policy inception, the parties did not know of or have reason to expect and did not encounter in the course of executing the SOW. They included, for example, the risk that an insured might encounter PCs at a location that was far away from the area where remediation was taking place (such as might occur when digging a utility trench a mile away from the cleanup area, or even at a disposal site hundreds of miles away).[24]

Projects that did not follow the combined model had the PLL coverages in a separate policy. Working from the Model 2 description above, the following Figure illustrates Cost Cap and PLL insurance backing a Model 2 GFPC:

[24] Although not at issue in the Mare Island case, PLL coverages sometimes also extended to costs from entirely *non*-regulatory risks (such as claims due to medical injury, loss in property value, or other harm to neighbors who lived near the site, possibly triggered by PCs that had migrated from the Insured's property onto or under the property of a neighboring property).



EI Is a Surplus Lines Product. It is important to bear in mind that all modern day (post-1980's) EI is sold as what is called a "Surplus Lines" product. That is because, unlike General Liability, Homeowners, Auto, and the vast majority of other insurance with which most people are familiar, EI is not sold on policy forms with language and terms that are subject to prior review (and required approval) by State Insurance Commissioners or any other regulators. Rather, EI policies can be (and must be) individually manuscripted. The documents I have reviewed in this case indicate that, as was typical, the Insureds and their counsel and broker had a great deal to do with the manuscripting.[25] Further discussion on this point is in Section III.D.

For that reason, and to a much greater degree than language-regulated policies, EI policies may have unexpected gaps in coverage or other problems that were not intended by the parties. Given this circumstance, and as noted elsewhere, the need for trust, good faith and fair dealing are particularly critical to successful implementation of EI-supported GFPCs. In this context, it is significant that Steadfast has not, to my knowledge, tried to block coverage based on literal readings of obvious inadvertent errors identified below (note 27), and also that, during the claims process, Steadfast accepting CH's request that Steadfast make preliminary and monthly payments of 90% of the costs submitted, subject to later true-up during quarterly review.[26]

Particularly because GFPCs are highly complex and were a relatively new concept in the early days (e.g., 1998-2004), it was important to work with counterparties with whom one felt relatively comfortable in relying on their good faith in executing their respective obligations. Again, as stated by the Department of Defense in its Guide to Early Transfers:

[25] See e.g., 2000-2001 Documents cited within Appendix A, at ¶ 4.

[26] See 2008-07-11 email exchange between CH and Steadfast (SKL 009172 to 174).

> These benefits [of ETAs] … will not be realized without all involved parties … trusting each other.

2004 DOD Guide, supra, at 6. The need for trust was particularly great because, especially in the early days, there was more opportunity for parties to take advantage of the remaining imprecisions if not outright mistakes in the policy language.[27]

D. Early Transfers (and the ESCA and MIRA)

GFPCs and EI are particularly needed where the military seeks to make an "Early Transfer," that is, a transfer of contaminated property before regulators have determined that no further action ("NFA") is required to remediate the contamination. Under federal law, Early Transfers require heightened regulatory review and approval to ensure that the cleanup will in fact be performed following the transfer. E.g., G. Hart, 2004 ("[A]n early transfer requires a much more robust environmental insurance program than a FOST [i.e., non-early] transfer.").

The Mare Island transfer was done pursuant to the federal government's goal of re-purposing bases that were no longer needed by the DOD or any other part of the federal government. These transfers were made as part of the federal government's larger Base Realignment and Closure ("BRAC") program.[28]

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[27] As briefly referenced above, the Policies in this case presented several instances in which the plain language departed from what was almost certainly the Parties' intent. One example noted above is the RSL's definition of "Allowable Expenses," which is limited to costs that CH not only incurred but also "paid." RSL Para. II.D ("Allowable Expenses of the Named Insured means those actual expenses incurred and paid by the Named Insured ….") (emph. added). Certainly CH's internal expenses were intended to be covered to the extent that they were reasonable and necessary, id., but because those expenses, while "incurred" were not also "paid," a literal reading of Section II.D would substantially undercut what would have to have been the intended coverage.

A second example is in the RSL's exclusion for Loss or Claims arising out of "any consequence, whether direct or indirect, of war … (whether declared or not) …." Exclusion IV.P. Given the Mare Island Naval Station's historical purpose, read literally, this exclusion could be argued to exclude the vast majority of the intended coverage. Plainly what was intended by this language was to omit coverage for costs related to war taking place after the Policy's inception. Any doubt on this is removed by the fact that the Parties did include precisely that qualifying language in the ELI Policy's corresponding "war" exclusion. ELI Exclusion IV.S.

A third and equally clear example is the RSL's definition of Knowns, which (at least in the first sentence) limits them to conditions that the Government requires "the Named Insured" to address. Because CH was the sole Named Insured and CH was never (and was never anticipated to be) a party that is liable to the Government for cleanup, the Government would not (and was never anticipated to) require CH to do anything. Read literally, this sentence could exclude virtually all RSL coverage.

[28] The 2017 testimony of Navy Witness, Laura Duchnak, is consistent with this approach, in that she stated that the Mare Island ESCA was done at a time when "there was a huge impetus to incentivize BRAC cleanups, get them going, support the economic redevelopment of the local communities, especially in a situation like Mare Island where they were heavily impacted by the BRAC decision [to close the Base]." 2017-04-05 Duchnak Depos. at 13-14 (as paginated in rough draft format).

The Navy's goals were, in the words of DOD, to allow communities to beneficially reuse property sooner and the redevelopment to integrate cleanup and redevelopment, saving time and money. DOD Early Transfer Authority Guide, at 5 (Oct. 2004) ("Congress amended CERCLA to authorize a deferral of the CERCLA covenant that requires all remediation actions to be completed before federal property is transferred. This allows the community

As part of re-purposing federal property, the federal government needed to ensure either: (1) that the property was fully remediated and otherwise "suitable for transfer;" or (2) that the circumstances surrounding the transfer were such that an "Early Transfer" (i.e., one that was made before the site was fully remediated) would "not substantially delay any necessary [remediation] at the property." CERCLA § 120(h)(3)(C)(i)(IV), 42 U.S.C. § 9620(h)(3)(C)(i)(IV).

The public policy concerns with respect to such Early Transfers are such that they were prohibited completely until 1996, and thereafter allowed only where the Governor of the hosting state had himself or herself approved of the Early Transfer. See 2017-04-05 Deposition of Laura Duchnak, at 29 (as paginated in rough draft format). Sites that are on the EPA's National Priorities List ("NPL") require the approval not only of the Governor but also of the EPA Administrator.

As briefly noted above, GFPCs and EI supporting the GFPCs are critical tools in providing the assurances necessary to obtain these approvals. In 2007, I helped the Air Force obtain insurance necessary for the first Early Transfer of military property that was on the NPL and thus required the EPA Administrator's approval as well as that of the Governor. That cleanup, which also occurred in California, was completed just four years later (see supra at 3 & n.2) and was thus also the first Early Transfer of an NPL site to reach complete cleanup status.

The Mare Island transfer was one of the first Early Transfers, and it was done at a time when the military, regulators, and other Parties were still becoming familiar with EI and GFPCs.[29] For that reason and others, the Navy and other Parties may not in 2001 have appreciated the possible impact of the incentives structures (particularly those in the GFPC) outlined above.

III. The Mare Island Transfers.

Many of the specifics of the Mare Island transfers are covered in the prior Sections. Some additional specifics and references illustrating the points below are set forth in this Section (and in other documents identified in Appendix A).

A. CH's Incentives as Applied.

As reflected and discussed in more detail in Section I, any discussion of what happened at Mare Island should start with the GFPC and the economic incentives it provided CH. This Section summarizes some of those incentives and then looks at some documents reflecting CH's and others' actions in light of them.

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to beneficially reuse property sooner and the redeveloper to integrate cleanup and redevelopment, saving time and money.").

[29] Articles written as late as 2005 still referred to GPFCs as a "New Approach" to cleanups. E.g., B. Mauer, *Guaranteed Fixed-Price Remediation Offers a New Approach to Cleanups*, BNA Daily Env. Rept., B-1 (Nov. 28, 2005).

As noted above, CH likely had at the start of the project the hope if not expectation that it would complete the cleanup of the Knowns for roughly $5M below the "expected" amount of $57.5M held in the Payment Account, thus enabling CH to make the kind of significant profit for which at least one of its competitors had at the time already become well known. (See supra § II.B). As it became increasingly clear, however, that CH would not complete the cleanup at below $57.5M, it also became increasingly clear that CH could not make any profit for the Knowns work.

Importantly, although CH originally had the "carrot" incentive of possibly making great profit for the Knowns, it faced virtually no risk of a net loss (or "stick") under the Knowns. At worst, it would "break even" (i.e., not make profit). At the same time, by entering into the GFPC, CH knew it would help CH maintain (or grow) its market share while continuing to cover its base costs. For that reason, CH soon had an incentive to use up all of the $57.5M in RSL limits and to do so before they became unavailable through policy expiration. (Section III.C discusses CH's and others' efforts in this regard).

By contrast, CH was assured from the start of profit in any work it performed with respect to the Unknowns. Further, as to the size of the project, only by moving into the $150M ELI Policy could CH hope to expand the project from one with maximum revenues of $115M ($57.5M + $57.5M) to one with a maximum of $265M. Further incentivizing CH to characterize Knowns as Unknowns was the fact that, as was both logical and typical, it was presumed that CH would be performing the Unknown work even though such work (unlike the Known work) was subject to competition.[30] Thus, CH never had any reason not to characterize a PC as an Unknown, and lots of reasons *to* characterize them as such.

Again, CH's quarterly reports to Zurich indicate that, as of July 2003, CH expected to be able to complete the Knowns work by June 2008 and to do it for $52.7M, a variance of roughly $5M below the $57.5M held in the Payment Account for such work. (2003-07-30 Quarterly Report, at SZC 029384 and -385). By September 2008, the Estimate-at-Completion ("EAC") cost had risen to $83.3M and the time to complete expanded to March 2011 (CC100017953, and -957), and by February 2009, the EAC had risen to $130M (requiring at least $15M from the ELI SIR and Policy), and the time to complete expanded to March 2011 (SJCE 091674 and 091787).

As reflected more fully in Section III.C, in the waning months of the RSL policy, there was a concerted effort by all Insureds to adjust the cleanup schedule in an effort to complete cleanup of what they then characterized as the "Knowns" before the RSL's 2011 expiration.

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[30] This presumption is consistent with custom and practice (as well as common sense) and, as referenced in part above (at 6 n.8), is reflected in the testimony and document cited there.

Despite this presumption, efficiencies, and other reasons to continue to use CH for the Unknowns work, by 2007, LMI's and CH's relationship had soured enormously, with each accusing the other of bad faith. On May 21 of that year, LMI sent a formal Notice of Default to CH, largely adopting Steadfast's already-stated views that CH was overcharging for its work, "taken a position of absolute inflexibility regarding categorization of knowns and unknowns," and "presented its cost data and back-up information in a manner that is at best confusing and at worst obstructionist." LMI_002_1_00122263 (at 1-2). The same letter states clearly that CH's misconduct had "materially and adversely impacted the insurance coverage." Id. at 3.

LMI referred to CH's EAC estimates as "wildly changing." Although the precise date is at issue, by March 2011, the costs that CH had charged to the Knowns had risen to at least $114.3M.[31]

The results of this incentive structure were stated bluntly by LMI's counsel, Beth Pennington, and a 2011-09-22 email to CH's counsel, Stephen Watson:

- CH had an internal conflict of interest that drove it to push work to the unknown side where it believed work could be done more profitably.

- Had CH spent less time finding ways to call things unknown and more time just getting the work done, most of these PCB sites would have been finished 5 years ago.

(LMI-103669 to 673) (emphasis added).

That CH should have completed the cleanup in the first five years of the RSL, and that CH understood the obligation to use insurance funds only as reasonable and necessary but still responded inappropriately to its incentives, is further supported by the following:

- 2001-01-23, CH PowerPoint to the City, at 12, reflecting CH view that "IR sites to be cleaned up and closed within 5 years …." (SZC 100106).

- 2001-01-23 CH PowerPoint, at 9, states (accurately) that the City and LMI must reach and spend environmental insurance funds only as if they were their own: "Zurich expects reasonable due diligence be applied by City/Lenna to avoid unknown contamination and will cover only that which is clearly unavoidable – decisions to be made as if the $5.4M were City/Lennar money." (SCZ 100103).

- 2007-01-26 email from LMI's Neal Siler to CH, upset to be hearing only the previous day (in 2007) that CH had not completed the cleanup in Building 866, because "it has been common knowledge, at least for as long as I have been here, that the building was going to be demolished." (Siler 2015 Deposition Exh. 18, CH2M_MARE0842851).

- 2007-05-21 Letter from LMI's Tom Sheaff to CH's Jill Benson ("CH's long-standing inability and unwillingness to interact with LMI and its insurer in a productive manner has severely harmed LMI's insurance coverage.") (LMI_002_1_00122263).

[31] By the time of the 2012-04-13 First Amendment to the ESCA, the Insureds unilaterally (without Steadfast's involvement) stipulated (at p. 4) that an additional $4M would be needed to address what they unilaterally labeled the "Remaining Known Conditions." In the same Amendment, the Insureds agreed among themselves as to the date upon which the first $114M in Allowable Costs had been spent, and they then cross-released each other. As discussed below, these releases appear to have undermined Steadfast's contractual right to pursue subrogation claims against the Navy.

- Id. ("CH has taken a position of absolute inflexibility regarding categorization of knowns and unknowns ….").(LMI_002_1_00122263).

- Id. ("CH … presented its cost data … in a manner that is at best confusing and at worst obstructionist."). (LMI_002_1_00122263).

- 2008-02-12 Letter from LMI's counsel to CH, agreeing with Zurich that CH's CH50 report of Unknown in B108, IR10 and IR12 is wrong.[32] (CH2M_MARE083892).

- Id. LMI's statement to CH that the primary cause of delay is CH's "pattern" of trying a "new approach" when CH's position is not supported by the facts. (CH2M_MARE083892).

- 2009-05-20 internal LMI email, stating that, "as with many entities that come into contact with CH2M, … their [CH's] actions have eroded trust in their judgment and actions …." (LMI-253807 to -08).

- 2010-05-17 email from LMI's Neal Siler to LMI's counsel, Beth Pennington, reflects that LMI (and likely CH) was aware that Building 84 could simply have been demolished, at a cost (including abatement) of "around $200,000." If PCB-laden dust had impregnated the bricks, the range would be "anywhere from an estimated $500,000 to $1,000,000…." (Exhibit 4 to 2015 Pennington Deposition; LMI-050636-37).

- 2010-05-19 email from CH's counsel to LMI's counsel, urging that LMI and CH not "fall into the trap of answering or clarifying the Steadfast comments," and "slow down the present inquiry [by Steadfast]…." (LMI-101756).

- 2010-11-24 Letter from LMI to CH, at 3 ("The project was originally assumed to be completed within five (5) years.") (LMI_003_1_00000281-1).

B. **LMI's Incentives as Applied.**

Given LMI's economic incentives, LMI could accede to CH's approach – and in some cases seemed even to assist it. A 2010-01-14 email from LMI's counsel to CH reflects a conscious and inappropriate effort – in an express *quid pro quo* – on LMI's part to move PCs to the Unknown category in return for CH's reducing its cleanup charges:

[32] In arguing in this 2008 letter that certain PCs were Knowns, LMI expressly looked beyond the RSL's Tables and Figures (Ltr. at 2), a position that the Court on March 31, 2016 endorsed despite LMI's 2016 arguments to the contrary. (CH2M_MARE083892).

> I moved all FOPL [Fuel Oil Pipeline] remediation costs together to charge to ELI [as Unknowns]. [T]his makes your LI/RSL argument stronger. BUT I would ask you to consider a bigger haircut on the remediation costs.

Id. (emph. in original) (LMI-069908)

As noted, neither LMI nor CH had an economic incentive to avoid using insurance limits, and in fact LMI shared CH's incentive of moving the Knowns to the Unknowns so as to best preserve the relatively limited ($57.5 v. $150M) amount of funds in the RSL.

In this regard, LMI's writings are inconsistent with the pricing and generally-accepted nature of ELI policies. In its Default Notice, for example, LMI states that:

> When LMI and CH began working with the Navy, City of Vallejo and others more than seven years ago on an early transfer and privatized remediation, all parties recognized that a remediation project of th[is] size and scope … would undoubtedly involve occasional discoveries of 'unknown' contamination.

2007-05-21 Ltr., at 1 (LMI-002_1_00122263) (emphasis added). Only by using an extraordinarily overbroad definition of "Unknowns" (a definition that this Court rejected in 2016) could such a statement be supported. As noted above, this ELI policy (like most) was priced with the expectation that the chances of a claim were less than 5% (and arguably less than 3%). Despite that low expectation, by December 2003, LMI had submitted 22 change orders for Unknowns. (2007-06-11 Letter from CH to LMI, at 2) (LMI_003_1_00004278-1).[33]

LMI and CH also shared an interest (along with the Navy and City and even DTSC) in eventually adjusting the *timing* of the Knowns cleanup to ensure that it was completed by March 30, 2011 and thus fit within the RSL policy period. This likely was not expected to be an issue at Policy Inception – where documents show that, as is generally the case with Fixed-Price Cleanups of Knowns, CH and LMI expected the Knowns to be cleaned up long before the RSL's 10-year period had expired. In fact, as reflected in documents cited in the next subsection, the parties expected all of the Knowns to have been cleaned up within the first 4-5 years of the Policies.

As is critical to the writing of virtually any EI Policy addressing contaminated or potentially contaminated property, the RSL Policy and other documents make plain that, except as mutually agreed thereafter, the Policy covers only that which is reasonable and necessary[34] to achieve NFA within the uses that were reflected in the Policy-identified Land Use Plan in existence at the time of the Policy's inception. E.g., RSL ¶ II.D, End. 6, at 1-2.

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[33] LMI's above-quoted 2007 statement is at odds with the 2017 testimony of LMI's counsel, Gordon Hart, whose statements were more in line with my experience and with the very low (3.12%) premium to which the Parties agreed. Specifically, Hart testified that Lennar wanted "in a perfect world" for CH to perform all of the ESCA's cleanup requirements (Known and Unknown) and only "came to understand ultimately that there were going to be some unknowns." Depos. at 55 (in rough draft) (emph. added).

[34] E.g., 2001-01-23 CH PowerPoint to City ("Zurich … will cover only that which is clearly unavoidable").

Documents and testimony upon which I may rely with respect to LMI's use of EI to support redevelopment costs that may be additional to baseline remediation costs, and that LMI otherwise acted inappropriately include:

- 2004-08-02 internal CH email summarizing CH's then-recent conversations with LMI and characterizing the conversations as troubling in several respects. Perhaps chief among them is CH's statement that LMI was seeking insurance for "costs driven by development needs, such as elimination of land use restrictions, accelerated efforts to meet development schedules, changes in land use, [and] higher cleanup standards." (Sheaff Depos. Exh. 7) (CH2M_MARE0844158).

- 2004-09-28 (and -27) email exchange between CH and LMI. CH suggesting means of persuading Zurich to cover "historic landscaping" by "tying the requirement to protect these landscapes to some Governmental Authority (historic commission requirements?)." LMI not objecting to the characterization, but regretting schedule delays and stating that LMI "should have bid this work out weeks ago." Sheaff Depos. Exh. 6 (CH2M_MARE0843561-00002).

- 2006-01-30, letter from CH's J. Greeley to LMI's T. Sheaff, alleging (based on a Nov. 5, 2005 CH-DTSC meeting) that LMI had improperly (in violation of the GFPC) tried to influence DTSC's decisions as to the use of LUCs generally and the degree of cleanup in the Crane Test Area. (CH2M_MARE0844239).

- 2006-02-25 email from LMI to CH, pushing CH to ask regulators for certain testing to be done despite LMI's knowledge that "there is a very low, probably less than 0.1% [chance] that we would find VOCs or SVOCs …." (Note: the prior day, CH said to LMI that it would be "happy to analyze the samples as you request," knowledgeable that it was "LMI's desire" to do so despite that the likelihood of any VOCs or SVOCs being present at detectable concentrations "is not great …." (Siler Depos. Exh. 3; not Bates-numbered).

- 2007-06-10(?) (undated, but 06-10 is likely approximate) Labeled "Contractual Issues with LMI." Document appears to consist of notes written by someone at CH in preparation for CH's 2007-06-11 response to LMI's Default Notice. The notes object that, although the GFPC "clearly states" that CH is to be lead in discussions with DTSC with respect to the Knowns, LMI's "Sheila [Roebuck] does not recognize this constraint and has been actively engaging in discussion with the regulators on issues that affect the Known Conditions without deferring to CH2M HILL." Further states that "LMI has communicated to regulators that they [LMI] do not like LUCs and want to reduce, eliminate, avoid them if at all possible (except when it costs them money, then they are OK)." Notes that LMI is

contractually bound to support remedies that involve keeping certain floor slabs in place. (CH2M_MARE1246155) (Hart's 2015 Deposition Exh. 3).

- 2007-06-11 Ltr. from CH's J. Greeley to LMI's T. Sheaff ("LMI failed to obtain approvals from … Zurich of all change orders prior to executing the change orders"; "LMI mismanaged the ELI policy from the very start"; and "If LMI had engaged Zurich from the beginning …, LMI could have avoided the issues raised by Zurich") (LMI_003_1_00004278-1).

- 2015-03-30 Deposition of LMI's Counsel, Gordon Hart, at 85, 88 (LMI disfavors Land Use Controls).

- 2015-04-01 Deposition of DTSC's Janet Naito, at 45, reflecting conversations between LMI and DTSC reflecting LMI's desire that the State go "for an unrestricted cleanup" in the residential areas.

C. The Incentives of All Insureds (and even DTSC) to Push Work to the Knowns before RSL Expiration.

Because the RSL Policy was only 10 years in duration (v. 20 years for the ELI), and certainly after it became clear that CH was not going to complete the cleanup in the first 4-5 years as had been expected, the Insureds had a strong incentive to modify the timing and priorities of the cleanup in order to get as much "Known" work done as possible prior to the RSL's March 30, 2011 expiration.

This incentive was shared by the California Department of Toxic Substances ("DTSC" or "the State"), who allowed it to affect their decisions as to cleanup timing, a classic "moral hazard" that should have been avoided.

Documents and testimony upon which I rely with respect to the Insureds' and State's incentives in this regard include the following:

- 2009-12 draft Third Amendment to the GFPC states (at p. 1) that "The Parties expressly acknowledge that currently existing insurance coverage for Known Conditions Work remains in effect only until March 30, 2011. The Parties intend that all Known Conditions Work shall be completed by that date." (LMI-124011).

- 2010-05-19 CH to LMI email (attached to 05-19 internal CH email apparently inadvertently copied to LMI's counsel). Discusses the need to avoid "fall[ing] into the trap of answering or clarifying Steadfast's comments," as "Less gets done within the RSL policy period." (Sheaff Depos. Exh. 37) (LMI-101754).

- A 2010-11-24 letter from LMI's Siler to CH states that "There has been a long-standing consensus between LMI, [CH], [Steadfast] and the

regulatory agencies … that [Knowns] would be addressed first, both because they were identified first and also in recognition of the impending expiration of the insurance for CH's work on [Knowns]." (LMI_003_1_100000281-1).

- 2015-02-25 Deposition of Zurich's Tom Duggan, at 226, indicating that costs had escalated by "roughly $60M" in the last 6 months of the RSL policy, after taking years to reach the first $57M.

- 2015.03.17 Deposition of DTSC's Janet Naito, stating that "There was a big push [to use the RSL Policy] … because we knew … certain insurance policies [the RSL] were going to expire on a certain date ...we wanted to make sure that we got the largest cleanups done prior to the expiration of those policies." [64] "[I]t was our understanding the policies were funding the cleanup." [p.65] She was told this when she was brought onto the Mare Island site, but can't remember by whom. (p. 65). Says yes to "So when you were brought on, you were informed that there was this push [to get the cleanup done] because of the insurance issues?"

- CH's Quarterly Reports, cited in Appendix A, at ¶ 4.s; and the 2009-05 PowerPoint by CH, *CH2MHILL Lennar Mare Island GFP Project: Monthly Program Status Report* (May 2009).

D. The Surplus Lines Nature (and Complexity) of the EI Polices and Their Negotiation.

As noted above, the EI Policies in this case were of a "surplus lines" nature, and thus not subject to any regulatory review as to their language, requiring individual manuscripting much the same as most other private contracts. Thus, unlike the vast majority of other insurance policies (e.g., Homeowners, Auto, General Liability), EI policies do not come in pre-set templates whose language is *not* subject to negotiation and manuscripting.

Section II discusses briefly some of the problematic language that the Policies have on such critical terms as: (1) whether CH's allowable costs include its internal costs (v. being limited to costs it "paid" to others); (2) whether coverage for the Knowns is virtually all excluded by the War Exclusion; and (3) whether virtually all RSL coverage is excluded because the Named Insured (CH) is not a PRP. Supra at Section at 23 n.27. The documents referenced in the above footnote as well as those referenced below (and in Appendix A, espec. at ¶ 4) help illustrate the fact of the manuscripting, and help show that the parties' intent on these and other issues was, in fact, consistent with custom and practice, and with the practicalities in the context of EI-backed GFPCs.

E. The Interdependent Nature of ESCAs, MIRAs, GFPCs and Policies.

LMI's counsel, Gordon Hart, testified that the Mare Island EI, GFPC, and other Agreements were "interlocking and so interdependent on each other," and that they were, for that

reason, "negotiated as a package." 2017-02-07 Hart Deposition, at 18 (22-23). Although, in the above statement, Hart was referring only to the Navy, City, LMI and CH, he made clear immediately after that Zurich was involved not only in the EI negotiations but also in the GFPC negotiations, and Zurich was given copies of the evolving drafts of the ESCA and the MIRA. Id.

Mr. Hart's testimony is consistent with my experience. EI, GFPCs, and related Agreements are not drafted in a manner that enables them to be read in isolation. This is in large part because, on cleanups of this sort, the original agreement (here, the ESCA), forms the framework for each of the "downstream" agreements: MIRAs, GFPCs and Policies.[35] The fact that Zurich was given drafts of the ESCA and MIRA as they evolved leading up to their 2001 inception underscores the almost certain expectation in 2001 that none of the Parties would later amend any of the related Agreements without notice to the others.

Documents that are relevant to this issue include the following:

- 2007-06 (estimated date) Appears to be CH's internal notes in response to LMI's 2007-05-21 Default Notice, and appears to be another example of the Insureds, on their own, modifying what will be considered a Known v. an Unknown: "Even though the GFPC currently indicates that the FOPLs show[n] on the figures in …the ESCA are contractually Known[s]…LMI has coverage under the ELI policy for all but the 16 FOPLs segments covered under the RSL policy." CH2M_MARE1246192 (at p. 7).

- 2004-08-02 internal CH email, indicates that LMI and CH had agreed to split the costs of deductibles, and also discusses an agreement that LMI would join CH in defending CH's costs as "fair and reasonable and necessary"). (Sheaff Depos. Exh. 7) (CH2M_MARE0844158).

- 2009-01-14 email from LMI's counsel to CH, saying that she has "moved all FOPL remediation costs … to [the] ELI [Policy]… [T]his makes your [CH's] LI/RSL argument stronger. BUT I would ask you to consider a bigger haircut on the remediation costs." (emphasis in original) (LMI-069908).

- 2011-09-14 Email string and other documents between LMI, CH, and Navy discussing joint efforts to take to "support a strong consolidated positon when confronting Steadfast.") (LMI-101010, attached to LMI-103577 (Sheaff 2015 Depos. Exh. 11).

- 2011-09-14 Email string, and other documents, sent from or shared by LMI, Navy, and CH, reflecting efforts to reach agreement to modify the ESCA to "support a strong consolidated position when confronting [Z]." (LMI-103577 to 79, and LMI-101010 to 14 and LMI-106802 to 810).

[35] The "downstream" nature of the integrated agreements is reflected in part by the fact that the ESCA defines "Environmental Services" that the City must perform on behalf of the Navy (ESCA § 101); that LMI, in turn, must perform for the City (MIRA § 101); and that CH, in turn, was required to perform for LMI (GFPC § 2.1).

- 2011-09-22 Email from LMI's counsel to CH's counsel, discussing the need for a "unified position" between the two with respect to Steadfast. (LMI-103669 to 673).

- 2012-01-27, LMI to Navy, says treat Building 811 as a Known "because CH treated it that way, and was paid that way" and "it would be very difficult to un-ring that bell …." (Siler Exh. 28; LMI-002_1_00047259-1?)

The interrelated nature of the Agreements and Policy is critical to the issue of subrogation. Particularly given the fact that the Superfund (CERCLA) statute gives each PRP a right of contribution against other PRPs,[36] critical terms in virtually every EI policy concern the Insurer's subrogation rights to each of the Insureds' claims against other persons or entities. Subrogation provisions, of course, require each Insured to assign to the Insurer whatever rights the Insured would otherwise have had to pursue any claim against any person or organization for any costs for which the Insurer had reimbursed the Insured. Subrogation clauses not only expressly prohibit Insureds from doing anything to prejudice the Insurer's recovery rights, but typically they also expressly require the Insured to cooperate affirmatively with the Insurer by executing and delivering any documents that the Insurer may need to execute its subrogation rights. For an Insurer to do otherwise would violate an industry expectation that the Parties (Insureds and Insurer) act fairly and reasonably and otherwise cooperate with each other.

In cases of Policies covering multiple Insureds where one of the Insureds has expressly (and, among the Insureds, solely) retained certain liabilities that are not covered by Insurance, EI policies typically have express exceptions to any waiver of subrogation rights, thus expressly preserving those rights. Such an expression is consistent with industry understanding that each Insured will bear the risks it has contracted to bear. The Mare Island policies are entirely consistent with this general approach, in that both expressly preserved the Insurer's subrogation rights with respect to conditions that one of the Insureds, the Navy, had expressly retained. (RSL § VII.F; ELI § VIII.L). The 2012 First Amendment to the ESCA, through which, inter alia, LMI and CH released all claims they may have against the Navy – including for possibly overpayment of NRCs – was in my opinion a sharp departure from the Insurer's (and all Parties') reasonable expectations with respect to the EI Policies and related Agreements.

* * *

In conclusion, I believe that the Insureds (particularly CH and LMI), motivated in part by the incentive structures in this matter, did not exhibit the reasonably expected level of cooperation and fair dealing that is necessary to the success of insured GFPCs and related Agreements. CH's actions sought to convert the matter from an expected $57.5M project with no guarantee (and soon-waning chance) of profit, towards upwards of a $265M matter with a guarantee of profit. LMI's actions sought to access as much as possible of the $265M in Navy and Steadfast funds in order to increase the value of LMI's investment beyond that which was bargained for from the Navy and beneficial to the public.

[36] CERCLA Sections 107(a), 113(f), 42 U.S.C. §§ 9607(a), 9613(f).

CH's and LMI's lack of fair dealing was manifested in many ways, including the following: (1) they appear to have inappropriately characterized a significant number of pollution conditions as Unknowns to maximize their revenues and profit; (2) they inappropriately manipulated the timing and nature of the cleanup to maximize their access to the $57.5M in RSL and the $150M in ELI funds, rather than treating those funds as they would their own; (3) they unfairly omitted Steadfast from discussions and actions for which fair dealing required Steadfast's involvement; and (4) they spent or allowed the spending of more in resources than was reasonable and necessary to remediate the Site to fully protective standards. I believe that CH and LMI are, for those reasons and others, responsible for the extraordinary cost overruns and cleanup and redevelopment delays that have occurred at Mare Island.

I further believe that Steadfast's restraint in its interpretation of the Policy terms; its agreement to 90% monthly progress payments; and its other actions exhibit the reasonably expected level of cooperation and fair dealing that was necessary to the success of the Mare Island remediation and redevelopment.

May 3, 2017

Michael O. Hill

APPENDIX A

(Facts or Data Considered in Forming Opinions)

1. Mare Island Environmental Insurance Policies
   a. RSL Policy
   b. ELI Policy
   c. LTM Policy

2. Mare Island Agreements:
   a. Guaranteed Fixed Price Contract, and Amendments thereto
   b. Mare Island Redevelopment Agreement and Amendment thereto
   c. Environmental Services Cooperative Agreement, and Amendments thereto

3. Depositions (Transcripts and Exhibits):
   i. Karen Lubovinsky (Feb. 12, 2015)
   ii. Thomas Duggan (Feb. 25, 2015)
   iii. Tom Sheaff (March 9-10, 2015)
   iv. Neal Siler (March 18-19, 2015I)
   v. Vitaly Zurkovsky (March 24, 2015)
   vi. Gordon Hart (March 30, 2015)
   vii. Janet Naito (April 1, 2015)
   viii. Sheila Roebuck (April 6, 2015)
   ix. Beth Pennington (April 7, 2015, Vol. I)
   x. Jeffrey Giangiuli (Dec. 19, 2016)
   xi. Anthony Megliola (March 7, 2017)
   xii. Gordon Hart (Feb. 7, 2017)
   xiii. Douglas Gilkey (March 8, 2017)
   xiv. Laura Duchnak (April 5, 2017)

4. Miscellaneous Documents Reflecting Policy Negotiation, Manuscriptiong, and Claims Process:
   a. 2000-08-01 Email from L. Patton to J. Kovalcik (CH) (SZC 101459)
   b. 2000-10-17 Memo f/ Steadfast's M. McMullen to CH's K. Gettys (LMI - 52429 to 52434)
   c. 2000-10-20 email from M. McMullen to CH and Marsh. (SZC 103080 – 081)
   d. 2001-01-04 van Cleve email (SZC 102017)
   e. 2001-01-09 Bloom email to Steadfast's counsel (Van Cleve) and others (SZC 102016 to 18)
   f. 2001-01-23 CH Powerpoint to City of Vallejo (SZC 100096 to 100108)
   g. 2001-02-20 (or -22) Outline of Insurance Issues, by J. Bloom (SCZ 103521 – 530).
   h. 2001-02-22 Email by J. Bloom to Zurich and LMI and Marsh accompanying Outline of Insurance Issues by J. Bloom. (SCZ 103520, and 103521 to 530).

i. 2001-02-28 Memo by Bloom, SZC 103467-469). Forwarded with 2001-03-01 email (from J. Bloom to L. Patton w copy to K. Gettys, SZC 103466). Clearly contemplates greater concentrations and areas of what's on Tables, etc. Not clear if that's from earlier version.
j. 2001-03-09 Email from Zurich's Lindene Patton to counsel for LMI and CH (Hart and Bloom) and others, including Marsh (szc 099155) with "latest" policy draft (SZC 099156 – 168 (RSL) and 099169 - 211 (ELI))
k. 2001-03-20 Bloom's redline comments on RSL (SZC 103239 – 252)
l. 2001-03-21 cover email from CH's Bloom to Steadfast's Patton and others (szc 103238), transfmitting Steadfast's comments to 2001-03-20 CH (J. Bloom) redlined draft of the RSL. SZC 103239 – 252).
m. 2001-03-30 Email (SZC 099518) and comments (SZC 0990519-0548) Email Bloom to Zurich attaching 2001-03-20 comments on RSL
n. 2001-04-05 Letter from CH's Lindene Patton to counsel for LMI and CH (SZC 100534 – 538)
o. 2001-04-11 M. McMullen's email and accompanying modified ELI drafts (SZC 101578 – 606)
p. 2008-07-11 email string, w most recent from CH counsel, S. Watson to Steadfast (SKL 009172 – 174)
q. 2010-10-15 CH-Marsh internal email chain. CH2M_MARE1259781 (4 pp.)
r. 2003 to 2009, Quarterly Updates:
    i. 2003-07-30 (SZC 039375 et. seq.)
    ii. 2008-09-26 (CCI00017942 et seq.)
    iii. 2009-02-13 (SJCE 091660 et seq.)
s. Other documents referenced in Steadfast's 2015-11-09 Second Amended Counter-Claim.

5. Policy Templates
    a. AIG 2001 Product Description of Cost Cap Policies.
    b. AIG Specimen Policy for Pollution Legal Liability Select Clean-Up Cost Cap (2004-08).
    c. AIG Specimen Policy for Pollution Legal Liability Select Clean-Up Cost Cap (2007-06).
    d. Ace template policy PF-25671b (08/08).

6. PowerPoints:
    a. 2000-10-12 PowerPoint by M. Hill, *Base Realignment and Closures: The New Brownfields Initiative*, EPA's 2000 National Brownfields Conference (Oct. 12, 2000).
    b. 2001-01-23 PowerPoint by CH to the City of Vallejo, *Lennar Mare Island Early Transfer Update* (Jan. 23, 2001) (SZC 100095 – 100108).
    c. 2005-05-25 PowerPoint by CH, *Performance Based Contracting: CH2M Hill Case Studies, Federal Remediation Timetable*.

d. 2009-05 PowerPoint by CH, *CH2MHILL Lennar Mare Island GFP Project: Monthly Program Status Report* (May 2009).
e. 2011-03-09 PowerPoint by Navy (by Jeff Giangiuli), *Former MINS EETP, ESCA Potential for NRCs* (March 9, 2011).

7. Books, Articles, and Government Reports:

a. R. F. Durant, *The Greening of the U.S. Military: Environmental Policy, National Security, and Organizational Change,* Georgetown Univ. Press (2007)

b. G. Hart, *Brownfield Redevelopment at Closed Military Bases*, chap. 13 in *Environmental Aspects of Real Estate and Commercial Transactions*, ABA (3d ed. 2004)

c. G. Hart & J. Yung, *Brownfield Redevelopment at Closed Military Bases*, chap. 28 in *Environmental Aspects of Real Estate and Commercial Transactions*, ABA (4th ed. 2011)

d. M. Hill, *Insured Fixed-Price Contracts as a Means to Quantify Costs and Obtain Funds to Clean Up Contaminated Sites: The Kenosha Model*, Int'l. Risk Mgt. Inst. (April 2003).

e. M. Hill, *A Tale of Two Sites: How Insured Fixed-Price Cleanups Expedite Protections, Reduce Costs, And Help The SEC, The EPA, And The Public*, 45 Chem. Waste Litig. Rptr. 907 (May 2003), *reprinted with permission* by the National Association of Attorneys General's National Environmental Enforcement Journal, Vol. 18, No. 8, p. 3 (Sept. 2003).

f. M. Hill, *Insured Fixed-Price Cleanups, Still Possible Even After Commercial Insurers' 2011 Exit from The Cost Cap Market,* 70 Chem. Waste Litig. Rptr. 956 (Oct. 2015).

g. N. Kosko et al., *Performance Based Acquisition: A Tool to Reduce Costs and Improve Performance at U.S. Army Environmental Remediation Sites*, ICEM07-7050 (Sept. 2007).

h. B. Maurer, *Guaranteed Fixed Price Remediation Gains Popularity*, BNA (Nov. 18, 2004)

i. B. Maurer, *Guaranteed Fixed-Price Remediation Offers a New Approach to Cleanups* BNA Daily Envir. Rept. (Nov. 28, 2005).

j. B. Maurer, *Guaranteed Fixed Price Remediation – A Paradigm Shif tin Environmental Services Contracting*, written for Holland & Knight Newsletter (2nd Qtr., 2006).

k. C. Olson *et al*., *Urban Renaissance: From Brass Manufacturing to Uptown Brass Center*, Air & Waste Mgt. Ass'n. (Dec. 2005)

l. U.S. Army Environmental Command, *Tracking Performance on the Army's Performance-Based Contracts,* (May 16, 2006).

m. U.S. Army Environmental Center, *Performance-Based Contracting Guidebook* (Rev. 1, Jan. 27, 2006).

n. U.S. Department of Defense, *Base Reuse Implementation Manual* (1997). http://biotech.law.lsu.edu/blaw/dodd/corres/html/416566m.htm.

o. U.S. Department of Defense, *Early Transfer Authority: A Guide to Using ETA to Dispose of Surplus Property* (Oct. 2004)

p. U.S. EPA, *Overview of Early Transfer Guidance*, EPA505-98-007 (Jan. 1999).

q. U.S. EPA, *Guidance on Institutional Controls: A Guide to Planning, Implementing, Maintaining, and Enforcing Institutional Controls at Contaminated Sites,* OSWER 9355.0-89, EPA-540-R-09-001 (Dec. 2012) https://www.epa.gov/sites/production/files/documents/final_pime_guidance_december_2012.pdf.

r. U.S. EPA, *Interim Guidance for EPA Base Realignment and Closure (BRAC) Program* (April 27, 2006), and EPA's James Woolford's 2006-04-17 Transmittal Memo re. same.

s. U.S. EPA, Office of Inspector General, *EPA Should Increase Fixed-Price Contracting for Remedial Actions*, Rept. 13-P-0208 (March 28, 2013).

t. U.S. EPA, *EPA Guidance on the Transfer of Federal Property by Deed Before All Necessary Remedial Action Has Been Taken Pursuant to CERCLA Section 120(h)(3) – (Early Transfer Authority Guidance)*, (March 15, 2016).

u. U.S. General Accountability Office, *Superfund Legal Expenses for Cleanup- Related Activities of Major U.S. Corporations,* GAO/RCED-95-46 (Dec. 1994).

v. U.S. General Accountability Office. *Military Base Closures: Progress in Completing Actions from Prior Realignments and Closures.* GAO-02-433, (April 5, 2002).

w. U.S. Navy, *Base Realignment and Closure Implementation Guidance* (2007).

x. U.S. Office of Management and Budget, OMB Circular A-87 Revised (May 10, 2004).

8. Settlement Agreements in this matter:

a. 2008-01-04 (Pertaining to Change Orders) (CH2M_MARE0843761).

b. 2010-04-09 (pertaining to FOPLs near B461) (SJCP 015335 to 371).

c. 2011-12-12 (Pertaining to PCBs) (LMI-116217 to 281).

9. Miscellaneous Pleadings in this matter:

a. 2012-10-17 CH's Answer to Steadfast's Counter-Claim for Declaratory Relief

a. 2013-01-17 LMI's First Amended Complaint for Damages, Punitive Damages, and Declaratory Relief, Civ. No. 2:12-cw 02182-KJM-KJN.

b. 2014-12-19 LMI's Motion for Partial Summary Judgment re. Government Authority (and related pleadings submitted in support thereof); Steadfast's Opposition thereto (and related pleadings submitted in support thereof).

c. 2014-12-19 LMI's Motion for Partial Summary Judgment re. Definition of Known Pollution Conditions (and related pleadings submitted in support thereof), and Steadfast's Opposition thereto (and related pleadings submitted in support thereof).

d. 2015-10-16 Order on LMI's and CH's Motions to Dismiss Steadfast's Amended Counterclaim.

e. 2015-11-09 Steadfast's Second Amended Counter-Claim.

f. 2016-03-03 Order on LMI's and CH's motions to dismiss SACC.

g. 2016-03-31 Order on LMI's motions for partial summary judgment on the definitions of "Government Authority" and "Known Pollution Conditions."

h. 2016-04-08 LMI First Amended Complaint for Damages, Punitive Damages, and Declaratory Relief, Civ. No. 2:16-cv-00291-KJM-CKD (E.D. Calif. Feb.12, 2016).

i. 2016-08-08 U.S. Motion to Intervene (and pleadings related thereto).

j. 2016-10-16 Order Granting U.S. Motion to Intervene.

10. Reuse Plans:

a. Mare Island Final Reuse Plan (Vols. I & II) (1994).

b. Mare Island Preliminary Land Use Plan, by SWA Group (1-page) (May 23, 2000).

11. Site Visit, 2015-01-20.

12. All Exhibits identified in Appendix B.

13. Other Documents Referenced in M. Hill's Expert Report.

APPENDIX B

(Exhibits That May Be Used to Summarize or Support Opinions)

1. Powerpoints:

    a. 2001-01-23 PowerPoint by CH to the City of Vallejo, *Lennar Mare Island Early Transfer Update* (Jan. 23, 2001) (SZC 100095 – 100108).

    b. 2005-05-25 PowerPoint by CH, *Performance Based Contracting: CH2M Hill Case Studies*, Fed. Remed. Tech. Roundtable (May 25, 2005)

    c. 2011-03-09, PowerPoint by Navy (by Jeff Giangiuli), *Former MINS EETP, ESCA Potential for NRCs* (March 9, 2011).

    d. 2017-04-29 PowerPoint Slides used in M. Hill's Expert Report (plus 1-3 additional slides).

2. Articles discussing GFPCs at Kenosha and at McClellan Air Force Base.

    a. C. Olson *et al*., *Urban Renaissance: From Brass Manufacturing to Uptown Brass Center*, Air & Waste Mgt. Ass'n. (Dec. 2005)

    b. USAF, *Innovation Pays Off at McClellan Business Park* (Sept. 3, 2010).

APPENDIX C

(List of All Publications Authored in the Past 10 Years
And Selected Publications and Presentations Before Then)

M. Hill, *Industrial Bankruptcies and Environmental Cleanups*, Int'l. Risk Mgt. Inst. (May 2016)

M. Hill, *Fixed-Price Contracts Using Cost-Cap Alternatives for Environmental Cleanup*, Int'l. Risk Mgt. Inst. (Feb. 2016)

M. Hill, *Insured Fixed-Price Cleanups, Still Possible Even After Commercial Insurers' 2011 Exit from The Cost Cap Market,* 70 Chem. Waste Litig. Rptr. 956 (Oct. 2015)

M. Hill & C. Gregory Rogers, *Using Insured Fixed-Price Cleanups to Respond to New Accounting Standards, Gain Tax Savings, and Lower Cleanup Costs While Increasing Cost Certainty*, BNA Environmental Due Diligence Guide (Nov. 2008) (co-authored with C. Gregory Rogers)

Environmental Insurance as a FASB Fix, Int'l Risk Mgt. Inst. (Aug. 2005).

A Tale Of Two Sites: How Insured Fixed-Price Cleanups Expedite Protections, Reduce Costs, And Help The SEC, The EPA, And The Public, 45 Chem. Waste Litig. Rptr. 907 (May 2003), *reprinted with permission* by the American Bar Association's Science & Technology Newsletter (Vol. 3, No. 2, p. 17, August 2003), and in the National Association of Attorneys General's National Environmental Enforcement Journal, Vol. 18, No. 8, p. 3 (Sept. 2003).

M. Hill, *Insured Fixed-Price Contracts as a Means to Quantify Costs and Obtain Funds to Clean Up Contaminated Sites: The Kenosha Model*, Int'l. Risk Mgt. Inst. (April 2003).

Presentations On The Subject of Fixed-Price Cleanups:

Panelist, *Insured Fixed-Price Cleanups As A Tool Toward Property Re-Use,* EPA's Annual RevTech Conference, Opening Plenary Session (July 22, 2003).

Panelist, *Fixed-Price Exit Strategies For Contaminated Properties*, EPA Brownfield Conference (Nov. 14, 2002).

Panelist, *Base Realignment and Closures: The New Brownfields Initiative*, EPA Brownfields Conference (Oct. 12, 2000).

APPENDIX D
(Other Testimony; Compensation)

List of All Other Cases In Which Witness Has Testified As An Expert

None

Compensation to be Paid for the Witness' Study and Testimony in This Case

$500 per hour

APPENDIX E

(Terms and Acronyms used in this Report)

BRAC	Base Realignment and Closure
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CGL	Comprehensive [or Commercial] General Liability
CH	CH2M HILL Constructors, Inc.
Contractors	Remediation Contractors
CTA	Crane Test Area
CTC	Cost to Complete
EAC	Estimated Cost At Completion
EI	Environmental Insurance
ELI	Environmental Liability Insurance
EPA	U.S. Environmental Protection Agency
ESCA	Environmental Services Cooperative Agreement
FOPL	Fuel Oil Pipeline
GFPC	Guaranteed Fixed Price Contract
GL	General Liability
Knowns	Known Pollution Conditions
LMI	Lennar Mare Island LLC
LRA	Local Redevelopment Authority
LUCs	Land Use Controls
Mare Island	Mare Island Naval Station
MIRA	Mare Island Redevelopment Agreement
NRC	Navy Retained Condition
Owners	Owners of property requiring remediation
Parties	Navy, City, LMI, CH and Steadfast (collectively)
PC	Pollution Condition
PLL	Pollution Legal Liability
Policies	The RSL and ELI Policies
PRP	Potentially responsible party
RAP	Remedial Action Plan
RSL	Remediation Stop Loss
SOW	Scope of Work
T&M	Time and Materials
Unknowns	Unknown Pollution Conditions