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STATE WATER RESOURCES CONTROL BOARD

IN THE MATTER OF PERCHLORATE CONTAMINATION AT A 160-ACRE SITE IN THE RIALTO AREA (SWRCB/OCC FILE A-1824)	SWRCB/OCC FILE A-1824 **GOODRICH CORPORATION'S REBUTTAL BRIEF** Date: July 9-12, 18-19, 2007 Time: 10:00 a.m. Place: San Bernardino County Auditorium 850 East Foothill Boulevard Rialto, California 92376-5230

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I.
INTRODUCTION

On February 22, 2007, Goodrich and the other alleged dischargers were called to Sacramento for a Pre-Hearing Conference before the Hearing Officer, Ms. Tam Doduc. Ms. Doduc advised that she was going to conduct a hearing and that the process would proceed "expeditiously." Lead counsel for the Advocacy Team indicated that Regional Board staff were already "prepared to advocate on behalf of the Cleanup and Abatement Order that was issued last year", and the lawyers for the City of Rialto ("the Rialto Lawyers") proclaimed that "we do not need discovery." But Goodrich, the Emhart Parties, and Pyro Spectaculars, Inc. (the "Alleged Dischargers") unanimously objected to the proposed process on multiple due process grounds – the Alleged Dischargers had not been presented with a charging document; the rapid pace contemplated by the Hearing Officer was simply unrealistic; no formal procedures existed, nor had any been established, to guide an administrative proceeding of such unprecedented scope and complexity; and the State Board had failed to name several potentially responsible parties to the proceedings, making it impossible to properly determine liability under Water Code Sections 13304 and 13267.

The day after the Pre-Hearing Conference, the Hearing Officer issued a Notice of Hearing which ignored all of the Alleged Dischargers' objections, and set forth an extremely ambitious schedule which called for the hearing to begin barely one month later, on March 28, 2007, with the parties' briefing and evidentiary submissions due by March 13, 2007. Even Judge Tassopulos, the Special Master in the related federal court litigation who has handled various discovery disputes between the parties, commented on the record during a March 7, 2007 hearing that the instant proceedings constituted "a very unusual, expedited process . . . It's a very, very unusual situation to have that type of a very complicated type of hearing set on such short notice . . ." And, not surprisingly, the representations made by the Rialto Lawyers and the Advocacy Team that they were ready to present their case in February, without discovery, have proven to be unfounded. As of the filing of this Rebuttal Brief, on June 7, 2007, the extensive discovery taken and the voluminous written and

evidentiary submissions that have been made leave no doubt that Rialto Lawyers and the Advocacy Team do not have a shred of competent evidence that Goodrich's operations caused any of the groundwater contamination in Rialto. Nor has evidence been proffered to support a finding of liability for any allegation made in the 2006 Draft CAO against Goodrich. Instead, the prosecution's case has continued to unravel from the start, and has been characterized by repeated errors, omissions, violations of procedures established by the Hearing Officer, and willful efforts to manipulate expert opinion to manufacture "evidence" against the Alleged Dischargers.

The documented missteps by the Advocacy Team are many. It failed to submit required summaries of anticipated witness testimony in a timely fashion; a 19 box "document dump" was stricken from the record because it contained an unorganized hodge-podge of materials; and, for similar reasons, a binder of evidence upon which the Advocacy Team intended to rely was also excised. The Advocacy Team's opening brief is riddled with citation errors, gross omissions of supporting authority, and demonstrably false allegations like the curious claim that Goodrich's facility included a pipe running to its burn pit – an allegation that the author of the Advocacy Team's brief, Ann Sturdivant, has since testified is completely erroneous.

In discovery, the Advocacy Team's case quickly wilted. Each of its witnesses convincingly testified that after 10 years of investigating the Rialto-Colton Basin contamination, they had no evidence that Goodrich was responsible for groundwater contamination at the 160-acre parcel.

The Rialto Lawyers' efforts to prosecute the Alleged Dischargers have fared no better. Their brief is largely just a re-hash of the Advocacy Team's, and is likewise devoid of evidentiary support. The Rialto Lawyers' brief also includes irrelevant statements about Rialto's purported water rights, and seeks to recover damages, even though Rialto cannot legally recover damages in proceedings such as these. These and the many other problems with the prosecution's case necessitated several extensions of the original schedule – with the hearings originally noticed to begin on March 28 now slated for July 9,

2007 – and these extensions have facilitated extensive depositions and other discovery, which, ironically, has produced a substantial body of evidence revealing that the McLaughlin Pit is the major (and only confirmed) source of groundwater contamination in Rialto, that the Regional Board and City of Rialto each bears significant responsibility for the McLaughlin Pit release (it is undisputed that Goodrich has none), and that the Rialto Lawyers have deliberately manipulated their expert submissions to manufacture a case against Goodrich.

An abundance of evidence demonstrates that the Regional Board was grossly negligent in its regulation of the McLaughlin Pit, the only confirmed source of perchlorate to groundwater at the 160-acre parcel and the source of the highest concentrations recorded to date, during the sixteen years the pit was operated by Pyrotronics Corporation. The Regional Board permitted the construction of the McLaughlin Pit and approved waste discharge requirements allowing the disposal of 3,000 gallons per day of perchlorate-laden pyrotechnic waste into the pit, even though it was designed only to hold 12,000 gallons. Pyrotronics was then allowed to continuously flood the Pit with water, which created the hydraulic head required to push perchlorate 400 feet down through the soil and into the groundwater. Regional Board staff personally observed and documented multiple violations from the Pit over the years, including water levels dangerously close to the top of the uncovered Pit, and even overflows, but did nothing.

And when Ken Thompson, Inc. purchased the property where the Pit is located and undertook to close the Pit in 1987 as a condition of the purchase agreement and his entitlement to redevelop the property, the Regional Board failed to enforce the Subchapter 15 Regulations, which would have required the Pit to be tested for leaks, and, if leaks were detected, would have required sampling for numerous chemicals including, specifically, potassium perchlorate. Had the Regional Board complied with its duty to enforce Subchapter 15 in 1987, the perchlorate could have been detected twenty years ago; instead it has been left unabated. As result of the Regional Board staff's failure to properly regulate and close the Pit, massive releases of perchlorate into the soil and groundwater at the 160-acre site were allowed to occur.

The City of Rialto shares responsibility for the perchlorate releases caused by the McLaughlin Pit. As part of a negative declaration Rialto issued to Ken Thompson, Inc. permitting him to grade and redevelop property he had purchased on the 160-acre parcel, the City imposed on Ken Thompson, Inc. a CEQA mitigation measure requiring proper and lawful cleanup and closure of the McLaughlin Pit, with approval from all necessary public agencies. Rialto never enforced this measure, and Ken Thompson, Inc.'s agent, William McLaughlin, was allowed to illegally burn the approximately 54,000 pounds (25 tons) of perchlorate-laden waste that remained in the Pit, and then bury the Pit (including ash that remained), pave over it, and construct a concrete pipe manufacturing facility. Notably, the only public agency to approve Mr. McLaughlin's illegal burn was the City of Rialto Fire Department.

Although Rialto is keenly aware of the perchlorate contamination to groundwater caused by the McLaughlin Pit, and has been apprised in writing by Goodrich of its legal obligation under CEQA to enforce the mitigation measure it imposed on Ken Thompson, Inc. in 1987 requiring the cleanup and closure of the McLaughlin Pit, Rialto has taken no action. Instead of seeking to compel Ken Thompson, Inc. to comply with the 1987 CEQA mitigation measure, which should be a relatively simple and inexpensive process, Rialto has spent at least $12-15 million in legal fees, funded in part by a surcharge on the Rialto citizens' water bills, to pursue cost recovery against Goodrich and the other Alleged Dischargers that unquestionably have no responsibility for the McLaughlin Pit release. And after years of costly litigation, the Rialto Lawyers still have not marshaled any evidence showing that Goodrich is liable for any groundwater contamination in Rialto.

The discovery taken as part of this process has destroyed the credibility of Rialto's experts and further undermined its case. For example, Dr. Stephens, the Rialto Lawyers' chief expert, originally submitted a purported declaration which opined that the Rialto infiltration rate, i.e., the rate at which chemicals move from the surface towards the groundwater without the addition of free water, was 1.25 feet per year. But when faced with the realization that, at this infiltration rate, it would take perchlorate more than 300 years to

reach the Rialto groundwater (which is 400 feet below the surface), Dr. Stephens announced for the first time, during the second day of his deposition, that he had a new opinion, and his opinion is that the infiltration rate is 12.5 feet per year – a tenfold increase. By simply moving the decimal point over one space, Dr. Stephens abandoned his now inconvenient original opinion, and testified instead that perchlorate discharged at Rialto could reach the groundwater in 30 years instead of 300. Interestingly, the Rialto Lawyers now deny that Dr. Stephens' original calculation has been changed, despite the undeniable admission by Dr. Stephens at his deposition that that he had "changed" his opinion.

This radical change in opinion to suit litigation expediency is far from the only area where Dr. Stephens "scientific" opinion was unduly influenced by the Rialto Lawyers. A string of e-mail traffic and handwritten notes by Dr. Stephens' staff demonstrate beyond any question that the Rialto Lawyers have tried to shape, twist, and distort the information submitted to this tribunal. On topic after topic, Dr. Stephens first denied under oath the Rialto Lawyers' manipulation of his opinion, then contradicted that testimony when confronted with the emails and notes documenting the Rialto Lawyers' influence. Dr. Stephens' credibility in this case has been destroyed.

After an objective review of the deposition testimony, briefing, and admissible evidentiary exhibits submitted by the parties, the only fair conclusion to be reached is that the City of Rialto and the Regional Board, i.e., the State of California, are truly the culpable parties herein. Yet the nature of these proceedings makes it impossible for any redress to be obtained from these parties, since they are, after all, the prosecutors. Any real sense of justice, however, would require that an order be issued against those parties – the City of Rialto and the Regional Board – that would compel them to honor their obligation to address the McLaughlin Pit and Pyrotronics' contamination of the basin, a duty they have failed to discharge for the past 20 years.

II.
THERE IS NO EVIDENCE THAT THE B.F. GOODRICH COMPANY DISCHARGED ANY SIGNIFICANT AMOUNT OF PERCHLORATE OR TRICHLOROETHYLENE TO THE ENVIRONMENT

The evidence supports only one conclusion – The B.F. Goodrich Company ("Goodrich") operated a small, short-lived primarily research and development facility in Rialto, California that ultimately proved to be unsuccessful. During its short life span in Rialto, California, Goodrich obtained contracts to manufacture a small number of two types of production motors: the Loki and the Sidewinder. After failing to successfully manufacture either the Loki or the Sidewinder, Goodrich shut its doors in 1963.

While Goodrich may not have been successful in manufacturing rockets, it was successful in maintaining the safety of its facility. Unlike other rocket manufacturers of that time period and unlike other operators in Rialto, there were no major accidents, explosions or fires at its facility. Wever Dec. ¶ 6, 62; Haggard Dep., 38:25-39:8. According to former Goodrich employees, safety was a "top priority" at the Rialto facility. Haggard Dep. 88:2-6. Consequently, from the outset of its tenure in Rialto, Goodrich maintained safety procedures concerning the handling and disposal of propellant and other hazardous material and Mr. Dwight Wever, the safety engineer, ensured that these procedures were followed. Wever Dec. ¶ 6. These safety procedures required that all propellant and ammonium perchlorate waste be burned in Goodrich's burn pit. Wever Rebuttal Dec. ¶ 6; *see also* Wever Dec. ¶ 61-67.

It is ***undisputed*** that Goodrich disposed of all of its propellant-related waste in a single burn pit near the static test bay on the southwest portion of the facility. *See* Goodrich Brief at III.A.5. The Advocacy Team, Rialto, and former Goodrich employees all concur that Goodrich disposed of all propellant related waste in a single burn pit. Yet, Rialto is

purposefully deceitful by falsely declaring over 30 times in its Opening Brief that Goodrich "discharged" and "disposed" of thousands of pounds of ammonium perchlorate "into the environment." Simply ignoring the undisputed fact that Goodrich burned its waste propellant and ammonium perchlorate in a burn pit does not change the truth – ***Goodrich burned all waste propellant and ammonium perchlorate in a single burn pit.*** *See* Goodrich Brief at III(A)(5).

The fact that Goodrich burned its ammonium perchlorate waste is crucial and Rialto's and the Advocacy Team's refusal to acknowledge or discuss this key fact is nothing less than deliberate deception. Because Goodrich burned its propellant and ammonium perchlorate waste, there was virtually no ammonium perchlorate remaining in the environment that could migrate to groundwater. Dr. Jimmie Oxley, a Professor of Chemistry at the University of Rhode Island who has studied energetic materials, including propellants, for the last twenty years, conducted several experiments involving the burning of propellant consistent with that utilized by Goodrich. Dr. Oxley's results reveal that following burning, the small amount of remaining residue is only approximately 0.002% perchlorate. Based on these results it is Dr. Oxley's opinion that

> the average of 0.002% is a good estimate of perchlorate residual from propellant burned in a burn pit. Moreover, it is my opinion that the experiment results discussed above would accurately reflect the perchlorate residue one could expect in and round the former Goodrich burn pit in Rialto, California, as it was used during the late 1950s and early 1960s, as described in the depositions of former Goodrich employees. The fact that Goodrich also burned straight ammonium perchlorate or propellant contained in water in its burn pit, in addition to scrap propellant, would not change my opinion because any additional oxidizer, such as ammonium perchlorate, only makes the burn cleaner.

Oxley Dec. ¶ 13. Rialto never disputes these results or opinions. Further, Rialto's only expert commenting on Goodrich's disposal practices, Dr. Daniel Stephens, testified that he does not disagree with Dr. Oxley's conclusions and has never calculated the perchlorate

mass remaining (if any) after propellant is burned. Stephens Dep., 204:17-205:16. Based on Dr. Oxley's opinion, even if Rialto's estimate that Goodrich disposed of 24,385 pounds of ammonium perchlorate is correct, which it is not, ***less than half a pound of ammonium perchlorate (0.4877 pounds) would remain*** after Goodrich's ammonium perchlorate waste is burned – according to the undisputed testimony of Dr. Oxley.

A. The Rialto Lawyers' Estimates Regarding The Amount of Ammonium Perchlorate Consumed By Goodrich are Materially Misleading and Patently False

Throughout its Opening Brief, Rialto repeatedly proclaims that Goodrich ***consumed*** upwards of 125,350 pounds ammonium perchlorate in its production of solid rocket propellant and 75,000 pounds of ammonium perchlorate in its testing of rocket motors. Rialto Brief at 37. Rialto's proclamations are intended to do nothing more than create a false impression - obviously if the ammonium perchlorate was ***consumed*** (in other words "used up" or "destroyed"), then there was no discharge of ammonium perchlorate to the soil or groundwater.

Moreover, Rialto provides no support (except its own brief and the "calculations" by its lawyers) for its proclamation that Goodrich "consumed upwards of 125,350 pounds of ammonium perchlorate." A careful reading of Rialto's Brief reveals that its lawyers cannot even agree on the amount of perchlorate *consumed* by Goodrich.

Rialto's *Lawyer Math* on Goodrich's Consumption of Perchlorate	
22,416 pounds of ammonium perchlorate consumed in production of Loki	Rialto Brief at 49.
56,394 pounds of ammonium perchlorate consumed in production of Sidewinder	Rialto Brief at 44.
4,086 pounds of ammonium perchlorate consumed in the production of various other motors	Rialto Brief at 50.
RIALTO'S TOTAL = 125,350	
ACTUAL TOTAL = 82,896	

Importantly, a careful review of the "evidence" purportedly relied upon by the Rialto Lawyers in support of their assertion that Goodrich consumed 82,896 pounds of ammonium perchlorate in its manufacturing process reveals that this estimate is also false and misleading. *See infra* II.A. As for the Rialto Lawyers' proclamation that Goodrich consumed "upwards of 75,000 pounds of additional ammonium perchlorate for its test programs at Rialto" - there is absolutely no support for this assertion anywhere in Rialto's Opening Brief.

B. *The Rialto Lawyers' Estimates Regarding The Amount of Ammonium Perchlorate Discharged By Goodrich are Materially Misleading and Patently False*

Rialto engages in further *lawyer math* in devising its conclusion regarding the amount of ammonium perchlorate discharged (and ultimately burned in the burn pit) as well. The Rialto Lawyers initially assert that because "Goodrich processed its perchlorate at the same facility, in the same buildings and in the same manner as West Coast Loading Corporation" one can rely upon West Coast Loading Corporation's documented 3-5% 'wastage' for perchlorate.[1] Rialto Brief at 37. The Rialto Lawyers then "conservatively" estimate that Goodrich "discharged up to 24,385 pounds of ammonium perchlorate onto the ground at the Rialto Site." *Id.* Assuming *arguendo* that it is even proper to rely upon a waste estimate from a corporation loading munitions in connection with Goodrich's manufacturing of solid rocket propellant (which it clearly is not), Rialto does not even apply this 3-5% waste estimate:

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[1] Ms. Ann Sturdivant, a member of the Advocacy Team, concedes that even the 3-5% waste estimate from West Coast Loading Corporation's documents is wrong. Sturdivant Dep., 1414:7-1417:14.

Rialto's *Lawyer Math* on Goodrich's Discharge of Perchlorate	
3-5% waste estimate	Rialto Brief at 37.
200,305 pounds of ammonium perchlorate consumed in production and testing	Rialto Brief at 37.
RIALTO'S TOTAL = 24,385 pounds of perchlorate waste	
ACTUAL TOTAL = 6,010.5 – 10,017.5 pounds of perchlorate waste	

Apparently, the Rialto lawyers decided it was more appropriate to apply a 12.17% waste estimate without any evidentiary support or even attempting to explain why.

The Rialto Lawyers then proceed to break down the actual waste streams that comprise its overestimate of 24,385 pounds of ammonium perchlorate waste. Again, a careful review of the "evidence" purportedly relied upon by the Rialto Lawyers in calculating these "waste streams" reveals that this estimate is also false and misleading. The Rialto Lawyers fail to provide even a shred of evidence to support its assertion that Goodrich disposed of 24,385 pounds of ammonium perchlorate.

Rialto's Ammonium Perchlorate Waste Stream *Lawyer Math*		
Purported Waste Stream		*Evidentiary Support*
5,860 pounds	Grinding & Mixing	Rialto Brief at 52-55 provides no evidentiary support
6,275 pounds	Loading & Trimming	Rialto Brief at 55 provides no evidentiary support
8,500 pounds	Motor Salvaging	Rialto Brief at 52 provides no evidentiary support
3,750 pounds	Testing & R&D	Rialto Brief at 57 provides no evidentiary support

The Rialto Lawyers' are in no position to provide an expert or other opinion on Goodrich's manufacturing processes or the waste streams generated from these processes. The Rialto Lawyers' complete failure to provide any evidentiary support for their bold assertions confirms this conclusion.

On the other hand, Dr. Merrill, an expert in the manufacturing of solid rocket propellant, conducted a careful calculation of the amount of ammonium perchlorate waste

and concluded that only 9,599 pounds of ammonium perchlorate waste was generated and virtually all of this waste was burned in the burn pit. Merrill Dec., Ex. A; *see also* Oxley Dec. ¶ 13.

C. Rialto and the Advocacy Team Grossly Overestimate the Size of Goodrich's Operations in Rialto

Goodrich principally manufactured two production motors during its short tenure in Rialto – the Loki and the Sidewinder. Goodrich retained Dr. Claude Merrill, an expert in the manufacturing of solid rocket propellant with decades of experience in reviewing government contracts, to formulate an opinion regarding the number of motors loaded by Goodrich based on a review of the available contracts and correspondence obtained from the National Archives and Records Administration ("NARA") and the testimony of numerous former Goodrich employees. After conducting a careful review of all the available evidence, it is Dr. Merrill's opinion that Goodrich never loaded a large quantity of motors at its facility and never produced a large amount of solid rocket propellant. Merrill Dec. 24.

Rialto and the Advocacy Team never retained such an expert in the industrial practices of solid rocket propellant and instead rely upon the math of lawyers and lay persons who have never even witnessed the manufacturing of solid rocket propellant and who have no experience in reviewing government contracts. For this reason, the overestimates derived by both Rialto and the Advocacy Team are based on false presumptions, misinformation, are unreliable, and are simply wrong.

1. Goodrich Only Loaded 515 Loki Motors

Goodrich obtained contracts with the Navy to load two different types of Loki motors – the Loki I and the Loki IIA – both utilized the same motor casing but used different propellant formulations. The NARA documents reveal that Goodrich did not obtain a government contract to load Loki motors until 1959 and that Goodrich completed its

contracts for the Loki motor with the Navy in 1961; however, due to problems with cracking of the propellant grain, there were large periods of time during which no Loki motors were loaded. Ex. 1 (KWKA00452123-29) (April 2, 1959 Negotiated Contract for Nord 18853); Ex. 52 (KWKA00452143-82) (June 4, 1959 Negotiated Contract for Nord 18966); *see e.g.* Ex. 80 (KWKA00452271-77) (October 28, 1959 Memorandum).

Dr. Claude Merrill, after a careful review of all the available documents obtained from NARA and a review of the testimony of numerous former Goodrich employees, concludes that ***Goodrich loaded only 515 Loki motors***. Merrill Dec. ¶ 20; Merrill Rebuttal Dec. ¶ 6.

Dr. Merrill's Opinion Regarding the Number of Loki Motors Loaded	
330 Loki I motors loaded	Ex. 69 (KWKA00452488-90); Ex. 72 (KWKA00452502-03)
185 Loki IIA motors loaded	Ex. 30 (KWKA00452363-64; Ex. 23, 24, 29 (KWKA00452328-46)
515 TOTAL Loki motors loaded	

On the other hand, the Rialto Lawyers' estimate that Goodrich loaded 1,868 Loki motors is fundamentally flawed – in large part because the Rialto Lawyers, unlike Dr. Merrill, have no experience in interpreting government contracts and therefore no basis to offer any opinion.

Flaw Number 1: The Rialto Lawyers rely almost exclusively on a single, undated document entitled "Rocket Motors for Meteorological Studies"[2] to support its assertion that Goodrich loaded 1,500 Loki IIA motors (hereinafter "Texas Western Presentation"). However, this document is internally inconsistent, unauthenticated, unsupported by the

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[2] The authenticity of this document is unclear. The document was not produced by Goodrich or any of its former employees and it does not come from the files of the Department of Defense or NARA. Indeed, it is unclear exactly where this document came from or how the document was maintained.

government contracts and correspondence obtained at NARA, and unsupported by the testimony of former Goodrich employees.

The Rialto Lawyers contend that the Texas Western Presentation supports its assertion that Goodrich loaded 1,000 Loki IIA motors based solely on the following passage:

> In early 1959, production of Loki IIA motors was begun for Cooper Development Corporation, using motor cases of their manufacture. Additional development and loading of these motors has continued since, for the Signal Corps and others, under subcontract to Cooper and its successor, the Marquardt Corporation. The quantity now totals about 1,000 units.

Rialto Ex. G-36 at 2. But nowhere does the Texas Western Presentation actually indicate that ***Goodrich*** loaded these 1,000 units. The only government contractor referred to is Cooper Development and its successor, the Marquardt Corporation. Just two pages later, the Texas Western Presentation suggests that Goodrich actually did not load these 1,000 Loki IIA units:

> In September, 1960, after the manufacturing development work of the LOKI motors had largely been accomplished and standardized, The B.F. Goodrich Company began to produce a quantity for evaluation in the Navy's [Loki II] (200,000-foot) meteorological system.

Rialto Ex. G-36 at 4. Reading both these passages in context leads to the simple conclusion that Cooper Development (its subcontractors) and other government contractors developed the Loki IIA motors and standardized the manufacturing process through the loading of approximately 1,000 Loki IIA motors. Thereafter, after the development work was completed and standardized, Goodrich obtained a contract with the Navy to load Loki IIA motors. This is the same conclusion reached by Dr. Merrill:

> The Loki motor was not initially developed by Goodrich, it was developed by other manufacturers. . . . Thus, Goodrich was simply an additional industry source for Loki (or HASP) motors and it is my opinion that many of the 1,000 Loki units referenced in the Texas Western Presentation were produced by other manufacturers before Goodrich became involved in the program. It is my further opinion, that given the poor quality of Goodrich's motors, a government contract for 1,000 motors was unjustified.

Merrill Rebuttal Dec. ¶ 5(a).

More importantly, the Texas Western Presentation is inconsistent with the government contracts and the testimony of former Goodrich employees. The government contracts obtained from NARA confirm that Goodrich obtained a contract with the Navy to load 185 Loki IIA motors. Ex. 30 (KWKA00452363-64); Exs. 23, 24, 29 (KWKA00452328-46). This is consistent with the memory of the former assistant production manager at Goodrich, Mr. Dwight Wever, who recalled that Goodrich loaded approximately 120-150 Loki IIA. Wever Decl. ¶ 15.

For these reasons, the Rialto lawyers' reliance on the Texas Western Presentation is unjustified – a more appropriate estimate for the number of Loki IIA motors loaded is 185 motors, as supported by the government contracts, testimony of former Goodrich employees, and the opinions of Dr. Claude Merrill.

Flaw Number 2. The Rialto Lawyers include "approximately 16 additional Loki I rocket motors as part of its contract to deliver 330 finished Loki I motors" as part of Goodrich's "qualification" or "quality control" testing. Rialto Brief at 47. However, it is the opinion of Dr. Merrill, who has extensive experience in government contracts for rocket motors, that a "quality control" or "qualification" test motor is included in the contract number and considered "delivered" to the Navy. Merrill Rebuttal Dec. ¶ 5(d). This is because the government takes "acceptance and delivery of a lot (or batch) of motors at the contractors manufacturing facility." *Id.* Dr. Merrill's opinion is supported by the Goodrich government contracts obtained at NARA that indicate that delivery of the Loki motors was made at the Goodrich facility. *Id.* Therefore, the Rialto Lawyers are double counting Loki motors already contained in their total estimate.

Flaw Number 3. The Rialto Lawyers conclude that "at least 22 Loki I motors developed propellant cracking causing the motors to be undeliverable. [citations omitted]

The propellant from the defective Loki I motors was cut-out. . ." Rialto Brief at 47. However, the document the Rialto Lawyers rely upon, an October 28, 1959 Technical Report to the United State Navy, does not support this conclusion. In particular, the Technical Report states that "[r]adiographic inspection of loaded Loki 1 motors produced since June 22, 1959 has revealed the occurrence of unusual cracks and void-crack combinations of ***some of the propellant grains from every batch of 22 motors*** . . . loading of the Loki 1 motors with this propellant has been discontinued until a solution to the problem is reached." Rialto Ex. G-31 (emphasis added). The Rialto Lawyers assumption that 22 Loki motors were defective has no basis in fact. Further, the technical report provides no support to the Rialto Lawyers' assertion that these defective motors were salvaged or that these motors were not accepted by the Navy. Therefore, these 22 motors should not be included in the total number of Loki I motors loaded by Goodrich.

Rialto's Loki Motor *Lawyer Math*		
Rialto Lawyer's Estimates	*Problems with Estimate*	*Actual Number*
330 Loki I delivered		330 Loki I loaded
16 Loki I tested	Double counts Loki I motors delivered	0
22 Loki I defective	Misreads Government Correspondence	0
1,500 Loki IIA loaded	Unsupported by NARA documents or witness testimony	185 Loki II loaded
Rialto Lawyer TOTAL: 1,868		**Actual TOTAL: 515**

Given the fatal flaws in Rialto's *lawyer math*, the Rialto Lawyers' estimate is unfounded and the more appropriate and accurate calculation of 515 total Loki motors conducted by Dr. Merrill should be accepted.

2. Goodrich Only Loaded 426 Sidewinder Motors

In approximately 1961, Goodrich obtained a contract to load Sidewinder motors for the United States Navy. *See e.g.*, Ex. 82 (KWKA00452529) (April 18, 1961 Navy Memo).

Unfortunately, shortly after obtaining this contract, in November 1962, Goodrich encountered problems with cracking in the propellant grain and its contract with the Navy was cancelled. Ex. 93 (KWKA00452719-23) (indicates cracking of Sidewinder Motor discovered in November of 1962). Because of the problems Goodrich encountered with the Sidewinder motor, it never loaded a significant quantity of these motors. Again, Dr. Merrill carefully reviewed the government documents obtained at NARA and the testimony of numerous former Goodrich employees and based on this review concluded that ***Goodrich loaded only 426 Sidewinder Motors***. Merrill Dec. ¶ 20; Merrill Rebuttal Dec. ¶ 4.

Dr. Merrill's Opinion Regarding the Number of Sidewinder Motors Loaded	
283 Mk 31 Mod 0 Sidewinder motors loaded	Ex. 122 (KWKA00452528-30); Ex. 85 (KWKA00452626-27); Ex. 86 (KWKA00452634-37).
143 Mk 36 Mod 0 Sidewinder motors loaded	Ex. 90 (KWKA00452707-09); Ex. 95 (KWKA00452736-38); Ex. 97 (KWKA00452740-43).
426 TOTAL Sidewinder motors loaded	

Again, the Rialto Lawyers engage in creative *lawyer math* in their estimate that Goodrich loaded 723 Sidewinder motors. Without any experience in reading and interpreting government contracts, the Rialto Lawyers are in no position to provide guidance or testimony on the actual number of Sidewinders Goodrich loaded.

Flaw Number 1. The Rialto Lawyers' ignorance regarding government contracts results in the misreading of a key government document regarding Goodrich's loading of Sidewinder motors and a gross overestimate of the number of Sidewinders loaded. The Rialto Lawyers rely principally on a misreading of six lines of text from a five page Sidewinder Progress Report dated December 1, 1962 in support of their conclusion that Goodrich loaded 630 Sidewinder motors (200 Mk 31 Mod 0 motors delivered to the United States Navy, 119 Mk 36 Mod 0 motors delivered to the United States Navy (319 total

delivered) and 311 "cast but not delivered.") Rialto Opening Brief at 43; Rialto Ex. G-17 (KWKA00452719-23). When these six lines are read in context with the entire document and prior Navy Sidewinder Progress Reports, it is clear that Goodrich did not load the 311 additional Sidewinder motors.

Dr. Merrill, an expert in reviewing government documents, concludes that based on this Report and prior Sidewinder Progress Reports, Goodrich delivered 319 Sidewinder motors and was in the process of loading "Lot 3" of 311 motors when employees discovered cracks in the motors, at which time all further loading was discontinued. Merrill Rebuttal Dec. ¶ 3(a). Therefore, Goodrich "did not and could not have cast the additional 311 Sidewinder motors." Merrill Rebuttal Dec. ¶ 3(a). Dr. Merrill relies on the following support for his conclusion:

- The December 1, 1962 Sidewinder Progress Report states that "further loading would be suspended until a thorough investigation of the problem was made." If Goodrich had cast all 311 motors, there would have been no need to cease further loading because all of the motors would be loaded. Merrill Rebuttal Dec. ¶ 3(a).
- The December 1962 Progress Report indicates that "311 (net Lot 3) Mk 36 Mod 0 motors were in the process of final assembly." Based on this language, Goodrich did not cast all 311 motors, rather Goodrich cast a portion of the 311 motors designated as "Lot 3." The lot size corresponded to the size of a batch, and therefore "Lot 3" was approximately 18 motors. Merrill Rebuttal Dec. ¶ 3(a).
- The December 1, 1962 Sidewinder Progress Report must be read in context with the prior 1962 Sidewinder Progress Reports. Prior Progress Reports

show that NOTS had funding only for 311 motors. Ex. 11 (KWKA00452643). Goodrich was only authorized to load motors for which NOTS had funding and therefore Goodrich was not permitted to load a total of 630 Sidewinder. There is no evidence that NOTS ever gave Goodrich such an authorization or that NOTS procured the necessary funding before Goodrich's Sidewinder Contract was cancelled in 1963. Merrill Rebuttal Dec. ¶ 3(a).

Moreover, Dr. Merrill's conclusion that Goodrich delivered 319 Sidewinders is supported by prior Sidewinder Progress Reports, which corroborate the delivery of the 200 Mk 31 Mod 0 motors and the delivery of the 119 Mk 36 Mod 0 motors referenced in the December 1962 Progress Report. Merrill Rebuttal Dec. ¶ 4; Ex. 122 (KWKA00452528-30); Ex. 90 (KWKA00452707-09).[3]

Flaw Number 2. Just as with the Loki motors, the Rialto Lawyers improperly include additional Sidewinder motors for "qualification" or "quality control" testing. Rialto Brief at 44 ("Goodrich must have loaded at least (57) fifty-seven extra 'test' Sidewinder motors with ammonium perchlorate-based propellant for quality control testing.") However, any Sidewinder motors that were static test fired for "qualification" or "quality control" purposes would have been included in the final number of motors accepted and delivered to the Navy. Therefore, the Rialto Lawyers' misinformed math results in the double counting of 57 motors.

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3 Even the Rialto Lawyers recognize that their conclusion that Goodrich loaded 311 additional motors is flawed. In a memo drafted by the Rialto Lawyers entitled "Water Board Corrective Action Consideration – Goodrich Release Evidence" the Lawyers stated that the December 1, 1962 Sidewinder Progress Report was "ambiguous." Ex. 30043 (Rialto Lawyers' Memo) at 14.

Rialto's Sidewinder Motor *Lawyer Math*				
Rialto Lawyer's Estimates		*Problems with Estimate*	*Actual Number*	
319	Sidewinders delivered		319	Sidewinders delivered
311	Sidewinders "cast but not delivered"	Misreads Government Document	0	
36	Sidewinders "cast" to address propellant cracking	Misreads Government Correspondence	24	Sidewinders cast to address cracking. *See* Ex. 16 and Ex. 17
57	Sidewinders "cast" for testing and qualifying	Double counts Sidewinder motors delivered	0	
Rialto Lawyer TOTAL: 723			**Actual TOTAL: 426**	

Once again, the fatal flaws in the *lawyer math* are detrimental to Rialto's estimate of 723 Sidewinder motors. Dr. Merrill's opinion, unrebutted with any competent evidence, supports the conclusion that Goodrich loaded 426 Sidewinder motors.

3. Goodrich's Research & Development

In addition to the production of Loki and Sidewinder motors, Goodrich conducted research and development on its own proprietary solid rocket propellant formulations and obtained small research and development contracts from the Navy and Air Force. Graham Dec. ¶ 4; Sachara Dec. ¶ 3. While the testimony and documentary evidence is not as conclusive as with the Loki and Sidewinder, Dr. Merrill carefully reviewed the available evidence and concluded that Goodrich loaded numerous small two-inch laboratory motors, three Atmos motors, and two spherical motors – all of which contained ammonium perchlorate. Merrill Dec., Ex. A. In addition, Goodrich loaded several research and development motors that did not contain ammonium perchlorate, including the ASP and the JATO. Merrill Rebuttal Dec. ¶ 7(a); Wever Dec. ¶ 12. For this reason, Dr. Merrill did not include either the ASP or the JATO in his ultimate conclusions. Merrill Dec., Ex. A.

Rialto admits that not all of the motors loaded by Goodrich contained ammonium perchlorate. Rialto Brief at 40. Yet, Rialto fails to account for any motors that it claims were

actually loaded with another oxidizer. Without any support, Rialto asserts that the ASP and JATO research and development motor contained 70% ammonium perchlorate by weight. Rialto Brief at 49-50. According to Mr. Dwight Wever, the assistant production manager at Goodrich, the ASP I and the ASP IV contained ammonium nitrate as the oxidizer – not ammonium perchlorate. Wever Decl. ¶ 12. Rialto simply ignores this evidence and indirectly relies upon the testimony of Ronald Polzien, a test engineer who never worked in the production of either the ASP, the JATO, or any other rocket motor. Polzien Dep., 587:25-588:20, 588:23-589:4, 589:14-592:15, 594:6-11, 728:25-729:5, 693:25-697:11, 456:16-19.

Not only does Rialto improperly include the ASP and JATO in its final calculation, but the Rialto Lawyers also miscalculate the number of ASP motors loaded by Goodrich. Rialto relies upon the testimony of Mr. Bland and Mr. Sachara for the conclusion that 22 ASP motors were loaded at Goodrich. Rialto Brief at 49-50. But, Mr. Sachara testifies that "possibly ten or less" ASP motors were loaded at Goodrich and Mr. Bland cannot provide any conclusive testimony whether the ASP was ever loaded at Goodrich:

Question: The ASP and the Viper are different rockets?

Mr. Bland: I don't know.

Question: All right.

* * *

Question: Because you've testified that you think that the ASP was made at Goodrich; right?

Mr. Bland: Either/or, ASP or Viper.

Question: And that's what I gotta get down to. [¶] Do you actually have a specific recollection of the Viper being made at Goodrich?

Mr. Bland: No.

Question: All right. You have a recollection of the ASP being made at Goodrich, though?

Mr. Bland: Or Viper.

Bland Dep., 509:13-510:3. Somehow the Rialto lawyers get from ten or less ASP motors to 22 motors, without any evidentiary support.

The Rialto Lawyers also overestimate the number of Atmos motors loaded by Goodrich. Rialto leaps from "only a few ATMOS rocket motor [sic] were manufactured" to five Atmos motors loaded. *Compare* Rialto Brief at 49:18-20 *with* Rialto Brief at 50:13-14. The testimony of both Mr. Polzien, whom Rialto heavily relies upon, and the testimony of Mr. Staton both support the conclusion that Goodrich loaded approximately three Atmos motors. Polzien Depo. at 573:17-574:5, 576:24-577:4; Staton Depo. at 76:13-15. Without explanation the Rialto Lawyers again deem it appropriate to inflate the actual number of motors loaded.

4. The Rialto Lawyers' Estimates regarding the Number of Motors Loaded by Goodrich Vary Substantially from those of the Advocacy Team

While Rialto and the Advocacy Team together comprise the "Prosecutorial Team," their estimates of the number of motors loaded by Goodrich vary greatly.

Rialto Lawyers' Estimate	Advocacy Team's Estimate
1,868 Loki motors	1,330 Loki motors
723 Sidewinder motors	240-347 Sidewinder motors
12 JATO motors	Unknown JATO motors
22 ASP motors	4-5 ASP motors
5 Atmos motors	2 Atmos motors

Based on these vastly different estimates, the Advocacy Team concludes that Goodrich utilized 27,202 pounds of ammonium perchlorate and the Rialto Lawyers conclude

that Goodrich consumed upwards of 200,350 pounds of ammonium perchlorate. Ad. Team Brief at 74; Rialto Brief at 37. If the members of the Prosecutorial Team cannot agree on the number of motors loaded, how can either of the estimates be reliable? Moreover, neither the Advocacy Team nor the Rialto Lawyers rely upon any expert in the industrial practices of manufacturing solid rocket propellant, making both estimates particularly suspect and inadmissible.

D. The Rialto Lawyers Fail To Provide Any Evidence Establishing that Goodrich Discharged Any Ammonium Perchlorate or TCE to the Groundwater

The Rialto Lawyers boldly state that Goodrich used and disposed of thousands of pounds of ammonium perchlorate, yet when it comes to actually calculating how much of this perchlorate was remaining after it was burned in Goodrich's burn pit – the Rialto Lawyers' remain tellingly silent. The explanation for this is simple – it does not matter how many tens of thousands of perchlorate Goodrich disposed of in its burn pit – the fact is that burning is a very effective way to dispose of ammonium perchlorate. Merrill Dec. 15; Oxley Dec. 13. Thus, even if Goodrich disposed of 24,385 pounds of ammonium perchlorate in its burn pit, virtually none of the perchlorate remained after it was burned. Oxley Dec. 13.

1. The Rialto Lawyers Overstate that Size of the Sidewinder Motor

Because the Rialto Lawyers have no personal knowledge regarding the Sidewinder motor, they rely upon a document entitled "Principles of Guided Missiles and Nuclear Weapons," a document that has absolutely no relation to Goodrich. Rialto Brief at 42:3-8. Not only do the Rialto Lawyers inappropriately rely upon an unrelated document, but they misquote the document. *See* Rialto Ex. G-13 (Rialto claims that Sidewinder *motor* weighed 190 pounds but the document indicates that the *motor* weighed 155 pounds). On the other hand, Dr. Merrill has vast experience with the Sidewinder motors and opines that

> the Sidewinder motor is approximately six feet long, approximately five inches in diameter, and holds less than sixty (60) pounds of Goodrich ***propellant***.

Merrill Rebuttal Dec. ¶ 8(d) (emphasis added). For these reasons, the Rialto Lawyers' estimate is wholly unreliable and leads to the gross overstatement that Goodrich *consumed* "at least 56,394 pounds of ammonium perchlorate" to manufacture the Sidewinder motor.

2. Goodrich's "Sidewinder Salvaging Process" Did Not Result in the Discharge of Any Ammonium Perchlorate or TCE into the Environment

The Rialto Lawyers allege that Goodrich salvaged 22 Loki motors and 100 Sidewinder motors. Rialto Brief at 52:7-11. Notably, no citation is provided to support the alleged "fact" that 100 Sidewinder motors were salvaged. Even the Rialto Lawyers cannot agree on how many Sidewinders were salvaged - a memorandum drafted by Rialto Lawyers concludes that "***the most reasonable estimation of the number of Sidewinders salvaged is between 24 and 36***." Ex. 30043 (Rialto Lawyers' Memo). If this is the case, why do the Rialto Lawyers now, in proceedings before the Hearing Officer, inflate this estimate to 100 motors without any evidentiary support?

The Rialto Lawyers further allege that "[t]he perchlorate-based propellant scraped from the motor casings was either caught in trays, placed in buckets filled with water, or scattered on the ground." Rialto Brief at 51:15-18. The Rialto Lawyers cite several different former Goodrich employees for this allegation; yet, all but one of the former Goodrich employees cited by Rialto, testified that scrap propellant was ***never*** left lying strewn across the bare ground during the salvaging process. Haggard Dep., 119:4-13; *see also* Haggard Dep., 116:8-15 (emphasis added); Garee Dep., 73:2-75:21; Wever Dec. ¶ 47 ("I did not observe any of the propellant removed from the casings or solvent used spilled on the ground.").

The only witness who testified to this "allegation" is Mr. Polzien, whose credibility is undermined by the fact that his "story" is not corroborated by any other former Goodrich

employee and is flatly contradicted by several former employees.[4] Indeed, even Mr. Sachara, whom Mr. Polzien claimed would confirm his "story," refutes Mr. Polzien's testimony:

> At no point during my employment at the Rialto facility did Mr. Polzien ever tell me that he was concerned about working around the test-firing area. He also never complained to me about the manner in which propellant was being removed from rocket casings. Despite Mr. Polzien's assertions to the contrary, I never expressed concerns about the safety of removing propellant from rocket casings to Jack Shields orally or in writing. Furthermore, I never communicated to Jack Shields orally or in writing about the existence of scrap propellant on the ground at the Rialto facility.

Sachara Dec., ¶ 13 (emphasis added); *see also* Polzien Dep., 1029:17-21 ("The sidewalks leading from the pad, almost all over, to varying degrees, and there is testimony about Mr. Sachara's confirmation on that, too."). The overwhelming weight of the testimony demonstrates that Mr. Polzien's recollection of events is either faulty or fabricated, and cannot be relied upon by Rialto.

Finally, as Rialto concedes, "all large chunks of extracted propellant was eventually taken to Goodrich's burn pit for disposal." Rialto Brief at 52. Thus, any waste propellant from this process was burned and no ammonium perchlorate was discharged into the environment.

3. The "Mixing" of Solid Rocket Propellant Did Not Result in the Release of Ammonium Perchlorate or TCE to the Environment

As the Rialto Lawyers ultimately concede "[a]ll the waste from the mixing process, including leftover perchlorate-based propellant, TCE/propellant slurry and cleaning rags were subsequently disposed of in Goodrich's burn pit." Rialto Brief at 54:19-22. Therefore, virtually all ammonium perchlorate was consumed in the burning of the propellant waste in

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[4] Dr. Stephens admits that he is not "in a position to evaluate [Mr. Polzien's] trustworthiness" without reading his complete transcript, which he never did. Stephens Dep., 149:9-11.

Goodrich's burn pit and not released into the environment. Oxley Dec. ¶ 13; Merrill Dec. ¶ 15.

Further, Rialto's allegations regarding Goodrich's mixing process are filled with falsehoods and half-truths. Rialto alleges based on the testimony of Mr. Wever that "Goodrich had two production mixers – a 100 gallon mixer and a 150 gallon mixer." Rialto Brief at 53:16-17. However, Mr. Wever specifically testified that "[t]here were two production mixers at the Goodrich plant: a 25-gallon mixer and a 100-gallon mixer." Wever Dec. ¶ 28.

Despite the fact that there is no concrete evidence that Goodrich ever used trichloroethylene ("TCE") at its Rialto plant, Rialto recklessly alleges throughout its brief that Goodrich used TCE for cleaning purposes. Rialto Brief at 54:10-22, 54:27-28. Several former Goodrich employees affirmatively testified that ***TCE was not used*** in any part of Goodrich's operations in Rialto.

- Mr. Haggard testified that he did not recall trichloroethylene ever being used to clean the mixers. Haggard Dep., 54:10-23
- Mr. Garee testified that he was familiar with the solvent TCE and he does not recall TCE ever being used while he worked at Goodrich. Garee Dep., 122:6-123:1.
- Mr. Morris also testified that he was familiar with the solvent TCE and he never used TCE while employed at Goodrich. Morris Dep., 39:3-25
- Mr. Shook testified that he never saw or used TCE while employed at Goodrich. Shook Dep., 29:2-19.
- Mr. Holtzclaw testified that he "recall[ed] that acetone was used at the Rialto facility to clean the carriages where propellant was cured. [He did] not recall

any other solvent being used at the facility. [He did] not recall ever seeing Trichloroethylene or hearing of any employees using Trichloroethylene at the facility." Holtzclaw Dec. ¶ 9.

- Mr. Willis testified that "During the entire length of [his] employment at Goodrich, [he] never used and [he] did not see other employee[s] use trichloroethylene at Goodrich's Rialto facility." Willis Dec. ¶ 13.
- Mr. Hernandez testified that "only MEK and acetone were stored at Goodrich. [He does] not recall the solvent trichloroethylene ever being stored at Goodrich." Hernandez Dec. ¶ 3.

The only witnesses the Rialto Lawyers rely upon to establish that Goodrich used TCE are Mr. Dwight Wever and Mr. Gerald Bland.[5] Yet, Mr. Wever, after careful reflection, testified that he cannot recall what type of solvent was used at the Goodrich facility in Rialto and does not recall exactly what type of solvent was used for any cleaning purpose at Goodrich. Wever Dec. ¶ 32. Similarly, Mr. Bland testified that he has "no recollection of every personally using trichloroethylene at the Goodrich facility" and he has "no recollection of seeing anyone use trichloroethylene at the Goodrich facility." Bland Dec. ¶ 10. Finally, Mr. Polzien, whom Rialto heavily relies upon throughout its Opening Brief, also testified that he could not recall exactly what type of solvent was used at Goodrich (either TCE or TCA). Polzien Dep., 618:17-620:5. Rialto's expert, Dr. Stephens, also relies upon the testimony of

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[5] Rialto's own expert admits that deposition testimony is not "definitive evidence" that a company used trichloroethylene. Stephens Dep., 333:3-24. According to Dr. Stephens, conclusive evidence includes the "purchase records, invoices that document the purchase of the chlorinated solvents, industrial practice, operating procedures, and so on which would be – and also maybe some waste manifests would be useful to document and confirm the solvent use." Stephens Dep., 342;12-17. Therefore, Dr. Stephens admits there is no conclusive evidence that Goodrich even used TCE in Rialto. Stephens Dep., 343:6-11.

Mr. Ray Davis as evidence that Goodrich used TCE; however, Mr. Davis never worked at Goodrich – he was a former employee of West Coast Loading Corporation – and Dr. Stephens concedes that Mr. Davis does not provide any support for Goodrich's use of TCE. Stephens Dec. at 3; Stephens Dep., 59:1-6. In sum, there is simply no determinative evidence that Rialto can point to establishing that Goodrich used and/or disposed of TCE.

4. The "Loading" of Propellant into Motor Casings Did Not Result in the Release of Ammonium Perchlorate or TCE to the Environment

Once again, Rialto concedes that all waste propellant from the loading process was containerized and sent to Goodrich's burn pit for burning. Rialto Brief at 54. Since the undisputed evidence is that Goodrich burned all of the propellant waste in connection with this process, virtually all detectable ammonium perchlorate was destroyed and never released into the environment. Oxley Dec. ¶ 13; Merrill Dec. ¶ 15.

Again, Rialto can point to no evidence that Goodrich actually used TCE in connection with this process. The only support they cite to is the deposition of Mr. Haggard; yet, Mr. Haggard specifically testified that cyclohexanone and acetone were used to clean the mixers and transfer pot – not TCE. Haggard Dep., 58:22-59:17. Because Rialto cannot establish that Goodrich even used TCE; there is no evidence that Goodrich ever released TCE into the environment.

5. The "Trimming" Process Did Not Result in the Release of Ammonium Perchlorate to the Environment

Once again, Rialto concedes that "[a]ll 'scrap' propellant and trimmings were disposed of in Goodrich's burn pit." Rialto Brief at 56:5-6. If all of the scrap was burned in Goodrich's burn pit; then there is no mechanism for ammonium perchlorate to be released into the environment. Oxley Dec. ¶ 13; Merrill Dec. ¶ 15.

Rialto relies exclusively on the testimony of Mr. Polzien for its allegation that

"Goodrich rocket motors were overfilled to accommodate any shrinkage that occurred in the curing process" and that "all rocket motors were trimmed" because of this overfilling. Rialto Brief at 55:12-13; 55:23-24. Rialto disregards the testimony of former Goodrich employees who actually participated in the trimming process in favor of Mr. Polzien's testimony, despite the fact that Mr. Polzien admits that he never witnessed the "trimming" operation," so he would be unable to provide truthful testimony as to the trimming process. Polzien Dep., 728:25-729:5 (Q. [d]id you ever actually see a Sidewinder trimmed and then look down and see actually how much trimming was done after it was completed? A. ***No, because I never witnessed a trimming operation***.") (emphasis added); *see also* Polzien Dep., at 289:15-290:5. Importantly, the testimony of former Goodrich employees involved in the trimming operation testified that the "trimming" process generated very little waste. Wever Dec. ¶ 40; *see also* Beach Dec., at ¶ 5; Bland Dec. ¶ 8; Ustan Dec. ¶ 12. Therefore, large amount of waste were not generated during the process and all such waste was burned in the burn pit.

6. *Phantom* Perchlorate Waste

For no explicable reason, the Rialto Lawyers create a *phantom* release of ammonium perchlorate by relying upon a "waste factor of three to five percent (the same waste factor percentage used by WCLC and supported by the evidence herein)." Rialto Brief at 56:19-22. Using this waste factor, the Rialto Lawyers assert that "Goodrich necessarily discharged up to 4,000 pounds of perchlorate waste slurry directly into the environment." *Id.* The Rialto Lawyers claim that this discharge is from the various waste streams it identified "i.e. grinding, mixing, trimming, etc.," but the Rialto Lawyers already asserted an estimate of the "pounds of perchlorate discharged into the environment as a result of these operations." Rialto Brief at 38:4-39:18; 56:14-22. What then is this "4,000 pounds of

perchlorate waste slurry?" The Rialto Lawyers never tell us; rather, they just create a phantom release with no justification whatsoever.

Further, the Rialto Lawyers' reliance on a waste factor created by a munitions facility is wholly misplaced in connection with a solid rocket propellant facility. There is absolutely no relation between the processes followed by West Coast Loading Corporation in the loading of munitions with potassium perchlorate and Goodrich's processing of ammonium perchlorate for manufacturing solid rocket propellant. Merrill Dec. ¶ 31; Oxley Rebuttal Dec. ¶ 3. Moreover, Ann Sturdivant, a member of the Advocacy Team and the Joint Prosecutorial Team, admitted that this 3-5% waste factor was incorrect in connection with West Coast Loading Corporations operations. Sturdivant Dep., 14147:1417:14. Thus, it is questionable whether 3-5% is even the correct waste factor to use in munitions processing, let alone rocket manufacturing.

7. "Static Test Firing" of Motors Did Not Result in the Release of Ammonium Perchlorate to the Environment

The Rialto Attorneys claim that the static test firing of motors resulted in "an additional 366 to 396 pounds of ammonium perchlorate being discharged into the environment." Rialto Brief at 58:9-11. Yet, again, the Rialto Attorneys admit that "all scrap propellant was taken to Goodrich's burn pit for disposal" and never explain how any release to the environment occurred if everything was burned in the burn pit. Rialto Brief at 57:14.

More importantly, the testimony of former Goodrich employees confirm that the static test firing of motors did not result in any waste propellant. As confirmed by the repeated testimony of former Goodrich employees, ***all of the propellant was consumed in the test firing***. Sachara Dec. ¶ 8; Graham Dec. ¶ 7; Wever Dec. ¶ 52; Staton Dep., 36:5-14, 75:5-16; Garee Dep., 25:4-25, 33:5-20, 47:2-9, 277:6-16, 279:2-17, 285:2-13; Haggard Dep., 122:14-123:14; Morris Dep., 44:3-46:7. Moreover, Dr. Merrill, who has conducted motor test

firings over decades, is of the opinion that "once a high ammonium perchlorate concentration, solid propellant motor is ignited, the propellant completely burns" and that "there would be no scrap propellant remaining after igniting a motor in the Goodrich static test firing bay, even if there was a 'failure' of the motor itself." Merrill Dec. ¶ 16.

8. Goodrich's Burn Pit Resulted in *Less Than Half a Pound* of Ammonium Perchlorate Released Into the Environment

Neither Rialto nor the Advocacy Team make any attempt to quantify the amount of perchlorate discharged as a result of Goodrich's use of a single burn pit for the disposal of its propellant and ammonium perchlorate waste. Neither Rialto nor the Advocacy Team provide any scientific evidence regarding the amount of perchlorate residue remaining after solid rocket propellant is burned.[6] ***The only evidence presented on this issue is that of Dr. Jimmie Oxley – a leading scientist in the area of the combustion of energetic materials including propellants.*** Oxley Dec. Neither Rialto nor the Advocacy Team has presented any evidence disputing Dr. Oxley's opinion. Indeed, Dr. Stephens, Rialto's sole designated liability expert, testified that he does not disagree with any of Dr. Oxley's opinions and can offer no alternative opinion regarding the amount of perchlorate remaining. Stephens Dep., 205:6-7.

Based on Dr. Oxley's opinion, Goodrich's burning of 9,599 pounds of ammonium perchlorate (mainly in the form of solid propellant) in its single burn pit results in only 0.1919 pounds of perchlorate being released into the environment. Such a *de micromis* release clearly has not impacted either the deep soil or groundwater in the Rialto-Colton Basin.

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[6] Any attempt by either Rialto or the Advocacy Team to analogize the residual perchlorate remaining after an explosion at a fireworks facility with the controlled burn of solid rocket propellant in a burn pit is wholly misplaced. Oxley Rebuttal Dec. ¶ 3; *see* Rialto Brief at 38, fn. 50 (Rialto appears to rely upon a "July 14, 2005 study by TRC, an environmental consulting firm, tested ash and debris left over after a fire in a building containing perchlorate was allowed to completely burn itself completely out.")

Further, neither Rialto nor the Advocacy Team can point to any evidence that Goodrich disposed of its propellant waste in any manner other than in the single burn pit near the static test firing stand.[7] The former Goodrich employees unanimously agree that Goodrich's plant in Rialto contained a ***single burn pit***. Wever Dec. ¶ 53; Graham Dec. ¶ 5; Willis Dec. ¶ 19; Beach Dec. ¶ 11; Sachara Dec. ¶ 9; Staton Dep., 21:25-22:1, 27:4-14; Garee Dep., 83:2-87:9; Hernandez Dec. ¶ 7; Ustan Dec. ¶ 8; s*ee also*, Bennett Dec. ¶ 16.

Despite Rialto's assertions otherwise, material placed in the burn pit was burned immediately; no scrap was left outside or in the burn pit overnight, or for extended periods of time. Wever Dec. ¶ 55; Willis Dec. ¶ 19; Staton Dep., 57:2-58:8, 63:6-16; Garee Dep., 83:2-87:18; Hernandez Dec. ¶ 7; Ustan Dec. ¶ 8. The burn pit was never rinsed with water, and burns did not occur during rainy or windy conditions. Wever Dec. ¶¶ 57-60; Staton Dep., 26:1-15. Even Dr. Stephens, Rialto's sole designated liability expert, concedes that he is unaware of any evidence that free water was ever placed in Goodrich's burn pit. Stephens Dep., 381:14-16, 382:19-383:2. Thus, neither Rialto nor the Advocacy Team can provide any explanation as to how Goodrich's burn pit is a source of perchlorate contamination in the groundwater.

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[7] Any allegation by Rialto or the Advocacy Team that Goodrich utilized a disposal pit in the southwestern portion of the facility is unsubstantiated. Not one former Goodrich employee testified that Goodrich ever buried waste in any location at the Goodrich facility. Sachara Dec. ¶ 6; Holtzclaw Dec. ¶ 10-12; Graham Dec. ¶ 9-11; Beach Dec. ¶ 8; Willis Dec. ¶ 20; Shook Dep., 30:10-14, 53:2-60:6; Staton Dep., 15:5-17:23; Garee Dep., 79:1-23; Morris Dep., 36:6-38:24; Haggard Dep., 36:6-38:24, Hernandez Dec. ¶ 5-7; Bland Dec. ¶¶ 10-1; Ustan Dec. ¶ 8. Even members of the Advocacy Team, such as Mr. Saremi agree that any material discovered in Area D-1 (the so-called Southwest Disposal Pit) was not propellant and that the Southwest Disposal Area was repeatedly used by the fireworks manufacturers, such as Pyrotronics. Saremi Dep., 1144:18-23. Further, Dr. Stephens also confirms that the "Area D-1" was used for decades as a burn pit by Pyrotronics and believes it is "more likely than not" that any perchlorate found in the soil in "Area D-1" is due to "fireworks incineration." Stephens Dep., 194:2-6, 197:14-198:10.

III.
THE EVIDENCE DOES NOT ESTABLISH THAT GOODRICH DISCHARGED ANY AMMONIUM PERCHLORATE OR TCE TO THE GROUNDWATER

As noted in Goodrich's Opening Brief, there is a fundamental and insurmountable evidentiary problem with the Advocacy Team's and the Rialto Lawyers' efforts to pin groundwater contamination on Goodrich's operations. They simply cannot get any alleged contamination from Goodrich's former burn pit or other operations at the 160-acre parcel through the 400-foot-thick layer of soil, known as the vadose zone, and into the groundwater. Goodrich's Opening Brief outlined the overwhelming evidence, including the vadose zone transport evidence provided by Drs. Michael Kavanaugh and Neven Kresic, that natural rainfall does not provide enough water to push contaminants that deep. Goodrich Brief, at 20-21. The evidence also establishes, beyond any question, that Goodrich did not add any water to its burn pit or provide any other transport mechanism to move alleged contaminants through the vadose zone. *Id.* Neither the Advocacy Team nor the Rialto Lawyers provides any credible evidence to the contrary. Absent credible scientific evidence that alleged contaminants from Goodrich's operations can move 400 feet through the vadose zone, there is no basis whatsoever for the claim that Goodrich's operations at the 160-acre parcel have impacted or threaten to impact groundwater.

The only "evidence" on this issue offered by either prosecutor comes from the Rialto Lawyers' designated expert, Dr. Daniel Stephens. The Rialto Lawyers submitted a "declaration" from Dr. Stephens dated April 12, 2007, as testimony in connection with its initial submission of evidence in this matter. The "declaration" was unsworn, however, and Dr. Stephens conceded at his deposition that he would be unwilling to sign it under penalty of perjury. Stephens Dep., 281:21-282:1. Assuming, however, that this written statement represents Dr. Stephens' testimony, he opined in it that water from natural precipitation moves through the vadose zone underneath the site at 1.25 feet per year. *See* Stephens Dec. pp. 14, 16.

Dr. Stephens' opinion is scientifically unjustified and is far greater than the migration rate calculated by every other scientist that has examined these issues, including

Goodrich's experts Drs. Neven Kresic and Michael Kavanaugh, and Emhart's expert Dr. Min-Ying Jacob Chu. But even assuming, *arguendo*, Dr. Stephens' migration rate of 1.25 feet per year was credible, he conceded at his deposition that it would take more than 300 years for any perchlorate associated with Goodrich's operations to reach groundwater, and that he would expect any perchlorate from the Goodrich burn pit to have traveled no more than 50 feet below ground surface as of today. Stephens Dep., 766:20-767:4, 414:16-415:6. He concedes that there is no evidence of free water in the Goodrich burn pit area, which would be necessary to push any perchlorate down through the 400-foot-thick vadose zone and into groundwater.

Recognizing that his 1.25 foot per year opinion destroyed the Advocacy Team's and the Rialto Lawyers' case against Goodrich, on the second day of Dr. Stephens' deposition, and without any notice to the parties or permission from the Hearing Officer, Dr. Stephens announced that he had "changed" his opinion, raising his migration rate by a factor of ten from 1.25 feet per year to 12.5 feet per year. There is absolutely no scientific basis for this new opinion, which is contrary to all the known data concerning the vadose zone conditions in the Rialto-Colton basin. Rather, it is the shameless by-product of the Rialto Lawyers insisting that Dr. Stephens change his opinion because, using his original opinion, the Rialto Lawyers' case against Goodrich fails entirely.

When the parties raised this issue with the Special Master during Mr. Stephens' deposition on May 16, Mr. Sommer, Rialto's lead counsel, claimed he heard this new opinion for the first time during the deposition.

Special Master:	But I would express an opinion, which the court reporter can take down, and that is that under these circumstances I think this witness should come back and complete his testimony at some point in time after the May 17 deadline. And that would be after, of course, he -- when is he planning to return from Europe? [¶] Well –
Mr. Hunsucker:	Your Honor, may I ask when counsel knew about the change?
Mr. Sommer:	**Which change?**
Mr. Hunsucker:	The big change, the ten times change.

Special Master: Yes, you may ask.

Mr. Sommer: I actually heard it for the first time in the deposition.

Ex. 30015 (May 16, 2007 Hearing Transcript) (emphasis added).

Dr. Stephens, however, testified under oath that he told the Rialto Lawyers about this change before the deposition:

Q. Did you discuss your new opinion with the City of Rialto before you came here and gave it?

A. Yes.

Q. When did you discuss it?

A. I don't recall.

Q. You don't recall when you discussed it?

A. Not -- I can't recall the day, no.

Q. Was it within the last two days?

A. No, it was before that.

* * *

Q. And then you talked it over with the city, that you wanted to change your opinion?

A. No, I don't know that I talked it over with them. I think -- I know I mentioned it. But there wasn't any discussion.

Q. What did they say, what did the lawyers say about that?

A. Nothing -- nothing in particular.

Q. Did they tell you that you couldn't do that?

A. No.

Stephens Dep., 396:9-17, 397:16-25 (emphasis added).

Incredibly, when the parties raised this issue with the Hearing Officer and pointed out that Rialto was attempting to violate the schedule for submitting evidence under the Notices of Public Hearing, Mr. Sommer denied there was any change in Dr. Stephens' opinion at all:

> Dr. Stephens was not changing his general infiltration estimate of 1.25 feet per year, or more, but was addressing the 'greater rates' [the 'or more'] that would occur *in the event* of abnormally wet years, focused infiltration rates or recharge, etc.

Ex. 30018 (June 1, 2007 Letter from S. Sommer to Hearing Officer). Unlike Mr. Sommer's feeble effort at obfuscation, Dr. Stephens was unequivocal – he testified that he was, in fact, changing his opinion:

> Q. So you wrote 1.25 feet in your declaration, ***now you're changing your opinion?***
>
> A. ***Yes.***
>
> * * *
>
> Q. How many feet per year, what's your number now, sir, what's the new number?
>
> A. It could be on the order of ten times more.
>
> Q. So now you're saying it could be ten feet or actually it's more than that, it's ten times would be --
>
> **Mr. Sommer: 12.5.**
>
> Q. See, he's good at math, better than me. 12.5 feet a year; is that right?
>
> A. It could be, yes.

Stephens Dep., 392:17-19, 395:1-11 (emphasis added).

And it is clear, that during Dr. Stephens' deposition, Mr. Sommer knew that Dr. Stephens was changing his opinion:

> Q. And you have no intention to revise any recharge rates in your opinion that you submitted to the hearing officer on April 12; is that correct?
>
> Mr. Sommer: You mean other than what he's already testified to?
>
> Q. No. Let me ask the questions, please. [¶] You have no intention, do you, Dr. Stephens, to change your opinion with regard to the recharge rate in the document you submitted to the hearing officer as your opinions; is that correct?
>
> A. Well, I have not prepared any testimony specifically for the hearing officer. If asked to submit additional information in addition to what we've submitted that's based on revised information, I will do that.

Stephens Dep., 478:24-479:14 (emphasis added).

Of course, if, as Mr. Sommer represents, there is no change to Dr. Stephens' opinion, then he is left with his initial opinion that water moves in the vadose zone at 1.25 feet per year, and it would take centuries for any alleged contamination from Goodrich's operations

to reach the groundwater. But that is only part of the issue. Dr. Stephens' new opinion was evidently orchestrated by the Rialto Lawyers as part of their effort to manipulate the evidence to find Goodrich legally responsible. Rialto's motives are now well-known – it needs a scapegoat for (1) its failure to fulfill its legal obligation to enforce the mitigated negative declaration that required Ken Thompson, Inc. to remediate the contamination emanating from the McLaughlin Pit, the only confirmed source on the 160-acre parcel; and (2) to justify the legal fees paid to Mr. Sommer's law firm – which City Attorney Bob Owen testified were between $12 and $15 million (Owen Dep., 231:3-21, 326:14-21) – to unnecessarily and falsely prosecute Goodrich and the other alleged responsible parties in these proceedings. *See* Section V.A, *infra*. Likewise, the Advocacy Team needs a scapegoat for its failure to close the McLaughlin Pit in accord with the legal requirements of Subchapter 15, which occurred under the specific watch of Advocacy Team members. See Section V.B. and X, *infra*. Despite the prosecutors' best but ill-motivated efforts, the real evidence exonerates Goodrich.

A. The Advocacy Team Has No Evidence Linking Goodrich's Operations and any Contamination

The Advocacy Team's brief contains no evidence that even attempts to connect Goodrich's operations with any groundwater contamination beneath the 160-acre parcel or downgradient of the 160 acre parcel. Its presentation is limited to claims related to Goodrich's rocket manufacturing operations and use of its burn pit (inaccurately discussed as being at least two burn pits). Ad. Team Brief, at 62-79. There is no discussion, however, of any vadose zone transport evidence linking Goodrich's use of perchlorate or alleged use of TCE, and any deep soil or groundwater contamination. The Advocacy Team has not even identified an expert witness who could attempt to support such allegations.

Compounding the Advocacy Team's silence in its brief is the fact that, when confronted in deposition, the Advocacy Team members conceded they have no evidence that perchlorate or TCE allegedly used by Goodrich is the source of any deep soil or groundwater contamination. Kamron Saremi and Ann Sturdivant are the Advocacy Team

witnesses who will purportedly testify about the "conclu[sion] that perchlorate and TCE were disposed of by Goodrich at the Property, and these contaminants have migrated into the vadose zone and to the groundwater." April 6, 2007 Ad. Team's Detailed Description of Witness Testimony, at 6, 10. Mr. Holub[8] will purportedly testify about the claim that "[d]ischarges of perchlorate and TCE at the Property have impacted groundwater at the Property" and "migrated from the Property." *Id.*, at 2. Contrary to these statements in the Advocacy Team's submission to the hearing officer, these witnesses each admit not knowing whether the contamination found in any well or soil sample is from Goodrich's operations.

1. Mr. Holub (Supervising Water Resource Control Engineer)

Mr. Holub, the most senior member of the Advocacy Team addressing these issues, concedes there is no evidence establishing that Goodrich's operations caused any groundwater or soil contamination at or down gradient from the 160-acre parcel:

> Q. All right. [¶] With respect to all of these wells that have shown at any time concentrations of trichloroethylene, you cannot tell me on any particular sample that's been taken what the source is of that trichloroethylene from the various operations over time that we've talked about that overlay the basin; is that correct?
>
> A. Correct.
>
> Q. And the same thing would be true with respect to perchlorate; isn't that right, sir?
>
> A. There's no direct evidence, yes, I'm sorry.

Holub Dep., 932:19-933:4.

> Q. You can't tell me with respect to any well that's located in the Rialto/Colton basin anywhere on this map that has shown concentrations of perchlorate, positive concentrations, whether that perchlorate comes from any particular operation; is that correct?
>
> A. Yes.

Id., 933:8-13.

---

[8] In the Advocacy Team's March 26, 2007 Initial Witness Statement, Mr. Holub was slated to testify about "Evidence of Waste Discharge by Goodrich Corporation." March 26, 2007 Advocacy Team submission.

Q. I mean, you can't tell me whether or not soil samples taken from the 160-acre parcel come from the McLaughlin burn, can you?

A. No.

Q. No. [¶] And from Pyrotronics' washouts, you can't tell me that either, can you?

A. No.

Id., 936:11-18.

Q. **With respect to trichloroethylene or perchlorate in soil or groundwater anywhere in this basin, you cannot tell me what the source of either of those constituents is in soil or groundwater anywhere in this basin, can you?**

A. **No.**

Id., 937:8-13 (emphasis added).

Mr. Holub confirmed there is no evidence that Goodrich is responsible for any location of contamination in the Rialto-Colton basin:

- Groundwater monitoring wells at the 160-acre parcel

<u>CMW-01</u>

Q. Okay. [¶] If you look down, we know where the McLaughlin pit was. [¶] It's simply right above where CMW-01 is; right?

A. Yes.

Q. And leave the picture out for just a moment. CMW-01 has shown some high concentrations of perchlorate?

A. Yes.

Q. Okay. [¶] To your knowledge, there's no allegation or evidence that either West Coast Loading or Goodrich ever utilized the McLaughlin pit; right?

A. Yes.

Id., 983:4-17.

Q. Do you have any evidence whatsoever that Goodrich or West Coast Loading's operations at the site account for any of the perchlorate that exists in CMW-01 when it's been sampled?

A. No.

Q. Or trichloroethylene, for that matter?

A. No.

Q. You don't have any evidence; correct?

A. Correct.

Id., 983:25-984:8.

CMW-02

Q. Do you know whether there's any evidence whatsoever that perchlorate or trichloroethylene that's found in CMW-2 came from Goodrich's operations?

A. No.

Id., 988:20-23.

CMW-03

Q. All right. [¶] Then we go to CMW-3. [¶] You see that?

A. Yes.

Q. Okay. [¶] There were very small concentrations in CMW-3; right?

A. I believe that's correct.

Q. Right. [¶] Do you know whether or not there's anything that you've seen that evidences that Goodrich's perchlorate would be in CMW-3?

A. No.

Id., 984:9-21.

CMW-04

Q. Okay. [¶] So as a result of the years and years of washing out these buildings into the ground and these boxes outside, how much of the potassium perchlorate that was brought to the facility by Pyrotronics is showing up in CMW-4?

Ms. Novak: Lacks foundation. Assumes facts not in evidence. Calls for expert opinion. Also calls for speculation. [¶] You may answer.

A: I don't know.

Q. Well, is all of it?

Ms. Novak: Same objection.

A: I don't know.

Q. Do you know whether or not any evidence exists that Goodrich's perchlorate is in CMW-4?

A. No.

Id., 978:13-979:6.

CMW-05

Q. CMW-5 is a little different. It's above what used to be many, many years ago a mixer, and I guess the best way to show it to you is take a look at it from this perspective. [¶] This is one of my favorite ones here -- which is this one?

The Reporter: 4264. [EXH-4264]

* * *

Q. Now, I realize that, you know, there's not much left of this building, but you've seen this area before, sir?

A. Yes.

* * *

Q. When Goodrich left the site, do you understand that this building was used by the fireworks manufacturers?

A. Yes.

* * *

Q. Well, you do know that the building isn't there anymore; right?

A. Yes.

Q. That's quite apparent from 4264; right?

A. Yes.

Q. And do you know that the building came to a quite violent end?

A. Yes.

Q. What happened to it?

A. I believe it blew up.

Q. Who blew it up?

A. I recall it was Pyrotronics.

Id., 979:8-981:14.

Q. You do know that this building, this feature 4264, it lies immediately upgradient of CMW-5 there?

A. Yes.

Q. Okay. [¶] And CMW-5 has been tested, and there's some perchlorate in that well?

A. Yes.

Q. Okay. [¶] Well, is the perchlorate in CMW-5 as a result of Pyrotronics washouts of this building that was there once?

A. I don't know.

Q. Do you know whether there's any perchlorate in CMW-5 that originated from Goodrich's operations?

A. I don't know.

Q. Do you have any evidence that that ever happened?

A. No.

Q. Or trichloroethylene, for that matter?

A. No.

Id., 982:9-983:3.

All CMW wells

Q. I asked you with respect to each one of the CMW wells whether or not you had any evidence that any of the three alleged dischargers had any of their trichloroethylene or perchlorate in any of those wells; correct?

A. Correct.

Q. And you told me you did not?

A. Did not have any evidence.

Q. Right.

Id., 993:6-14.

Q. So I'm asking you, are you planning on making any mention at the hearing as to where any trichloroethylene or perchlorate for CMW-01 to CMW-05 is coming from?

A. Based on what's here, I don't believe so.

Id., 994:15-18 (emphasis added).

All other wells

Q. And if I was to ask you that question with respect to each of those operations for each of the wells located on this Exhibit 4256, you would agree you cannot tell me, could you?

A. I could not link the perchlorate in PW-5 to any specific operations.

Q. No. [¶] I'm saying with respect to any of the wells on this map, you can't link it to any particular operation, can you, sir?

A. Not conclusively.

Q. You can't say one way or another. You don't know whether or not PW-2, which is on the 160-acre parcel that shows perchlorate concentrations, has perchlorate that's coming from the RASP operation, do you?

A. No.

Q. You don't know whether or not the PW-2 has any perchlorate, any perchlorate that comes from Goodrich's operations, do you?

A. Not conclusively, no.

Q. You can't say that. [¶] You can't say whether PW-2 has perchlorate coming from the West Coast Loading operations, can you?

A. There's no data to indicate.

Q. There's no data to indicate Pyro Spectaculars, Goodrich, or West Coast Loading; isn't that right, sir?

A. Yes.

Q. And the same is true for every single well on this map; isn't that true?

A. Yes.

Id., 934:10-935:15; *see also id.*, 996:21-997:23.

- Shallow soil samples at the 160-acre parcel

Q. Okay. [¶] Next one down -- one, two, three, four, five – "Detection of perchlorate in shallow soils at locations where West Coast Loading and Goodrich conducted operations and beneath the former McLaughlin pit," you see that?

A. Yes.

* * *

Q. Are you aware of any evidence in those locations that establishes that the perchlorate there is from West Coast Loading versus Goodrich versus Pyrotronics versus the RASP?

Ms. Novak: Asked and answered. [¶] You may answer it again.

A: No.

Q: Okay. [¶] So you cannot say and will not get up at the state board proceedings saying this is Goodrich's perchlorate versus the RASP's perchlorate; right?

A. Right. [¶] I can't say that it is, correct.

Q. And you can't say whether or not the perchlorate that's found in the various locations that you're talking about here comes from

Mr. McLaughlin's fireworks show in December of 1987 in the pit, can you?

A. Correct.

Q. Or the previous self-ignition of the pit, can you?

A. Correct.

Q. And you're not going to get up at this hearing in May and say otherwise; right?

A. Correct.

Id., 995:8-996:20 (emphasis added).

- Groundwater monitoring wells downgradient from the 160-acre parcel

Q. Okay. [¶] Number four, "Analytic results of groundwater samples obtained from monitoring wells PW-5 through PW-9." [¶] Okay, I understand you're going to present the results of the data historically. That's fine. [¶] Are you going to present anything else with respect to those wells?

A. Not that I'm aware of.

Q. Okay. [¶] So you're not going to offer any testimony when we get to the state board about the sources of either TCE or perchlorate in those wells; right?

A. I don't believe so.

Id., 994:19-995:7 (emphasis added).

Q. Next one, "Discharges of perchlorate and TCE at the property have migrated from the property"; okay?

* * *

I know you're going to testify about the McLaughlin pit. [¶] But other than that, you're not going to testify about what specific discharges have impacted groundwater off the property, are you?

A. I don't believe -- I don't know. I don't believe so.

Id., 996:22-24, 999:17-23.

Q. I'm asking you, are you going to offer some opinion or some testimony about where perchlorate or trichloroethylene comes from other than the McLaughlin pit off this property? [¶] Because if you are, I'm going to ask you questions about it.

A. Based on this, it does not appear that I will be.

Id., 1000:8-15 (emphasis added).

Q. Next one down says, "Data from the monitoring wells shows perchlorate and TCE from the property have migrated at least 3.2 miles from the property." [¶] What's that referring to?

A. That is referring to the data from the off-site monitoring wells that Goodrich installed.

Id., 1000:17-22.

Q. There could be multiple sources of perchlorate in PW-9. [¶] You've already agreed to that; right?

A. Yes.

Q. And you're certainly not going to testify PW-9 has perchlorate from Pyro Spectaculars or West Coast or Goodrich, are you?

A. Just from the site.

Q. You can't say whose perchlorate; is that right?

A. Correct.

Id., 1002:18-1003:2.

Q. You're certainly not going to get up at the hearing and say that you have a scientific foundation for the conclusion that PW-9 is impacted by the 160-acre parcel, are you, sir?

A. Not a scientific conclusion, no.

Id., 1003:21-25.

Q. Now we're talking about what evidence there is that PW-9 is impacted by the 160-acre parcel. [¶] You're not going to be offering any type of scientific evidence to support that conclusion, are you, sir?

A. No scientific evidence, no.

Id., 1005:11-16.

Q. And by the way, I understand that you're going to present the data, but you can't present even a scientific conclusion with respect to PW-5 as to where the source of that contamination comes from, can you?

Ms. Novak: I believe it's been asked and answered.

A: No.

Id., 1006:23-1007:3.

Q. All right. [¶] Let's go back to page 2 here. There are some other things that you are going to testify about, and I want to go through them. [¶] It says, "Impacts of perchlorate and TCE on the water supply including, number one, analytical results from the groundwater

samples from municipal wells in the Rialto and Riverside-B groundwater management zones." [¶] Do you see that?

A. Yes.

Q. What are you going to say about that?

A. I anticipate I'll just be summarizing the data that's available of the perchlorate and TCE in the admissible wells.

Q. You're not going to offer any testimony about the source of that contamination; correct?

A. Correct.

Id., 1009:25-1010:15.

Q. The next one says, "Data from the municipal wells indicate that discharges of perchlorate and TCE at the property have migrated at least 4.5 miles from the property." [¶] I had a question when it was 3.2 bullet points up, and now it's now moved 1.3 miles. [¶] How's that work?

A. The data from the municipal wells show that -- there's a municipal well four and a half miles from the property that contains both perchlorate and TCE, and again, this bullet points says "data from the municipal wells indicate."

Q. So you're not –

A. So that will be basically my point.

Id., 1011:14-1012:2.

Q. You don't have any scientific basis to conclude that perchlorate from the 160-acre parcels has migrated 4.5 miles from the property, do you?

A. No scientific basis, no.

Q. No. [¶] And the next one says, "Perchlorate present in wells located up to 6" -- "about 6 miles from the property is consistent with discharges of perchlorate from the property." [¶] You see that?

A. Yes.

Q. You don't have any scientific basis for that either, do you?

A. No.

Id., 1012:21-1013:9.

Q. You have no scientific basis to state that discharges at the 160-acre parcel are responsible for perchlorate in wells 6 miles down from that -- from that site, do you?

A. No scientific evidence.

Q. You don't know when the first molecule of perchlorate got to the groundwater below the 160-acre parcel, do you?

A. Correct.

Q. In fact, if I asked you what decade that happened, you couldn't tell me, could you?

A. Correct.

Q. And the same thing would be true of trichloroethylene; isn't that true, sir?

A. Yes.

Id., 1013:18-1014:7.

Q. Let me back up to the point before. It says, "Perchlorate present in wells located up to about 6 miles from the property is consistent with discharge of perchlorate from the property." [¶] You see that?

A. Yes.

Q. You're not offering any scientifically supportable statement or testimony to support that conclusion, are you, sir?

A. No.

Q. Okay. [¶] The next one ... [¶] It says, "Geology" -- and should say hydrogeology -- "characteristics are consistent with the presence of perchlorate and TCE in the municipal wells." [¶] You see that?

A. Correct.

Q. What are you going to say on that subject?

A. It's basically related to the bullet above it that the groundwater flow rate and flow direction in the basin is consistent with how far perchlorate or TCE would have traveled in the groundwater during the range of time that perchlorate or TCE may have reached ground water from the 160-acre site.

Q. Okay. [¶] But you're not offering any scientifically based testimony about the conclusion as to when TCE or perchlorate reached the groundwater at the 160-acre parcel?

A. No.

Q. Or where from -- where at the 160-acre parcel, if at all other than from the McLaughlin pit, it actually reached groundwater; correct?

A. Correct.

Id., 1021:2-1022:21.

2. Ms. Sturdivant (Senior Engineering Geologist)

Ms. Sturdivant is even less prepared to address Goodrich's alleged responsibility for groundwater contamination. In her deposition, Ms. Sturdivant did not even recall being assigned this task:

> Q. If you look at the brief -- and you're free to do that -- it gives you the page number. There's a discussion in there, which undoubtedly you saw when you read the brief, concerning the -- whether or not Goodrich's operations impacted the groundwater or threatened the groundwater. [¶] You've seen that section; right?
>
> A. I don't remember getting that far. I don't know.
>
> Q. Well, do you have any responsibility for responding to that section?
>
> A. I may have. I don't remember.

Sturdivant Dep., 1121:23-1122:9.

Ms. Sturdivant's confusion may stem from the fact that no one on the Advocacy Team performed the work necessary to support such a conclusion: (1) no calculation was made of how much of Goodrich's perchlorate was discharged to the ground (*id.*, 1223:25-1224:4); (2) no calculation was made of the net infiltration rate for North Rialto (*id.*, 1239:25-1240:3); and (3) no one prepared a vadose zone transport model or calculated the rate of infiltration through the 400-foot vadose zone and into groundwater (*id.*, 1122:24-1123:7, 1284:13-1285:8). Ms. Sturdivant's complete lack of knowledge on this subject was summarized by the following testimony:

> Q. There are two pieces of information that you cannot tell me today. And I want to verify that one is you cannot tell me today how much perchlorate was discharged from Goodrich's burn pit as a result of the burning of propellant; correct?
>
> A. That's true.
>
> Q. And you can't even tell me by an order of magnitude how much perchlorate was discharged, can you?
>
> A. No.
>
> Q. You cannot; right?
>
> A. I cannot.

Q. Second thing you cannot tell me is, you cannot tell me the migration rate of perchlorate that was discharged by Goodrich from its burn pit towards the groundwater from the surface, can you?

A. No. No, I cannot.

Id., 1286:22-1287:13.

Consistent with this lack of evidence, Ms. Sturdivant is unable to conclude whether Goodrich's operations are responsible for any contamination:

Q. You can't tell me at any given time whether or not any sample taken from any well that has perchlorate in it, that the perchlorate came from Goodrich's operations as opposed to Pyrotronics or the United States, can you?

A. No.

* * *

Q. So I mean, we've got operations all over here, we've had historical operations on the 160-acre parcel, we've had historical operations at Broco, we got the landfill, we have multiple places where solvent contamination and/or perchlorate could come from; correct?

A. Yes.

Q. So on any given day, at any sample that's taken from this basin, when you actually take the sample and you look at the data, and if you see perchlorate or you see trichloroethylene, you can't say under oath that that TCE or perchlorate came from any particular operation versus another one, can you?

A. In the water?

Q. Yes.

A. Probably not.

Sturdivant Dep., 712:17-22, 717:8-23; *see also id.* 646:20-647:4, 649:2-22; 651:17-652:9.

3. Mr. Saremi (Associate Water Resources Control Engineer)

Likewise, Mr. Saremi concedes there is no evidence that Goodrich is responsible for any of the groundwater contamination of the Rialto-Colton basin, including beneath the 160-acre parcel or downgradient:

- Groundwater monitoring wells at the 160-acre parcel

Q. Okay. Some of them have very small concentrations of perchlorate. Some of them have a -- slightly elevated concentrations of perchlorate.

Some have some TCE in them. [¶] Varies, depending upon when you take the sample and which well you look at; right?

A. That's correct. Based on the record on the water quality data thus far, yeah, there's variations.

Q. There's variations. [¶] And based upon the number of years that these properties have been used by all of these different users and based upon the record that you have in your own file –

A. Yes.

Q. -- you can't say whose perchlorate or trichloroethylene is in any particular well at any particular time, can you, sir?

A. I don't think we can link -- Yeah, that -- that's correct.

Q. You can't do that; right?

A. Yeah, because perchlorate and TCE, they were basically common salt and common solvent.

Saremi Dep., 447:6-448:2.

Q. So my question, again, is, CMW-1, which is immediately downgradient of the McLaughlin pit, that's the only well that shows perchlorate from the subsurface to the groundwater; correct?

A. Based on the -- yeah, the existing borings, yeah.

Q. Okay. So let's put CMW-1 aside. [¶] You believe that contamination in CMW-1 comes from the McLaughlin pit?

A. I -- I believe has to do with discharges from the pit and lateral movement of the perchlorate, both vertical and lateral, from that area.

Q. Okay. But I previously asked you about CMW-2, -3, -4 and -5, and you previously testified in your deposition that with respect to those wells, you can't tell us what the source is because of the various other operations that occurred out there during the time. You remember?

A. Well, you know, I don't re- -- but I could make this statement today.

Q. Well, let's stick with my question.

A. Yeah.

Q. Okay. You previously testified in your deposition --

A. Yes.

Q. -- under oath –

A. Yes.

Q. -- when I asked you, that you could not tell me what the sources were -- in other words, what operations were the -- were responsible for contaminations in CMW-2, -3, -4 and -5. In fact, you told me that with respect to all of the wells on the site; right, sir?

A. With the groundwater, yeah, because there's overlap of historical use.

* * *

Q. Have you changed your testimony?

A. No, I -- I made some changes and Ms. Novak took a -- took that information down, you know, I –

Q. So you consulted with your counsel and you made some changes to the deposition?

A. It's on the errata sheet, yeah.

Q. Did you change your testimony about that you could not provide testimony about the sources – the operations with respect to the wells?

A. No, I haven't.

Id., 952:11-955:4.

- Groundwater monitoring wells downgradient from the 160-acre parcel

Q. These wells that are down here that I've mentioned, PW-9, PW-7, PW-6, PW-5, PW-8, these wells that are in this basin, you don't know where the perchlorate that's being seen in those wells originated from, do you, sir?

A. I'll make a correction. We do know it's from the 160-acre site.

Q. You don't know what industrial operation is responsible for the contamination in those wells; is that true, sir?

A. Not specifically.

Q. I mean, in other words, you can't tell me whether or not the perchlorate in PW-5 belongs to West Coast Loading or Pyro Spectaculars or Goodrich or Pyrotronics, can you?

A. With respect to perchlorate, no.

* * *

Q. Okay. Well, let me ask you something: Here you see all of these users of the properties in the area in this basin?

A. Yes.

Q. I asked you questions about whether they used perchlorate; right?

A. Yeah, I believe you –

Q. And trichloroethylene; right?

A. Yes.

Q. You don't know whether or not their perchlorate or trichloroethylene, to the extent they had any, is in any of these wells, do you?

A. I -- I don't.

Id., 455:22-456:12, 456:17-457:4.

Q. You cannot tell us which specific operation is responsible for perchlorate in any of these specific wells, can you, sir, throughout the basin? You can't tell us?

A. Yeah, based on available records, probably not.

Id., 457:16-20.

Q. You can't tell me whether or not, for example, in PW-5, the perchlorate is coming from the McLaughlin pit, can you?

A. That, I cannot.

Q. Okay. I mean, all of the perchlorate in there, you can't tell me whether it's all coming from the McLaughlin pit, can you?

A. All I can say, it's coming from the 160-acre site.

Q. You can't tell me whether or not all the perchlorate that belongs in PW-5, that's been seen there, is as a result of Apollo's operation of that pit, can you, sir?

A. That's correct.

Q. Same thing is true of PW-6, PW-7, PW-9; right, sir?

A. That is correct.

Id., 458:12-459:3.

When Mr. Saremi was specifically confronted with the fact that he is a designated witness expected to testify that Goodrich is responsible for groundwater contamination, he conceded he cannot offer that opinion:

Q. Okay. Now, coming back to your April 6th submission, we've gone through some of the subjects on here. I want to ask you about a few others. [¶] Taking a look again at page 3, we were going down this list, at the bottom here it says, the last two, "Discharges of perchlorate and TCE at the Property have impacted groundwater at the Property." You see that?

A. Yes, sir.

Q. And then the next one says, "Discharges of perchlorate and TCE at the Property have migrated from the Property"; right?

A. Yes, sir.

Q. Okay. This does not say who the discharges are from. It just says that discharges occurred; right?

Mr. Tavetian: Document speaks for itself.

Q. Right, sir?

A. From the property.

Q. From the property. [¶] And you've previously testified, and you're not changing your testimony today, that you can't address, other than McLaughlin pit, the specific source, you can just say that discharges have occurred; correct, sir?

A. More or less.

Q. Okay. That's what you said in your deposition previously; right?

A. That -- That's what I've said, yeah.

Saremi Dep., 998:15-999:16

Q. Are you aware of any evidence that shows that perchlorate in the Goodrich burn pit next to the static test firing area, the one the witnesses testified to, goes 400 feet all the way to groundwater?

A. I don't have that information.

Id., 1208:15-19.

Q. Can you tell me how you're going to explain to the hearing officer, based on what you've told me and based upon what you've seen in the documents that I've shown you, including the declarations and depositions, how perchlorate or trichloroethylene from Goodrich's operations migrated 400 feet all the way to the groundwater?

Mr. Tavetian: Calls for speculation.

A: I -- I don't have a concrete statement to make right here.

Id., 1216:4-13; *see also id.* 653:18-655:1, 655:25-656:24.

Mr. Saremi's inability to offer such an opinion is understandable because he is not an expert in hydrogeology, geology, vadose zone transport modeling, or groundwater modeling. *Id.*, 850:17-852:17. As one would therefore expect, he has not calculated and offers no opinion concerning the rate of TCE or perchlorate transport through the 400-foot-thick vadose zone

and into groundwater, including the rate due to natural infiltration from rainwater or the effect of covering the burn pit with a concrete slab and a building in approximately 1987. *Id.*, 855:20-856:16, 963:5-964:2, 970:5-12, 971:2-19, 972:14-18, 973:1-974:2, 975:12-16, 1073:13-1074:5, 1203:24-1204:15. Without such expertise and information, as demonstrated by the testimony above, neither Mr. Saremi (nor any other Advocacy Team member) is capable of attributing groundwater contamination to Goodrich's operations.

B. The Advocacy Team Concedes There is No Evidence of Free Water at Goodrich's Operations, Which is Necessary for Perchlorate to Reach or Threaten the Groundwater

The Advocacy Team's inability to prove that Goodrich is responsible for any groundwater contamination is closely tied to its admission that there is no evidence that there was free water in the Goodrich burn pit, which would have been necessary to push any perchlorate through the vadose zone and into groundwater (as occurred at the McLaughlin Pit and the County landfill / Robertson's Read-Mix operations).[9] This is a critical fact because the Advocacy Team also concedes that the migration rate through the

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[9] The Advocacy Team contends that Goodrich also disposed of perchlorate in the D-1 area of the 160-acre parcel. Every witness with knowledge testified there was only one burn pit (*see* Section II, *supra*), but in any case, the Advocacy Team concedes there is no evidence that there was free water in the D-1 area, and it therefore it could not be a source of groundwater contamination.

> Q. Are you aware of any evidence that free water collected in Area D-1? Are you aware of any concrete evidence that you can point to, sir?
>
> A. No.
>
> * * *
>
> Q. My question now is, at D-1, in the absence of free water on top of it, okay, if there was no free water running into that area, you would agree with me that perchlorate could not migrate 400 feet to groundwater; correct?
>
> A. Yeah, it's good -- good observation.
>
> Q. What I said is correct; right?
>
> A. You could say that.

Saremi Dep., 1170:22-25, 1171:10-17; *see also* Sturdivant Dep., 1271:15-17 ("Q. Are you aware of any free water that was placed on top of Area D1 at any time? A. No.)

vadose zone due to rainfall is "very slow to zero." Together, these facts unavoidably lead to the conclusion that Goodrich's perchlorate could not have reached groundwater and does not threaten the groundwater.

- Mr. Saremi:

Q. Do you have any concrete evidence – a photograph, testimony or documents -- that show that free water was allowed to enter into the Goodrich burn pit ever?

A. No.

Saremi Dep., 1206:21-25.

Q. All right. Let's take a look at paragraph 5. This is Mr. Lass' sworn statement under oath; right?

A. Yes, I see it.

Q. Okay. It says -- That is, what it says, "In addition to groundwater and contaminant transport modeling, GeoLogic Associates has performed a limited evaluation of the chemical transport through the vadose zone at the RCB," and that's the Rialto-Colton Basin.

A. Yes.

Q. You see that?

A. Yes, sir.

Q. "The vadose zone analysis conducted by GeoLogic Associates shows that the transport of perchlorate in the vadose zone (i.e. from, at or near the ground surface through the unsaturated zone to groundwater - roughly 400 feet deep) is dependent on the amount of free water available to transport the chemical through the unsaturated zone to the groundwater in the Rialto-Colton Basin." You see that?

A. Yes, sir.

Q. Do you agree with that?

A. Yes, sir.

Q. Then he says, "In the Rialto-Colton Basin, the transport rate of perchlorate in the vadose zone is very slow to zero in areas where regional rainfall is the only source of water infiltration." Do you see that?

A. Yes, I do.

Q. Do you agree with that?

A. In general, yeah.

Id., 1077:2-1078:6.

Q. We're in paragraph 5, okay. He says here in the Rialto-Colton Basin, the transport of perchlorate in the vadose zone is very slow to zero if you just base it on rainfall. You see that?

A. Yeah, I see that.

Q. You told me you generally agree with that statement; right?

A. I do.

Id., 1079:7-14.

Q. Okay. If you just have rainfall pouring on that material, it's either not going to move very much at all or it's going to take a very, very long time to get to groundwater, yes?

A. Yes -- In Rialto-Colton Basin?

Q. Yes, sir.

A. Yeah, that's a good estimation.

Id., 1080:6-12.

- Ms. Sturdivant:

Q. I'm talking about the burn pit. [¶] Was there any evidence that there was water poured into the burn pit at Goodrich?

A. I don't think so, no.

Sturdivant Dep., 1272:4-7.

Q. Paragraph 5 reads as follows: "In addition to groundwater and contaminant transport modeling, GeoLogic Associates" -- That's Mr. Lass' firm; right?

A. Yes.

Q. -- "has also performed a limited evaluation of the chemical transport through the vadose zone in the RCB," which is previously defined as the Rialto-Colton basin; right?

A. Yes.

Q. "The vadose analysis conducted by GeoLogic Associates shows that the transport of perchlorate in the vadose zone (i.e. from, at or near the ground surface through the unsaturated zone to groundwater) is dependent on the amount of free water available to transport the chemical through the unsaturated zone to the groundwater in the Rialto-Colton basin." [¶] See that?

A. Yes.

Q. "In the Rialto-Colton basin, the transport rate of perchlorate in the vadose zone is very slow to zero in areas where regional rainfall is the only source of water infiltration. Water (and associated perchlorate) travels through the vadose zone more quickly where there is a high volume or long period of application of water at the surface." [¶] You see that?

A. Yes.

Q. Do you have any reason to dispute that conclusion?

A. Only to qualify that if there's variations in the topography, low spots would accumulate more rain, and so he doesn't mention that here.

Id., 1228:16-1229:22.

Q. Have you done any analysis of the topography of North Rialto, California?

A. Any analysis?

Q Yeah.

A. Numerical analysis, no.

Q. Any kind of -- You haven't done any analysis?

A. No.

Q. Putting your topography comment aside, you otherwise agree with Mr. Lass' comments concerning contaminant movement in paragraph 5; is that correct?

A. I believe so, yes.

Id., 1236:3-13.

Q. Now, here's what I don't understand: You earlier testified that you agreed with Mr. Lass' conclusion that vadose zone transport in the North Rialto area of chemicals would be very slow to zero in the absence of free water. In other words, if it was just natural infiltration; right?

A. Yes, I think that's correct.

Id., 1281:16-22.

- Mr. Berchtold:

Q. Let me ask you something, Mr. Berchtold. [¶] Groundwater at the 160-acre parcel is 400 feet deep; right?

A. Correct.

Q. And you would agree with me that a significant issue in connection with these proceedings is whether or not there is sufficient free water on the ground surface to push perchlorate all the way down to the groundwater, wouldn't you?

A. I agree that that's an issue.

Berchtold Dep., 385:3-12.

Q. Have you or, to your knowledge, anyone at the Regional Board done any analysis to determine how much free water is necessary over periods of time in order to drive perchlorate 400 feet into the groundwater from the surface?

A. I have not done such an evaluation. I don't know whether anybody else has.

Q. Has Ann Sturdivant done such an evaluation?

A. I don't know.

Q. To your knowledge, has she done such an evaluation?

A. Not to my knowledge.

Q. How about with respect to trichloroethylene? Same question. How much free water is necessary in order to drive trichloroethylene 400 feet into the groundwater over time?

A. I don't know.

Id., 557:4-20.

Q. Take a look at Paragraph 5 [of Mr. Lass's declaration] for a moment. It says, "In addition to groundwater and contaminant transport modeling, GeoLogic Associates has also performed a limited evaluation of the chemical transport through the vadose zone in the RCB," which is the Rialto-Colton basin. [¶] Do you see that?

A. Yes.

Q. "The vadose" zone "analysis conducted by GeoLogic Associates shows that the transport of perchlorate in the vadose zone (i.e. from, at or near the ground surface through the unsaturated zone to the groundwater - roughly 400 feet deep) is dependent on the amount of free water available to transport the chemical through the unsaturated zone to the groundwater in the Rialto-Colton basin." [¶] You see that?

A. Yes.

Q. "In the Rialto-Colton basin, the transport rate of perchlorate in the vadose zone is very slow to zero in areas where regional water is the only source of water infiltration." [¶] You see that?

A. Yes.

Q. Do you agree with that statement?

A. Well, it's a fairly general statement, and I don't have any basis to disagree with it.

Id., 555:3-556:4.

These repeated admissions by the testifying professionals from the Regional Board that there is no evidence that Goodrich contaminated the groundwater cannot be ignored. The Regional Board staff have investigated the sources of perchlorate contamination in the Rialto-Colton Basin for over a decade, with focused attention on Goodrich during many of these years. Multiple parties, including Goodrich, Emhart, and Pyro Spectaculars, have undertaken investigations, always under the Regional Board or U.S. EPA's direction. Despite all those resources, time and effort, the Regional Board witnesses testified they still have no evidence that any perchlorate from Goodrich's operations reached or threatens the groundwater. Since the first CAO in June 2002, which was rescinded due to lack of adequate evidence, the case against Goodrich has only become weaker, especially in light of the other, far more credible sources that have now been identified. *See* Section V, *infra*.

In summary, the Regional Board has not proven its case for a CAO against Goodrich; and as discussed below, neither have the Rialto Lawyers.

C. The Opinion of Dr. Daniel B. Stephens, the Rialto Lawyers' Expert, Lacks Foundation and is Contrary to All the Available Evidence

The only testimony purporting to link Goodrich's operations and any deep soil or groundwater contamination is from the Rialto Lawyers' designated expert, Dr. Daniel B. Stephens. However, Dr. Stephens does not opine that Goodrich's operations are more likely than not responsible for any contamination measured at CMW-01, CMW-03, CMW-04, CMW-05, or any other downgradient monitoring well, because there are other explanations for this contamination. *Id.*, 435:6-436:7, 436:22-437:9, 437:25-440:2, 474:11-16. The only monitoring well that Dr. Stephens opines was more likely than not impacted by Goodrich's operations is CMW-02. Stephens Dec. p. 17, Stephens Dep., 448:16-20, 455:15-456:21, 457:6-459:3. Even so, he admits he cannot link the perchlorate detected in soil at CMW-02

to Goodrich's burn pit, *id.*, 454:17-455:3, 462:20-463:9, and concedes that it could have come from the McLaughlin Pit or some other source. *Id.*

Dr. Stephens also concedes there is no evidence that there was free water in the Goodrich burn pit. Stephens Dep., 381:14-16 ("Q: Are you aware of any evidence that free water was introduced into the burn pit during any time? A. Not directly."), 382:19-383:2 ("Q. Do you have any evidence that the Goodrich burn pit was a drainage source? ... In other words, that water drained into it? A. I have no direct evidence of that.) Thus, his opinion that the former Goodrich burn pit is the source of contamination in CMW-02 requires the assumption that any contamination in the pit moved through the entire 400-foot-thick vadose zone in less than 30 years (i.e. between the time the pit was first built in 1958 and the time it was graded and covered with concrete in 1987) transported only by natural rainfall.[10]

Dr. Stephens' initial estimate of 1.25 feet per year downward migration in the vadose zone under the property – the estimate the Rialto Lawyers submitted to the Hearing Officer as part of their initial submission – is simply insufficient to get perchlorate from the former Goodrich burn pit to the groundwater. In fact, using that estimate, the Rialto Lawyers cannot get Goodrich's alleged perchlorate even 40 feet below ground surface -- more than 350 feet above the groundwater -- a point Dr. Stephens concedes in his deposition testimony:

> Q. Let me ask you this, in the absence of free water in areas around the 160-acre parcel where there would have been perchlorate discharged to just the ground surface or immediately to the ground surface, like within a foot or two, the way I looked at your calculations, in the absence of free water, it would take -- it would take, you know, somewhere around 300 years for the perchlorate to migrate to the groundwater, assuming the groundwater is in and around 400 feet. Do you agree with that?
>
> A. It's hundreds of years.

---

[10] Dr. Stephens suggests in his written statement that rainfall runoff into the former Goodrich burn pit could have accelerated perchlorate migration through the vadose zone. Stephens Dec. at 17. But in his deposition, as noted above, Dr. Stephens admitted he had no evidence that the burn pit was a collection point for rain water runoff, which is consistent with the evidence that the former Goodrich burn pit was surrounded by a berm. Wever Rebuttal Dec. ¶¶ 3-4; Bennett Rebuttal Dec. ¶ 2.

Q. Hundreds of years?

A. Based on the 1.25 rate.

Q. Right. Based on the opinion you gave in the declaration of the report, right?

A. Yes.

Id., 414:16-415:6.

Q. Okay. Let's be clear. The 1.25 feet per year is how fast it would get from the top of the soil column down to groundwater; that's the estimate?

A. That's correct.

Q. Okay. And we talked earlier about it being hundreds of years, right?

A. It could be depending on the rate.

Q. And, if it's 400 feet and you use this estimate, you're talking about 320 years, right?

A. Approximately, yes.

Id., 766:20-767:4.

Q. Let's assume your 1.25 is right the first time. How long would it take without free water at the Goodrich burn pit for perchlorate that was burned there to make it to the groundwater?

Mr. Sommer: Objection, asked and answered.

A: Well, it would be a few hundred years.

Q. Okay. And you would agree, since it was capped in 1987, that it never would have gotten there, correct?

A. I didn't say that.

Q. Today it would have never gotten there if your infiltration rate was correct?

A. No. It will never or did you say would never? I'm not sure where the never came in.

Q. It would not be there today.

A. Oh, today. It hasn't -- probably hadn't reached there today under those assumptions, if they were true.

Q. Okay. Yeah, because we've only had about even, you know, at broadest stand about 30 years. You multiply that out, it would be about 50 feet, right?

A. Approximately.

Id., 461:15-462:14.

Q. If you just take the perchlorate and it was introduced in 1958 and I take your 1.25 foot, the first estimate you gave, and I assume there's no free water, based on the number of years it was uncapped, the perchlorate that was introduced at or around the Goodrich burn pit would have made its way about 50 feet down the soil column, correct?

A. Under the assumption that the rate of migration was 1.25 feet per year would be approximately correct.

Q. And that was the number that you put into the report that you signed on April 12, right, 1.25 feet, correct?

A. Yes, it was.

Id., 465:21-466:9 (emphasis added).

Faced with this case-crippling problem (and the Advocacy Team's witness testimony), the Rialto Lawyers responded by having Dr. Stephens dramatically change his infiltration estimate. On the second day of his deposition, Dr. Stephens announced that he was increasing his estimate by an order of magnitude. This new, unsupportable and fantastically fast downward migration rate was obviously prompted by the Rialto Lawyers:

Q. You in your declaration did an estimate of transport rate through the vadose zone which is natural rainfall, didn't you?

A. Yes, I did.

Q. And you came up with what, one and a quarter foot a year?

A. I believe so, yes.

Q. Okay. And in some years it would be less if it was really no rain at all, right?

A. Yes.

Q. And in some years it might be greater you pointed out if there was a wet year, right?

A. Yes.

Q. But on average over the years, if you look at historical rainfall, it would be about one foot and a quarter per year?

Mr. Sommer: Objection, compound.

Q. Correct?

A. In -- in a general way, for a site like this which has native vegetation, minor disturbance, that would be a reasonable number. But I believe the local recharge within the 160 acres could be much greater than the 1.25 feet per year.

Q. Well, it would require free water on top of it, wouldn't it?

A. No, not necessarily. It can also just be a result of the rainfall to be much greater than what I've estimated here.

Q. Well, I'm just going to ask you, do you stand by your calculation here of 1.25 feet for North Rialto?

A. I think it's greater than that.

Q. So you wrote 1.25 feet in your declaration, now you're changing your opinion?

A. Yes.

Q. What are you changing it to?

A. I believe that's not an unreasonable number, but I believe it's maybe a lower end in areas that have some vegetation, but it could be much greater.

* * *

Q. How many feet per year, what's your number now, sir, what's the new number?

A. It could be on the order of ten times more.

Q. So now you're saying it could be ten feet or actually it's more than that, it's ten times would be --

Mr. Sommer: 12.5.

Q. See, he's good at math, better than me. 12.5 feet a year; is that right?

A. It could be, yes.

Id. 391:9-392:23, 395:1-11 (emphasis added).

Unsurprisingly, using Dr. Stephens' new assumption of 12.5 feet per year, the amount of time required for rainfall to move through the vadose zone and reach groundwater is reduced to 32 years.

Q. All right. How long would it take in terms of years, what year would a discharge to the ground at the burn pit reach the groundwater using your 12.5 calculation?

Mr. Sommer: Objection, incomplete hypothetical, lacks foundation, calls for speculation.

A: Oh, maybe 30 years or so, 400 feet, 12 feet a year.

Q. So what are you saying, about what, 1988, 1989?

A. It could be.

Id., 451:10-17; *see also id.*, 415:7-10 (it would take "[p]robably on the order of decades").

The Rialto Lawyers absolutely need this new infiltration rate to support any conclusion that Goodrich's alleged perchlorate discharges reached or is threatening the groundwater. Goodrich began operating its burn pit in 1958, the entire area was capped in 1987, and a building was built on top of the former burn pit area, *see* Bennett Dec. ¶ 16, which Dr. Stephens concedes would reduce the infiltration rate to close to zero. *Id.*, 416:20-418:22. Using Dr. Stephens' changed opinion, and applying it to the entire vadose zone and for every relevant year (neither of which make any scientific sense to do), Goodrich's perchlorate would be approximately 363 feet below the ground surface (29 years x 12.5 ft / yr = 362.5 ft). The groundwater elevation in the well closest to the former Goodrich burn pit, CMW-02, on the other hand, was measured at 430 feet below ground surface when that well was installed in May of 2006. Ex. 30053. And Dr. Stephens identifies 2006 as one of the "wetter years" during which groundwater levels are particularly high. Stephens Dec. at 13; *id.* at Ex. 5. He notes that groundwater levels would be much lower – in fact, up to 115 feet lower – during drought years like 1999 through 2004. Stephens Dec. at 17. In other words, even using Dr. Stephens' new opinion of 12.5 feet per year, and applying it every year through the entire vadose zone under the former Goodrich burn pit, and looking at a "wet" year when groundwater elevation is highest, the Rialto Lawyers still are **70 feet short** of getting any residual perchlorate from the former Goodrich burn pit into the groundwater under the 160-acre parcel.

Dr. Stephens' new opinion, even though it does not get any perchlorate from the former Goodrich burn pit to groundwater, should be nonetheless rejected for several reasons. As a procedural matter, it violates the deadline for the Rialto Lawyers to submit evidence, as set forth in the Notices of Public Hearing. Goodrich first learned of this new

opinion more than a month after Rialto's April 12, 2007 deadline. Dr. Stephens testified that he "realized" the need to change his opinion "around the 17th or 18th of April[.]" Stephens Dep., 414:1-12. Since then, the Rialto Lawyers never sought, let alone obtained leave to change the opinions of Dr. Stephens submitted to the Hearing Officer. By itself, that should disqualify this new opinion. *See* Goodrich Corporation's Motion in Limine to Exclude the Stephens' 'Declaration" and any Revised or Oral Testimony by Dr. Stephens (MIL No. 2). The Rialto Lawyers' misconduct is magnified by the fact that they provided no notice to the parties and waited for Goodrich to uncover this critical change during the second day of Dr. Stephens' deposition. (For further discussion of this issue, *see* Pyro Spectaculars and Goodrich's May 31, 2007 Request for an Immediate Ruling, and the Emhart Parties' June 1, 2007 Request for Immediate Ruling.).

In addition to this procedural defect, it is crystal clear from the material produced in Dr. Stephens' files that he and the Rialto Lawyers ignored actual facts and engaged in a brazen, results-driven effort to find some way to hold Goodrich, and the other Alleged Dischargers, responsible. In the process, Dr. Stephens abandoned any semblance of scientific independence, ignored voluminous contrary evidence (including contrary site-specific calculations performed by his own staff), and biased his presentation of data at the direction of the Rialto Lawyers. His "opinions" deserve absolutely no weight in these proceedings.

Even if his opinions were not procedurally barred or demonstrably biased, Dr. Stephens' opinions suffer from an equally fundamental flaw – his opinions have absolutely no scientific basis, and therefore are inadmissible. Cal. Evid. Code § 801.. There is no scientific evidence to support his opinion that the migration rate in the vadose zone was as high as 1.25 feet per year, much less 12.5 feet per year. And there is no scientific basis to support applying either rate for every year from 1958 to 1987 and through the entire 400-foot-thick vadose zone. Dr. Stephens' opinions are contrary to all of the site-specific evidence, the scientific literature, and contrary to the conclusions of every other scientist who has examined this issue, including Dr. Kresic, Dr. Kavanaugh, Dr. Chu

(Emhart's designated expert), and even Dr. Stephens and his staff.

The only testimony purporting to link Goodrich's operations and any deep soil or groundwater contamination is from the Rialto Lawyers' designated expert, Dr. Daniel B. Stephens. However, Dr. Stephens does not opine that Goodrich's operations are more likely than not responsible for any contamination measured at CMW-01, CMW-03, CMW-04, CMW-05, or any other down gradient monitoring well, because there are other explanations for this contamination. *Id.*, 435:6-436:7, 436:22-437:9, 437:25-440:2, 474:11-16. The only monitoring well that Dr. Stephens opines was more likely than not impacted by Goodrich's operations is CMW-02. Stephens Dec. p. 17, Stephens Dep., 448:1-20, 455:15-456:21, 457:6-459:3. Even so, he admits he cannot link the perchlorate detected in soil at CMW-02 to Goodrich's burn pit and concedes that it could have come from the McLaughlin Pit or some other source. *Id.* at 444:14-445:8, 454:17-455:3, 462:20-463:9.

1. Dr. Stephens is Not Acting as an Independent and Objective Expert

Dr. Stephens' opinion that perchlorate from Goodrich's operations reached the groundwater was delivered because the Rialto Lawyers desperately need it for their case against Goodrich, not because science justified it. The truth is revealed in the thousands of pages of e-mail between Dr. Stephens' offices and the Rialto Lawyers, and Jenny Sterling's handwritten notes of telephone calls with the Rialto Lawyers. Dr. Stephens' litigation-driven opinions deserve no weight in these proceedings.

a. The Rialto Lawyers' litigation need is the only credible explanation for Dr. Stephens' new migration rate opinion

When Dr. Stephens was asked what led to his epiphany that the true infiltration rate was actually 10 times higher than his previous calculation, which had already been checked and approved by at least two members of his staff, *see* Exs. 30019 &30023, he was unable to offer any credible explanation. Initially, Dr. Stephens' explanation for his new opinion was that he realized he had not fully considered the amount of vegetation at the 160-acre site.

> Q. When did you come to this enlightenment that you had that 1.25 feet was this gross underestimation and now you were at 12.5 feet?

MR. SOMMER: Objection, argumentative.

A. Well, I think we've indicated in the report that vegetation can have a significant effect on -- or the absence of vegetation can have a significant effect on recharge. But what really – ***to tell you the truth***, what really struck me was I taught a short course a couple weeks ago for the National Groundwater Association on vadose zone hydrology. And I was talking about some of the recharge work that I had done and was familiar with. And one of the examples that I had given was a study in Washington state where in gravelly soils, unvegetated soils, the recharge rate was quantified to be on the order of 50 to maybe 70 percent of the precipitation.
And then, having gone back to the office and begun further work on this matter, looking at the air photos, sort of a light went on. And I drew the comparison between that study and -- or those studies and the Rialto site and realized that perhaps my estimate of 5 percent was too low.

Stephens Dep., 396:18-397:15 (emphasis added).

But the fact is that Dr. Stephens had considered the amount of vegetation originally and specifically wrote about this issue in his earlier April 12 statement.

Q. What, sir, was new information that you didn't have before April 12, 2007, that has formed the basis for changing your opinion? I mean it's not the vegetation, right? You've been looking at the vegetation in photographs for sometime now, right?

A. I have looked at the photographs on more than one occasion.

Id., 398:10-16;

Q. Now, you said earlier that one of the things that was driving your decision to change your opinion was the fact that you thought you had not sufficiently considered the absence of vegetation in certain areas. Do you remember that?

A. Yes.

Q. All right. I want you to take a look at your report, page 14. ... [I]n the discussion there, there's the following sentence, "The coarse soils and ***sparse native vegetation*** facilitate deep percolation of contaminants." Do you see that?

A. Yes.

Q. So, when you gave your 1.25 feet per year on average opinion previously in your declaration or report, whatever you want to call this, you considered the fact that there was sparse vegetation in the area, correct?

A. ***Generally I had considered that.*** And I think I mentioned that before lunch too.

Id., 409:4-410:7 (emphasis added).

Undeterred by the failure of his first explanation, Dr. Stephens next claimed there was "some new information" that led to his new opinion.

> Q. Okay. So -- and I take it that you had access to groundwater data that has been collected from the various wells on the property and then downgradient from the facility, correct?
>
> A. Let me back up. I'm trying to recall. **There might have been some new information that came to my attention after April 12 that was all part of this realization.** And I have to be candid. I don't recall the exact day. But we were involved in reviewing a cover design to put over a spoil pile west of the Robertson's Ready Mix area. [¶] And there was some modeling, vadose zone modeling that was done by GeoLogic Associates for that cover. And part of that related to evaluating net infiltration through a soil cap that was unvegetated. ...

Id., 400:8-22, (emphasis added). Dr. Stephens further explained that he did not receive this material until "probably maybe the third week of April approximately, middle of April." *Id.* 404:15-405:13.

In fact, Dr. Stephens' staff received this report and internally circulated it on April 3, 2007. *See* Ex. 30041. And, the cover page of the report is actually in Dr. Stephen's file of materials reviewed in developing his 1.25 feet per year calculation. *See* Ex. 30023. So, Dr. Stephens' testimony that this report was "no information" that he had not considered in forming his original 1.25 feet per year opinion is simply untrue.

Moreover, the report contradicts Dr. Stephens' new migration rate opinion. This report evaluated the "expected performance of the one-foot-thick low-permeability cover planned for the former Broco facility adjacent to the County of San Bernardino's Mid-Valley Sanitary Landfill[.]" *Id.* at Exec. Summary. It includes calculations of the net infiltration and migration rates through the cover and the soil beneath it. Even using a model designed to over-predict infiltration, soil parameters chosen to "suck" water down, and an amount of precipitation far in excess of what is seen at the 160 acre parcel (Kresic Rebuttal Dec. ¶ 36-40), the migration rate is only about 3 feet per year:

> As shown in Appendix B, **the moisture migration within the unsaturated zone beneath the cap is calculated to be relatively slow (3 feet per year), and approximately 17 years are required for the moisture front to move 50 feet.** This calculation is conservative in that it assumes a steady-state moisture contribution to stockpile soils has already occurred, and it ignores the adsorption that likely occurs in the relatively dry stockpile soils.

Id. at p. 8 (emphasis added); *see also* Kavanaugh Reb. Dec. ¶ 24.

Having failed in his second attempt to explain the change in his opinion, Dr. Stephens pointed to the declarations of Dr. Kresic and Dr. Chu as the reason for his new opinion.

> Q. Did you want to finish your response? Go ahead.
>
> A. Yes, I believe the -- we had been looking at this -- the declarations of Chu and Kresic initially. And they were talking about markedly different recharge rates and began to explore why there were such big differences in how they were approaching the recharge and the hydraulic properties and some of the other assumptions that related to vegetation and so on. And so those were things we considered that were part of the drive to change my opinion.

Stephens Dep., 403:18-404:4.

> Q. So you're saying that you reviewed the declarations. And it was upon reviewing the declarations and the differences between Dr. Chu and Dr. Kresic's recharge rates that you changed your view?
>
> A. That triggered things, yes.

Id. 421:17-22.

In fact, Dr. Kresic and Dr. Chu opine that the migration rate through the vadose zone at the 160-acre parcel is significantly <u>less than</u> Dr. Stephens' original calculation, which could not possibly support increasing his calculation by a factor of 10. Once confronted with the illogic of his third attempt to explain what prompted him to change his opinion, Dr. Stephens gave up on trying to provide an explanation:

> Q. So here's what I don't understand, Doctor. If you read these declarations and Chu says his are small and Kresic says his are a little bit larger than Chu's, but they're still you believe small, why does it then trigger you who clearly have an opinion with a higher recharge rate to decide that you have to tenfold your infiltration rate? I don't understand.
>
> MR. SOMMER: Objection, argumentative and compound.
>
> A. I think at that time we started to look closely at the assumptions, why were these numbers so different, and reading about how they described the site, they described the properties of the soils. And we began to just dig in a lot more on the assumptions that went into their models.
>
> Q. Well, why did that change yours? I mean you knew the site, you were very familiar with it, weren't you, sir?

A. I had not yet been on the site of the 160 acres.

Q. You still haven't?

A. I haven't -- I've been around it on the outside. I've been on the landfill area. But I have not been on the –

Q. But you've got many reports here that describe the site, right, the site conditions?

A. I have some reports that describe site conditions.

Q. You've got boxes of photographs over the years showing the site conditions, correct?

A. Yes, there are photographs of the site.

Q. Showing where the vegetation is, showing where the buildings are, showing the improvements on the site all the way back to the time that the RASP was there, right?

A. We have their photographs.

Q. And you've, you know, got dozens of reports that show information concerning borings that have been done on the site, right, so you're familiar with the lithology?

A. Yes, we know the geology in general.

Q. So, if you've been working on this project for four years with your project team and you were familiar with the site and you were familiar with the lithology and you were familiar with the vegetation and you were familiar with the improvements that have gone on the site and you were familiar with the rainfall data that had been collected in the immediate area, why is it that what Dr. Chu and Dr. Kresic produced to you which includes estimates of infiltration that are less than yours, why would that cause you to rethink your opinion such that you come up with a net infiltration rate which is now ten times greater than what you wrote on April 12?

MR. SOMMER: Objection, compound, argumentative, lacks foundation.

Q. Go ahead.

A. ***That's basically just what happened is all I can tell you***; is that, in reading those, I came to realize that, without the vegetation present, the recharge rate probably is greater than what I had initially estimated and likewise greater than perhaps what both of those two experts indicated.

Id., 422:20-425:9 (emphasis added).

Dr. Stephens left out the one explanation, which makes far more sense than "that's ... just what happened." That is, the Rialto Lawyers needed a migration number that

arguably placed Goodrich's alleged perchlorate in the groundwater, and Dr. Stephens did as he was instructed. Jenny Sterling's handwritten notes reveal that the issue was on the Rialto Lawyers' minds for good reason. Ex. 30006 (DBS000151-159). Dr. Stephens' change in opinion was obviously meant to try to fix this "CHALLENGE" and "WEAKNESS" identified by the Rialto Lawyers in their case. *Id.* (DBS000158).

b. Dr. Stephens engaged in a biased review and presentation of the evidence

Dr. Stephens' deposition and documents reveal a number of examples where he spun the evidence in an effort to hold Goodrich liable, or increase the projected costs of cleanup, including instances specifically at the instruction of the Rialto Lawyers. His actions are far from what is expected from an objective and independent scientist.

- **Dr. Stephens followed the Rialto Lawyers' direction to try to "scare people" into believing more investigation is needed**

One of the most disturbing examples relates to Dr. Stephens' opinion that more investigation of the perchlorate plume is necessary, which is more fully discussed in Section IV.A.2, *infra*. Dr. Stephens believed at one point that the perchlorate plume was fairly characterized. Based on that work, Rialto posted on its website a perchlorate plume map with contours at locations with less than 6 parts per billion of perchlorate in the groundwater. Of course, that is contrary to Rialto's litigation position that Goodrich should be ordered to spend millions of dollars in additional investigation costs because if the boundaries of the plume were known, then no more investigation would be required.

To avoid that inconsistency, on September 28, 2006, Mr. Robert Owen, the City Attorney for Rialto, directed that the plume map be manipulated by "put[ting] question marks on the map" to "make the point that more characterization needs to be done, and it might actually (and appropriately) scare people into realizing this fact." Ex. 30010 (DBS000390) (emphasis added). Dutifully, Dr. Stephens and his staff followed the Rialto Lawyers' orders, altered the plume map, and thereby distorted the data to try to "scare" people into supporting more investigation.

- **Dr. Stephens followed the Rialto Lawyers' direction to mischaracterize the 160-acre site as the "Goodrich/Black & Decker Site"**

Dr. Stephens also followed the Rialto Lawyers' instruction that he refer to the 160-acre parcel as the "Goodrich/Black & Decker site." This was the "1st change" made by the Rialto Lawyers upon reviewing a draft of Dr. Stephens' written statement. *See* Ex. 30006 (DBS000214). Again, Dr. Stephens followed orders and adopted this lawyer-language, without investigating its appropriateness and even though he knew of no evidence that Black & Decker was ever at the site.

When confronted with these facts, Dr. Stephens offered the ridiculous explanation that this change was done to avoid hypothetical confusion with "another" 160-acre site.

> Q. Do you find any information in your Roadmap to Remedy, Dr. Stephens, that indicates that Black & Decker or Black & Decker Corporation, Black & Decker, Inc., Black & Decker U.S. was ever on the 160-acre parcel, sir?
>
> A. I don't see that in -- I don't see that in here at this time.
>
> Q. Yeah, I don't think you'll find it. Why don't we -- why don't we back up and let me ask you a question. [¶] Between Goodrich Corporation and Black & Decker, you have told me that, over the 50 years of industrial operation, the parties were on the site between six to seven years collectively, correct?
>
> A. That's correct, approximately.
>
> Q. Okay. So and can you tell me then why, sir, with all of the other operations that have existed at that site and that you're familiar with and that you cite to in your declaration, you've chosen to call this the Black & Decker -- Goodrich/Black & Decker site as opposed to simply referring to it, for example, as the 160-acre parcel or referring to it as the owners of the site today?
>
> A. I think that's also a possibility, to call it that.
>
> Q. Why didn't you do that? This is a declaration that you're submitting to the state hearing officer. Why are you characterizing this site the Goodrich/Black & Decker site when you don't have any evidence that Black & Decker has ever been at this site and Goodrich was there last in 1963, sir?
>
> MR. SOMMER: Objection as vague and compound.
>
> A. That was the name of the site that the attorneys asked us to refer to the site as to be more specific and relevant I believe for this proceeding.
>
> * * *

Q. So when the lawyers, either Mr. Sommer or one of the other lawyers, told you you should call it the Goodrich/Black & Decker site, you complied; is that correct, sir?

A. We called the site -- yes, exactly, what –

Q. You never questioned the lawyers, you never questioned the lawyers and said, you know, maybe it would be more objective to call it the 160-acre parcel which I see it referred to as in all the depositions or maybe we can characterize it as the RASP or maybe we could characterize it as the -- you know, by the name of the current owners of the property or users of the property, did you, sir?

MR. SOMMER: Objection, compound.

Q. Did you do any of those things?

A. I thought the site was known to them and others as this Goodrich/Black & Decker site **to be distinguished from maybe another 160-acre parcel of which there could be many**.

Q. Okay. Let me ask you this, sir, in the evidence that you are relying upon, okay, Polzien deposition, Wever deposition, all of the documents that you refer to in here, do you know how many of these documents that you make reference to, okay, in your declaration refer to the 160-acre parcel as the Goodrich/Black & Decker site?

A. I don't know.

Q. Can you identify one?

A. I don't know of any.

Stephens Dep., 41:21-44:22 (emphasis added).

Q. Dr. Stephens, we've had marked as an exhibit next in order which is 4937, we've had it placed before you. And I will represent to you again these are more handwritten notes from the project manager, Jenny Sterling's file. [¶] And I want to direct your attention to first I note this is -- have you ever seen this document before?

A. No.

Q. A note that's about a conference call on 2/6/07. Do you see that?

A. Yes.

Q. Do you know whether or not you attended a conference call on 2/6/07?

A. Probably not.

Q. Down here at the bottom, there's a big circle with an X in it there. It says first change. Do you see that?

A. Yes.

Q. You want to read that?

A. "First change call 160 Acre Parcel Goodrich Emhart, Black & Decker site."

Q. Okay. What else does it say there on the next line?

A. "Change to Roadmap, Goodrich site, 160 acre Goodrich and something."

Q. Now, did you understand that somewhere in February of 2007 that you were instructed or your offices were instructed to change the name of the 160-acre site in whatever reports you were preparing to the Goodrich/Emhart/Black & Decker site?

A. That's generally my understanding, yes. I don't know about the time frame, but this would seem to suggest it's February.

Q. And that came from the lawyers for the City of Rialto?

A. Probably. I'm not sure who was speaking here on what her note was indicating.

Q. Okay. And we spent some time the other day about -- on this issue. And you testified I think, at the very outset of your deposition, Dr. Stephens, that you were here just to provide the facts as you saw them as best you could; is that correct?

A. Yes, sir.

Q. And that you were not an advocate; is that correct, sir?

A. That's correct.

Q. And do you think that the name of the site is an advocate's position about who is responsible for it?

MR. SOMMER: Objection, vague and argumentative.

A. It might be interpreted that way. It's an abbreviation I guess for the occupants.

* * *

Q. Did you ask anyone on your staff to undertake to determine whether or not the description requested of the site by counsel for the City of Rialto was an accurate description of the site?

MR. SOMMER: Objection, assumes facts not in evidence.

A. I don't know.

* * *

Q. Prior to receiving this phone call on February 2nd or February 6, 2007, had your staff ever referred to the site as the Goodrich/Black & Decker site?

A. I think we referred to it as the 160-acre site. But **that might have been kind of vague and confused with other 160-acre sites. So I think having this specified as the Goodrich/Black & Decker site made more sense to the city.**

Stephens Dep., 488:6-495:13 (emphasis added).

The fact that this spin "made more sense" to the Rialto Lawyers comes as no surprise given their prosecutorial bias in these proceedings. *See* Section V.A, *infra*. The fact that Dr. Stephens' adopted this blatant advocacy reveals his lack of independence and objectivity in these proceedings.

- **Dr. Stephens deliberately mischaracterized the evidence of whether Goodrich used and disposed of TCE in its burn pit**

Dr. Stephens' bias is also revealed by his analysis of whether Goodrich is responsible for any TCE groundwater contamination. He testified that the only evidence that Goodrich used TCE comes from the deposition testimony of Mr. Polzien and Mr. Wever.

Q. What do you cite to as evidence that trichloroethylene was used at the facility by Goodrich, sir?

A. We cite Polzien, Davis, and Wever. But I want to point out that Davis is not -- should be stricken from this one.

Q. Why is that, sir?

A. I think it was not correct, that that citation was wrong.

Q. Okay. So the citation in the middle, Mr. Davis, is wrong because Mr. Davis never worked for Goodrich, correct?

A. I think so, yes, that was a mistake.

Stephens Dep., 59:1-13.

As discussed earlier, Mr. Polzien and Mr. Wever clarified their deposition testimony and explained they could not conclude whether Goodrich used TCE or another solvent.

See Section II.D.3, *supra*.[11] Instead of accepting that evidence and reconsidering his opinion, as any objective scientist should and would do, Dr. Stephens invented explanations to defend his and the Rialto Lawyers' litigation position.

> Q. Okay. Did you see in Mr. Polzien's testimony, during the course of the cross-examination, where he conceded later in his deposition that he wasn't sure whether it was really trichloroethylene or whether it was another substance called trichloroethane?
>
> A. I think -- I'm not sure if I remember that specifically.

Id., 60:23-61:5.

> Q. Okay. And then, if you turn the page to page -- let's just drop down to page 619. And you see there are some questions about the use of TCE versus TCA at the Goodrich facility there. Do you see those?
>
> A. Yes.
>
> Q. Okay. And do you see on line 13:
> "Question: Do you know whether or not the cleaning solvent that you used in the mixers and other places where they had solvent was trichloroethane or trichloroethylene?" What's the answer, sir?
>
> A. He says I don't.
>
> Q. And then, if you go down a little bit on page 620, line 1, the question is "Do you know whether the solvent that made part of the slurry was trichloroethylene or trichloroethane?"
> "Answer: In light of what you just told me and my ignorance between the two, I -- I don't know."
> Do you see that, sir?
>
> A. Yes.
>
> Q. Okay. Now, I want to ask you, when you prepared your declaration and you cited to Mr. Polzien's testimony for the purpose of the proposition that trichloroethylene was used at the Goodrich facility, did you put some type of footnote there saying that Mr. Polzien later in his deposition, cross-examination, explained that he didn't know the difference between trichloroethylene and trichloroethane and could not tell which of those two substances was actually used at the facility?

---

[11] Later in the deposition, Dr. Stephens also cited the deposition testimony of John Graham as evidence that "TCE was used for cleaning out the mixers and for general cleaning" and then burned on site. Stephens Dep., 210:1-14. Dr. Stephens distorted Mr. Graham's testimony, which was that he occasionally used TCE to clean his hands. Dr. Stephens seemed to abandon his reliance on Mr. Graham after being shown his deposition testimony, as well as Mr. Graham's declaration in which he explained he did not recall what specific solvents were used at Goodrich's facilities. *Id.*, 211:5-212:16; *see also* Graham Dec. ¶ 8.

MR. SOMMER: Objection, the document speaks for itself.

A. There's no footnote to that.

* * *

Q. Do you think it was proper scientifically to rely upon Mr. Polzien's testimony for the proposition that TCE was used at the Goodrich facility given what you've just seen in terms of his testimony?

A. Well, I think it would be inappropriate if I didn't consider it. I mean the issue here is the source of TCE in groundwater. And the deponent, Mr. Polzien, said his first reaction was it was TCE. And then, thrown another chemical at him, 1,1,1-TCA, **he became confused**. So, as far as I know, the only thing he was really clear on was TCE.

Q. Now, he didn't become confused, Dr. Stephens, let's be very clear. He testified that he didn't know which of those two chemicals was used at the Goodrich facility, correct?

MR. SOMMER: Objection.

Q. That's what you just read?

MR. SOMMER: Objection, argumentative and the record speaks for itself in the deposition.

Q. Correct, sir?

A. Well, you just read the statement. I don't know was his answer.

Q. Right. So do you think it was appropriate to rely upon Mr. Polzien after he had testified that he didn't know which of the two chemicals was used?

A. There's nothing wrong with the statement in my declaration that says Mr. Polzien thought they used TCE. It's still true. He couldn't decide -- or at least, at this point in his deposition, it's fairly late, **he must have been getting a little tired by this point**. But he wasn't sure whether it was TCA or TCE. But as far as -- what we were trying to establish was whether anybody could have used TCE. And, as far as he knew, he thought yes.

Stephens Dep., 62:4-65:6 (emphasis added).

Dr. Stephens further concedes that Mr. Wever testified he did not know whether Goodrich used TCE or TCA, but Dr. Stephens did even not consider that testimony.

Q. Mr. Wever, you cite to Mr. Wever in your declaration in paragraph 2 of page 3, correct, in your declaration?

A. Yes.

Q. Okay. Did Mr. Wever in his deposition, as the questioning was ongoing, indicate that after he considered -- considered his testimony, that he was unsure as to whether it was trichloroethylene or TCA and, in fact, made a record in the deposition that he could not swear under oath that trichloroethylene was used?

A. I don't recall.

Id., 68:9-20.

Q. Well, here is his deposition transcript where he made the changes. We can mark it, if you want, or maybe you just want to take a look at it, it's up to you. [¶] A good example would be page 58. I mean there are multiple examples in here, but you can see. Line 13, you see where he's circled and written in the words "either TCE or TCA, I don't remember which. See my testimony on the second day of deposition." And then he initialed it?

A. Yes.

Q. No one showed this to you before?

A. I don't recall seeing this exactly with these notations on here.

Id., 70:3-16.

Dr. Stephens' failure to review all the available evidence is compounded by his shocking admission that he disregarded exculpatory evidence because he "was only trying to point out that there were employees who said TCE was used."

Q. Let me move on and ask you, other than the Polzien deposition which you looked at, are you aware of any deposition testimony of any witness where the witness said that trichloroethylene was used at the facility?

A. I think the ones that we're aware of we have cited here.

Q. Okay. So that would have been Polzien. Davis, you said is not a former employee of Goodrich, right?

A. Yes.

Q. And you've seen the corrections to Mr. Wever's testimony, correct?

A. Yes.

Q. Okay. So other than that there's no one else?

A. No one else what? Excuse me.

Q. No one else who said trichloroethylene was used at the facility under oath to your knowledge.

A. Not that I'm aware of.

Stephens Dep., 70:17-71:11.

Q. Do you in your declaration that you submitted to the state hearing officer say anywhere in here that there is testimony by witnesses who were at the facility for a number of years, who worked in production or other places, saying that they don't recall ever seeing trichloroethylene at the facility or that trichloroethylene was not used?

MR. SOMMER: Objection, the document speaks for itself.

A. **We were aware that some employees said that they weren't aware of TCE use.** But I don't think we said that in the declaration. **We were only trying to point out that there were employees who said TCE was used.**

Id., 75:7-20 (emphasis added).

To make matters even worse, and ignoring his previous testimony, Dr. Stephens then changed his story and claimed he was relying on "the technical data" as the basis for his opinion that Goodrich used and disposed of TCE.

Q. Okay. And it doesn't matter later on that they changed their testimony afterwards, correct?

A. My opinion is not based on this hearsay. It's based on -- it considers that. But it's based on the facts, the technical data.

Id., 78:13-17 (emphasis added).

The data, however, is also not helpful to him. Dr. Stephens concedes there is no data that confirms TCE is in the soil at the Goodrich burn pit. The only detection of TCE in soil is below the McLaughlin pit (but that is not convincing to him, even though he testified his opinion is based on the data), and he **never even considered other sources** for the TCE groundwater contamination.

Q. Technical data. Well, let's talk about the technical data for a moment, okay, about TCE and technical data. How many samples of volatile organic compounds were taken in the form of Goodrich burn pit, soil samples?

A. Soil samples -- can you repeat the question, please.

Q. Yeah. You understand obviously what a soil sample is, right?

A. Yes.

Q. Okay. How many soil samples were taken in the former Goodrich burn pit next to the static test firing area?

A. I don't recall.

Q. Okay. How many showed trichloroethylene in them?

A. In the soil sample?

Q. Correct.

A. In the soil samples at the burn pit, **none of the soil matrix samples showed TCE.**

Id., 78:18-79:12 (emphasis added).

Q. Okay. You know the McLaughlin pit was built after Goodrich left, right?

A. Yes.

Q. Was there TCE found in the soil matrix below the McLaughlin pit?

A. Yes.

* * *

Q. Do you know what it was? Was it -- I believe it was –

A. It was at 300 feet.

Id., 81:4-17

Q. Understood. So what was the concentration under the McLaughlin pit of trichloroethylene?

A. At 300 feet it was 8.7 micrograms per kilogram.

Q. Okay. Do you believe that that's evidence that trichloroethylene was at some point in time introduced into the McLaughlin pit?

A. It's possible. But I'm not certain that that's the source of that.

Id., 83:2-10.

Q. I see. Okay. Do you know whether Pyrotronics used [TCE] in their machine shop operations there?

A. It's possible.

Q. It's possible or you know or don't know?

A. Well, a machine shop could have TCE in it.

Q. Do you know whether or not witnesses testified, in fact, trichloroethylene was used there?

A. I'm not sure I recall that.

Q. Do you know whether or not the RASP used trichloroethylene with respect to maintenance of rail cars?

A. It wouldn't surprised me.

Q. Okay. Well, do you know how much trichloroethylene was disposed of on the grounds of the facility during the operations of Pyrotronics?

A. I don't know.

Q. How about the operations of the RASP?

A. I don't know.

Q. **How about the operations of any other party with respect to -- other than Goodrich with respect to the use of the property?**

A. **I haven't tried to do that.**

Id., 80:6-81:3 (emphasis added).

This testimony not only reveals that Dr. Stephens' has no basis for his opinion that Goodrich is responsible for any TCE groundwater contamination, it also demonstrates the rampant bias in his analysis.

c. Dr. Stephens was repeatedly caught giving false testimony about his work in this case and the influence of the Rialto Lawyers

Dr. Stephens' misconduct is not limited to blindly following the Rialto Lawyers' directions and supporting their litigation goals. He was also caught in false testimony as to their role in outlining and writing his opinions. The fact that Dr. Stephens was dishonest about something as basic as who outlined and wrote his report raises significant doubts about the reliability of all of this testimony.

- **Dr. Stephens falsely claimed that he outlined his written statement**

Dr. Stephens initially testified that there was no initial outline to his written statement, but if there was one, he wrote it.

Q. Now, I want you to take a look at – real quick question. Who outlined your declaration?

A. What do you mean outlined it?

Q. Well, do you know what an outline is?

A. Yes.

Q. Okay. Who outlined your declaration?

A. I did, if there's any outline to it. And I actually don't recall outlining it.

Stephens Dep., 460:23-461:5.

When further questioned on this subject, Dr. Stephens testified he may have prepared an outline, but it was not common practice for an attorney to outline his opinions and he did not recall that happening here:

> Q. Now, you testified earlier today in response to a question by Mr. Dintzer that – and I can't remember because maybe wasn't paying close enough – you answered some questions about an outline for your opinions. Do you recall those?
>
> A. Yes.
>
> Q. And was an outline prepared?
>
> A. I may have prepared an outline early on, I just don't recall exactly.
>
> * * *
>
> Q. Is it common practice for attorneys that retain you to send you outlines of your opinions before they're written?
>
> A. No, that's not common.
>
> Q. Okay. Did it happen here?
>
> A. I can't be certain. I don't recall that. They may have sent opinions or they may have sent outlines of opinions, I just don't remember.

Id., 496:4-12, 496:24-497:6.

When confronted with evidence that Mr. Elliot, one of the Rialto Lawyers, actually wrote the outline for Dr. Stephens' "Declaration," Dr. Stephens contradicted his prior testimony. *See* Ex. 30025 (Stephens Dep., Ex. 4938).

> Q. We're going to do something unusual here because the CD which contains all of the email communications between Mr. Sommer's office and your office, we couldn't get it downloaded in any facility and print it out. So I'm going to put before you, if I can, a copy of -- well, it's the actual email which is on the CD that Mr. Sommer or I should say Dr. Stephens provided along with the boxes of his documents.
>
> And it's an email from Jenny Sterling dated Tuesday, February 27, 2007, at 12:18 p.m. to Daniel B. Stephens and others. Subject: FW: Rialto Outline of Testimony. And it transmits an email from Mark E. Elliott of the Pillsbury law firm, the same subject.

> And it says here, before the outline is presented "very rough outline to start the conversation." And let me place this before the witness.
>
> * * *
>
> Now, in connection with your opinions that are written here by your words, do you recall receiving this email?
>
> A. Yes, I do.
>
> Q. Do you recall reading it?
>
> A. Yes.
>
> Q. And did you use it in connection with the preparation of your opinion which is exhibit – which are set forth in Exhibit 4901?
>
> A. In a general way, yes.

Id., 497:18-500:3.

But Dr. Stephens again was being less than honest. The Rialto Lawyers' outline served as more than a "general" reference. Dr. Stephens' written statement is nearly identical in substance to the Rialto Lawyers' outline, with the notable exception that Dr. Stephens did not address Part 3, *i.e.*, the appropriate cleanup standard based on evidence of perchlorate health effects. *Compare* Stephens Dec. *with* Ex. 30025.[12] Thus, although Dr. Stephens tried to cover it up during his deposition, the Rialto Lawyers crafted Dr. Stephens' opinions from the beginning.

- **Dr. Stephens falsely claimed that he was the sole author of his written statement**

When asked who wrote his April 12 written statement, Dr. Stephens unequivocally testified he did:

> Q. Okay. You indicated that your offices prepared your declaration, correct?
>
> A. I'm sorry?
>
> Q. Your offices, you prepared this declaration.

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[12] This omission is understandable and significant because the levels of perchlorate detected in the groundwater in the Rialto-Colton basin are far too low to cause any adverse health effect. *See* Borak Dec. ¶¶ 37-42.

A. Oh, it came out of our company?

Q. Yes, sir.

A. Yes.

Q. Did you write it?

A. Yes.

Q. **Yourself, you wrote this all yourself?**

A. **Yes.**

Q. **So you actually sat down at a computer and scribed this with your own hands?**

A. **Yes.** Portions of it were taken from the Roadmap. But, for the most part, it's my penmanship, if you will.

Q. Did the lawyers have any edits.

A. Not that I recall.

Stephens Dep., 188:12-189:4 (emphasis added).

However, immediately after being shown the detailed outline from Mr. Elliott, Dr. Stephens confessed that he is unsure "what that record shows," which should be irrelevant if he was testifying honestly:

Q. Okay. Did you subsequently exchange with the lawyers for the city various drafts of your opinion which they commented and then edited and sent back to you for your consideration?

A. I'm not certain what that record shows. I don't remember what -- what it was.

Q. Dr. Stephens, you're not sure what the record shows with regard to what you wrote; is that correct?

A. I didn't say that. I said I didn't know what the record was regarding what went back and forth with attorneys.

* * *

Q. So we can trace that in the emails, though. What I'm trying to find out from you today sitting here, you said a moment ago that you wrote what's in Exhibit 4901, and maybe you had a little staff help on some issues which you don't really remember. But you didn't mention Mr. Elliott, did you?

A. I didn't mention Mr. Elliott. I didn't recall -- I had forgotten about that outline.

Q. Okay. And had you forgotten, when you testified a moment ago, about the exchanges of emails you had or your staff has had with Mr. Elliott and other attorneys at the City of Rialto with regard to the preparation of your opinions?

A. I don't remember those exchanges.

Q. You don't remember them?

A. I don't remember the contents of the exchanges.

Q. Well, help me understand how the drafting process went on here. You created a draft. Who did you give it to?

A. I wrote the draft report and it went to our own staff most likely for internal review. And then we probably would have sent it to attorneys for review.

Q. Do you know how many times you sent it to attorneys for review?

A. No.

Q. Did they add words?

A. They may have.

Q. They may have? You don't know, Dr. Stephens?

A. I -- I can't be certain. I mean it's possible they had some suggestions and they were reasonable to me.

Q. All right. So these aren't all your words, are they?

A. I might have had some suggestions from others. It could have been staff, it could have been attorneys.

Id., 500:4-502:17.

Dr. Stephens' story changed again when he was shown an e-mail from staff transmitting a draft of the written statement to the Rialto Lawyers. *See* Ex. 30026 & 30027. From that point, Dr. Stephens admitted that several staff members were also involved in drafting "his" statement:

Q. Okay. Now, the draft declaration which is attached to this email of March 7 that was sent to the City of Rialto attorneys, did you draft it?

A. I -- I drafted -- I believe I drafted that document. There might have been some portions that staff assisted with as well.

* * *

Q. Okay. Who else worked on it?

A. In-house staff that assisted would have included Bill Casadevall, Jenny Sterling, and Nicole Sweetland.

Q. Now, did Nicole draft some portion of that document?

A. She -- it's possible she had some input into this. I would have -- I'm not certain.

Q. What about Jenny Sterling?

A. She may have had some input as well.

Q. And Bill Casa -- how do you say his last name?

A. Casadevall.

Q. Casadevall. Did he have some input into this document?

A. It's possible.

Q. Possible.

A. He had a lot of input into the Roadmap and the historical portion.

Q. We're not talking about the Roadmap right now, we're talking about the draft -- what I think is the first draft of your declaration. And you have now told me that Bill Casadevall, Jenny Sterling, and Nicole -- how do you say her last name?

A. Sweetland.

Q. Sweetland possibly or may have had some hand in drafting portions of it; is that correct?

A. That's my recollection at this time.

Q. Okay. And did they continue to have their hand in drafting it?

A. I think they assisted me throughout the process.

Stephens Dep., 504:5-10, 505:7-506:13.

Q. Well, I notice that on Exhibit 4951 Ms. Sweetland had her name and her address down at the bottom; is that right.

A. Yes.

Q. Okay. And the area code for her is 805. That's not New Mexico, is it?

A. No, sir.

Q. She's in Santa Barbara, isn't she?

A. Yes.

Q. Does this indicate to you, sir, Exhibit 4951, that Nicole Sweetland actually did the first draft of your declaration? You might want to look

at the email, the language of the email, because it talks about it being a very rough draft.

* * *

A. It appears from the way this email looks as though Nicole had a hand in drafting part of this as I asked her to do probably. I don't recall exactly.

Stephens Dep., 772:6-19; 773:24-774:1 (emphasis added).

- **Dr. Stephens falsely claimed no site-specific calculations were performed**

Dr. Stephens' less than truthful testimony is not limited to who outlined and wrote his written opinions. It also extends to his calculations. When Dr. Stephens was asked to explain why his new opinions were so remarkably different from those of Dr. Kresic and Dr. Chu, he denied performing any other calculation or having any site-specific data to use in making such a calculation. Dr. Stephens claimed he discussed doing such work with the Rialto Lawyers, but it was not done because he lacked site-specific data.

Q. And my question is do you have other data that you can use to take into account the criticisms that you have of section 4 of Dr. Chu's report and recalculate it?

A. At this moment I don't have any other – **I don't have any field data from the 160-acre site.**

Q. Okay. You're not aware of any other; is that correct?

A. **I have no other data from within the 160-acre site.**

Q. Have you ever done a calculation like Dr. Chu did in connection with section 4 of his report?

A. Yes.

Q. Okay. Is that something that folks in your business do ordinarily?

A. It's -- it's a reasonable approach.

Q. Okay. Did you ever propose to the attorneys for the City of Rialto that you be commissioned to do that; i.e., do what Dr. Chu did in section 4 of his report?

A. **Only in a general way. It would have come out had we gone forward with vadose zone modeling or at such time as we would.**

Q. You've been working on this project on and off for three and a half years; is that correct, Dr. Stephens?

A. Yes.

Q. And did you ever tell Mr. Sommer or Mr. Elliott or anyone else representing the city that you've been working with that it would be helpful to the analysis of the rate of recharge in the vadose zone to do such a calculation?

A. Sure.

Q. Did you ever tell him that it would be helpful to gather data to do such a calculation?

A. It's what's in the Roadmap.

Q. Why didn't you gather the data and do the calculation?

A. I didn't have access to the 160-acre site, at least I didn't think we did.

Stephens Dep., 667:15-669:4 (emphasis added).

Q. I asked you a specific question about what was your new estimate for this site, if you have one, with regard to the net recharge rate. And maybe you don't have one yet. I don't know. You tell me.

A. I believe I said **I haven't done any calculation on net recharge at the site.** If I had to estimate again for a bare soil case, we estimated – I estimated in the declaration for a sparse vegetation condition that it would be about 5 percent of precipitation.

Id., 673:23-674:7 (emphasis added).

Q. Okay. I'm going to change gears now a little bit here so I'm warning you that I'm changing gears. Okay. I'm going to ask you some questions about work that was proposed by you but not done. I want to make sure I have the list correct. Okay. You proposed to the city that vadose modeling, vadose zone modeling be done, and that's not been done, correct?

A. Not -- the kind of vadose zone modeling I think you're referring to hasn't been initiated. **The calculations that are in the declaration would be considered an analytic type of vadose zone model.**

Q. The 1.25 feet –

A. Yes.

Q. -- per year?

A. Yes.

Mr. Dintzer: Mark it.

Q. Other than doing the calculation that you just talked about, your firm hasn't done any other vadose zone modeling, correct, for the City of Rialto?

A. **Not at this time.**

Id., 787:22-788:17 (emphasis added).

Dr. Stephens' testimony is absolutely false. His records reveal that his staff performed **several pages of calculations using site-specific data less than two weeks before his deposition**. *See* Ex. 30019. None of those calculations, however, support Dr. Stephens' new migration rate opinion offered during his deposition. *See* Kresic Rebuttal Dec. ¶ 9. Dr. Stephens simply ignored this work product (which came to a conclusion contrary to the one he needed to offer), and to compound his misconduct, denied its existence when asked about it under oath in his deposition.

2. There is No Scientific Support for Dr. Stephens' Opinions About Migration Rates at the 160-Acre Parcel

Dr. Stephens' original estimate that the downward migration of net infiltration in the vadose zone is 1.25 feet per year is based on a number of assumptions he made: mean precipitation of 15 inches per year, average field water content (soil moisture) of 5 percent, and net infiltration as 5 percent of mean precipitation (5 percent of the water falling as rain would filter deep enough into the vadose zone to avoid evaporation or evapotranspiration). Stephens Dec. p. 14. And he justified his estimate by noting that the "coarse soils and sparse native vegetation facilitate deep percolation of contaminants." Stephens Dec. p. 14.

When Dr. Stephens was asked in his deposition why he assumed a field water content of 5%, he responded, "that was just an estimate" based on his "professional judgment" and "the general coarse texture of the soil." Stephens Dep. 600:5-15. When asked whether he knew of any scientific studies that contained a 5% net infiltration rate like the rate he assumed, Dr. Stephens testified, "I don't think it was based on any specific studies in this area," rather it was only based on his "professional judgment...in this declaration at this point." Stephens Dep. 598:13-599:12.

In fact, the scientific literature regarding recharge rates in the Rialto-Colton Basin and similar environments disagrees with Dr. Stephens' "professional judgment" about the net infiltration rate. The U.S. Geological Survey, which modeled groundwater recharge in the Rialto-Colton Basin, concluded that there would be **zero** net infiltration from precipitation

in years where less than 25 inches of rain fell. Kresic Rebuttal Dec. ¶5. Studies in other semi-arid environments, including studies that are cited in Dr. Stephens' own textbook, report infiltration rates as low as 0.004%. Kavanaugh Rebuttal Dec. ¶ 19. Dr. Stephens' original assumption of a 5% infiltration rate vastly overstates the amount of natural rainfall that is retained by the soil at the 160-acre parcel.

Similarly, actual site data regarding soil moisture contradicts Dr. Stephens' "professional judgment" regarding field water content. Where Dr. Stephens assumed a field water content of 5%, actual geotechnical measurements at the site indicated that the field water content averaged 10.8%, and in one sample was as high as 13.9%. Chu Dec. at Table 2. If Dr. Stephens used the 10.8% average water content from the actual site data instead of his "professional judgment," his downward migration rate would be less than half of his 1.25 feet/year estimate ((0.05 recharge x 15 inches of precipitation) ÷ 0.108 field water content = 6.94 inches/year downward migration). Stephens Dep. 596:8-597:18 (testifying that the water content is the denominator in the equation he used to calculate downward migration velocity).

As noted above, recognizing that the 1.25 foot/year opinion in his written statement destroyed the Rialto Lawyers' case against Goodrich, Dr. Stephens was prompted by the Rialto Lawyers to change his opinion. Stephens Dep. 394:17-395:11. Accordingly, in his deposition, Dr. Stephens changed his opinion and testified that the downward migration rate "could be" as high as 12.5 feet per year. Stephens Dep. 394:17-395:11. Dr. Stephens' new opinion about the migration rate is not supported by any modeling or calculations. In fact, although Dr. Stephens' office produced several pages of calculations of recharge using different analytical methods and varying hydraulic properties (the calculations Dr. Stephens neglected to mention during his deposition testimony), none of those calculations support the new migration rate asserted by Dr. Stephens in his deposition. Each of the equations performed by Dr. Stephens' office using hydraulic parameters generated from site-specific data concludes that the recharge rate at the 160-acre parcel would be orders of magnitude lower than the rate asserted by Dr. Stephens at his deposition. Kresic Rebuttal Dec. ¶ 9.

The only way Dr. Stephens' staff was able to calculate a migration rate as high as the 12.5 feet per year that Dr. Stephens testified about at his deposition was to ignore all the site-specific data, and to assume that 100% of the precipitation that fell on the property infiltrated into the ground. *Id.* This assumption, in the words of Dr. Kresic, is "absolutely non-sensical." Kresic Rebuttal Dec. ¶ 9. As noted above, perhaps because they failed to confirm his new opinion, Dr. Stephens testified at his deposition that he had not tried to use the site-specific data to evaluate recharge – even though the calculations were performed more than a week before he was deposed. Stephens Dep., 673:23-674:7. In fact, Dr. Stephens testified that he did not have site-specific data, even though his staff had done calculations with that site-specific data more than a week before. Stephens Dep. 667:15-24.[13]

Dr. Stephens' opinion also is contrary to the conclusions of all of the scientific studies of groundwater recharge in the Rialto-Colton Basin and San Bernardino area, and ignores site-specific facts and data. Scientists of the U.S. Geological Survey studied groundwater in the San Bernardino area and the Rialto-Colton Basin and have reached a conclusion very different than Dr. Stephens about the ability of rainwater in the area to move through the vadose zone:

> As in other semiarid basins, the potential evapotranspiration in the San Bernardino area is high, averaging more than 76 inches per year, nearly five times the average annual precipitation (San Bernardino Flood Control District, 1975). As a result, most

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[13] Dr. Stephens actually testified in his deposition that his opinion as to the new, ten-fold increase in the estimated recharge rate would not change if site-specific information regarding soil permeability were available. Stephens Dep., 518:23-519:12. Dr. Stephens asserts that information about hydraulic conductivity of the soil in the vadose zone would also only be useful in determining whether the opinions of the other experts in this case were valid, not in evaluating his own assertions about migration rate. Stephens Dep., 517:22-518:4. These statements about the insignificance of site-specific data not only contradict fundamental scientific principles in the field of hydrogeology, Kresic Rebuttal Dec. ¶ 10, but also contradict Dr. Stephens' own opinion about the investigative work that needs to be done at the site. In particular, Dr. Stephens specifically recommends three different tests to determine "hydraulic conductivity" of surficial soils, tests that would not be necessary if – as Dr. Stephens now suggests – site-specific data is unimportant to his determination of the migration rate in the vadose zone. *Id.*

> precipitation, which falls almost exclusively as rain on the basins, is evaporated or transpired before it can infiltrate or run off.

USGS Open-File Report 2005-1278, *Hydrology, description of computer models and evaluation of selected water-management alternatives in the San Bernardino Area, California* (2005), p. 26 ("USGS 2005," submitted as Kresic Dec. Ex. L8). The USGS also reviewed the available scientific literature and found that in environments like the Rialto-Colton area, the migration rate of rainwater into the vadose zone is nowhere near the 12.5 feet/year that Dr. Stephens is now estimating:

> In other semi-arid basins, researchers have estimated that infiltration of direct precipitation ranges from zero to about 0.05 ft/yr (Eychaner, 1983, p. 10; Danskin, 1988, 1998; Hollet and others, 1991, p. B59; Hanson and others, 1994, p. 41).

USGS 2005, p. 40.

In Dr. Stephens 1995 book on vadose zone hydrology, he compiled a table with 17 studies of recharge in areas of low precipitation (precipitation ranging from less than 3 inches to more than 17 inches per year). *See* Stephens, *Vadose Zone Hydrology* (1995), Table 1. The highest recharge rate in those studies was 100 mm/year, or 3.94 inches per year. *Id.* The lowest was 0.036 mm/year. *Id.* In other words, the studies that Dr. Stephens identified in his own book find recharge rates measured in inches per year or fractions of inches per year – while in the context of this litigation, Dr. Stephens is now suggesting a recharge rate of 12.5 **feet** per year.

Dr. Stephens relies exclusively on a series of studies at a single site in Hanford, Washington for his assertion that up to 50% of the rain that falls at the 160-acre parcel would infiltrate into groundwater. Stephens Dep. 453:18-454:7; 605:15-25. But, as demonstrated in great detail by Dr. Kresic in his rebuttal declaration, the Hanford site is not climatically or hydrogeologically similar to the 160-acre parcel, and findings from that site cannot be applied to the 160-acre parcel. Kresic Rebuttal Dec. ¶¶ 11-14. Most importantly, a significant percentage of the precipitation at the Hanford site falls as snow, and snow cover and snowmelt result in far greater recharge than would occur in a hot, semi-arid environment where the precipitation is in the form of rain. Kresic Rebuttal Dec. ¶¶ 13-14; Kavanaugh Rebuttal Dec. ¶ 20. The studies in Hanford show dramatic spikes in recharge

rates corresponding to snow cover and snow-melt, and much lower rates of recharge where snow is not present. Kresic Rebuttal Dec. ¶ 14.

Dr. Stephens' assertion that his new opinion is based on a lack of vegetation in parts of the site (rather than the "sparse vegetation" he identifies in his written statement), also has no basis in the scientific literature. USGS studies in Victorville, California, involving areas with no vegetation, in the bottom of a wash where water freely flowed during rainstorms, still found that water would move through the vadose zone at a rate of only 3 feet per year. Kresic Rebuttal Dec. ¶ 18.[14]

Dr. Stephens also ignores factual information about the 160-acre parcel that undermine his changed opinion about rainfall infiltration. At his deposition, Dr. Stephens testified that his changed opinion is based on the assumption that the soil where perchlorate was released is not compacted, *i.e.* that it is "loose and coarse-textured." Stephens Dep., 629:25-631:6. Dr. Stephens ignores that by 1969, a dirt road is observed in aerial photographs covering the former Goodrich burn pit area, Bennett Rebuttal Dec. ¶ 3, and that road remains in place through the 1980s until the former burn pit area was graded and covered. Bennett Rebuttal Dec. ¶ 3. Dr. Stephens conceded at his deposition that vehicle traffic would compact the soil. Stephens Dep. 629:25-631:6. Compacting the soil would reduce soil permeability. Kresic Rebuttal Dec. ¶ 20. Accordingly, Dr. Stephens' assertion about infiltration rates through "loose and coarse textured" soils simply does not apply in the area of the former Goodrich burn pit.

Dr. Stephens' assumptions about the nature of the soil are not only incorrect at the surface in the area of the former Goodrich burn pit, they are incorrect for the entire vadose zone. A basis for Dr. Stephens 12.5 foot per year migration rate is the assumption that the

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[14] The USGS estimated that more than 50 inches per year of water (1.3 meters) was infiltrating into the ground in the wash in Victorville, yet water was moving in the deep vadose zone at only 3 feet per year. Dr. Stephens, on the other hand, is assuming that 7.5 inches of rain is infiltrating into the ground at the 160-acre parcel (almost 7 times less water infiltrating than USGS), but the water in the deep vadose zone was moving at 12.5 feet per year (more than four times faster than USGS). Kresic Rebuttal Dec. ¶ 18.

entire vadose zone is described as "unconsolidated coarse sand and gravel" Stephens Dep., 630:7-9) "very coarse soils." *Id.*, 394:23. The actual vadose zone at the 160-acre parcel, however, as Dr. Stephens concedes at his deposition, is heterogeneous, and is not entirely made up of coarse sand and gravel. Stephens Dep. 399:11-17. The actual vadose zone under the 160-acre parcel has layers of medium sand and fine sand, each of which would reduce substantially the downward migration rate of water. Kresic Dec. Ex. L.

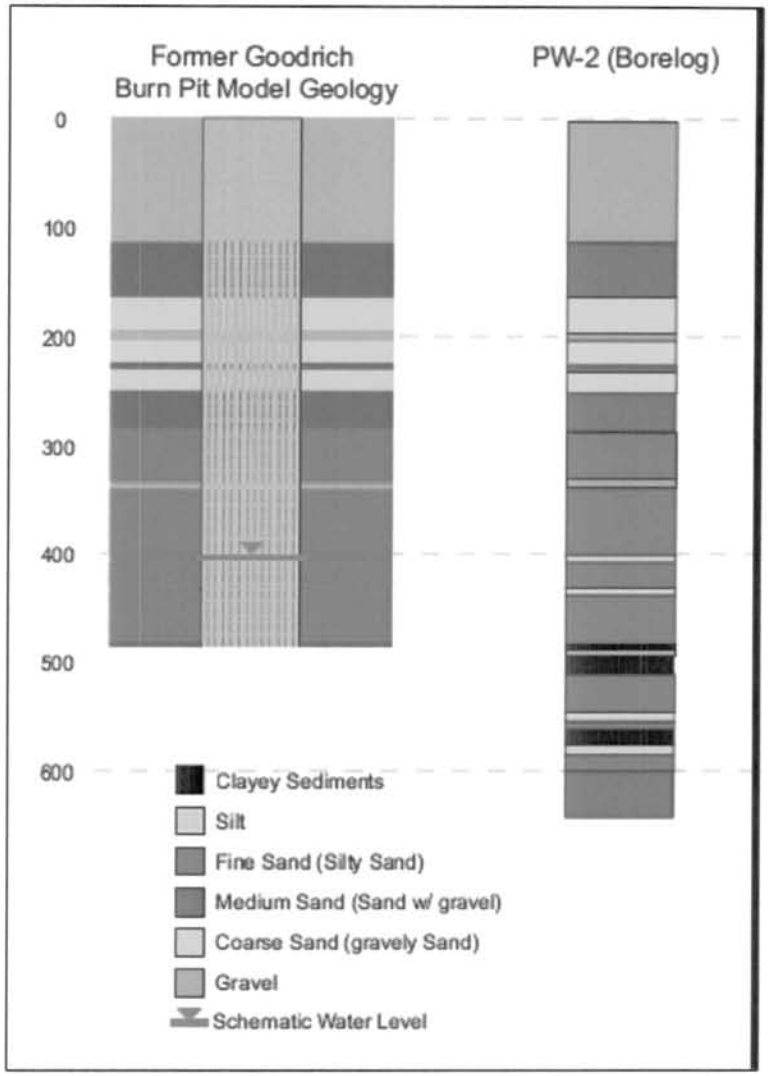

Figure L5

Figure L5 shows the geological layers at the site. Kresic Dec. Ex. L5. Only the first 100 feet of the vadose zone can be described as gravel, and below 100 feet, the vadose zone is described in the boring logs as including substantial layers of medium sand and fine sand. Kresic Dec., Ex. L3, L4, L5; Ex. Ex. 30053. According to USGS studies, gravel has a saturated hydraulic conductivity more than 100 times greater than medium sand, and almost 1000 times greater than fine sand. Kresic Dec. Ex. L. Considering the fact that Dr. Stephens' new opinion about migration rates is predicated on the soil being coarse sand and gravel, it is simply unsupportable for Dr. Stephens to assume that water will migrate at 12.5 feet per year through medium sand and fine sand as well.

Finally, if Dr. Stephens' new opinion about a 50% infiltration rate and 12.4 foot per

year water movement were correct, there would not be any perchlorate found in the soil sampling taken in the top 25 feet of the former Goodrich burn pit. Dr. Stephens, at his deposition, conceded that whether perchlorate would have been washed out of the shallow soil was dependent on the mass of perchlorate in the area. Stephens Dep., 591:18-592:13. But Dr. Stephens does not know the mass of perchlorate burned in the former Goodrich burn pit and has made no calculation of the mass of perchlorate remaining in the former Goodrich burn pit after incineration. Stephens Dep. 205:8-205:16, 206:4-207:3. He testified that he has no reason to dispute Dr. Oxley's conclusion, however, that after incineration, only an average of 0.002% of the original perchlorate mass would remain in the pit. Stephens Dep. 204:6-205:16, 206:4-18. Given the minute perchlorate mass left after incineration, there is no question that an infiltration rate of 50% and a downward migration rate of 12.5 feet per year would have long ago washed any remaining perchlorate mass out of the top 25 feet of the soil at the former Goodrich burn pit. Kresic Rebuttal Dec. ¶¶ 21-22. The fact that sampling showed the presence of perchlorate in the top 25 feet of the soil at the former Goodrich burn pit demonstrates that Dr. Stephens' new opinion about the 12.5 foot per year migration rate is, in Dr. Kresic's words, "scientifically improbable" and, more simply, "wrong." Kresic Rebuttal Dec. ¶ 22. [15]

IV.
THE EVIDENCE ESTABLISHES THAT PYROTRONICS IS THE SOURCE OF THE PERCHLORATE GROUNDWATER CONTAMINATION ON THE 160-ACRE PARCEL

As detailed in Goodrich's Opening brief and evidentiary submission, Pyrotronics' operations and disposal practices, including its use of the McLaughlin Pit, is a major source of perchlorate contamination in the Rialto/Colton Groundwater Basin, and the only confirmed source on the 160-acre parcel. Goodrich Brief, at 59-119, Kavanaugh Dec.

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[15] The fact that perchlorate is found in the soil at the former Goodrich burn pit but TCE is not, also is conclusive evidence that TCE was not disposed of with perchlorate at the burn pit. Kresic Rebuttal Dec. ¶ 35. If TCE and perchlorate were disposed of in the burn pit during the same five year time frame, there is no way to explain the absence of TCE in any of the 25 foot deep soil samples where perchlorate was found. *Id.*

¶¶ 42-62, Kresic Dec. ¶¶ 14-35. The Advocacy Team and Rialto have failed to fully consider this explanation for the soil and groundwater contamination, apparently because of their responsibility for the McLaughlin Pit and to justify the current (and costly) prosecution. *See* Sections V.A & V.B, *infra*.

These facts are not in dispute. Mr. Berchtold, Advocacy Team member and Assistant Executive Officer of the Regional Board, testified in deposition that "the highest concentration of perchlorate found adjacent to a source were the samples taken from the McLaughlin Pit." Berchtold Dep., 149:23-150:3; *see also* Berchtold Dep., 97:23-98:2 (acknowledging data from surveys shows "releases of perchlorate in the vicinity of the McLaughlin Pit."), Saremi Dep., 263:19-264:15 (acknowledging "concurrence in the water board staff" that the only confirmed source on the 160-acre parcel is the McLaughlin Pit), 591:19-23 (McLaughlin Pit past and present source of perchlorate contamination in Rialto/Colton aquifer), Thibeault Dep., 378:19-379:5 (same), Holub Dep., 1008:1-6 (same). Dr. Stephens similarly testified that the McLaughlin Pit is the only location where perchlorate is found in sampling through the entire soil column and in the groundwater under any suspected source at the 160-acre parcel. Stephens Dep. 439:20-440:6; *see also* Stephens Dec. p. 17.

The data showing perchlorate contamination from the bottom of the pit through the entire vadose zone to the groundwater demonstrate that the McLaughlin Pit leaked and contaminated the soil and groundwater at and downgradient of the 160-acre parcel. Kavanaugh Reb. Dec. ¶ 30, Kavanaugh Dec. ¶ 54. The transport mechanism for the contamination from the McLaughlin pit is plain: thousands of gallons of water were intentionally added to the pool to keep the perchlorate-containing fireworks waste from drying out and auto-igniting, and at times the pool was filled to within one inch of its rim or was observed to be overflowing. *Id.* The residential swimming pool construction methods used for the pit, with sprayed gunnite walls and a thin plaster veneer, degraded almost immediately after being put into operation. English Dec. ¶ 51; Stephens Dep. 251:22-252:9 (degradation would occur over "a few years or so"). Leakage from the pit was as high as 90

to 900 gallons per square foot per day. Kavanaugh Reb. Dec. ¶ 30, Kavanaugh Dec. ¶ 59. Apollo Manufacturing, an entity related to Pyrotronics, reported that they were disposing of up to 3,000 gallons of waste per day in the McLaughlin Pit – a pit that has a capacity of only 12,000 gallons. Stephens Dep. 251:2-15.[16]

The McLaughlin Pit's contribution to contamination at 160-acre parcel did not end with leakage. The decision to ignite the perchlorate-containing sludge in the pit in 1987 spread ash around the 160-acre parcel and added to contamination at the property. Stephens Dep., 324:24-325:11; *see also* Saremi Dep., 995:7-15, Holub Dep., 749:19-750:3. The ash and debris remaining in the burned-out pit was buried in place, Stephens Dep., 313:4-314:5, leaving the McLaughlin Pit – the only confirmed source of groundwater contamination at the 160-acre parcel – still in place under the surface of the property.

Other Pyrotronics operations also contributed to the contamination found at the site. Pyrotronics used more than 4 million pounds of potassium perchlorate at the 160 acre parcel. Stephens Dep., 240:2-241:14. Pyrotronics regularly – "at least daily" – hosed perchlorate-containing dust and waste out of its buildings and into concrete channels that discharged to unlined sumps and catch basins. Kavanaugh Rebuttal Dec. ¶ 28, Kavanaugh Dec. ¶¶ 44, 48, 50; Stephens Dep., 244:24-245:6. Those catch basins are located throughout the Pyrotronics manufacturing area, and upgradient of the impacted groundwater wells. Kavanaugh Rebuttal Dec. ¶ 28; *see also* Kavanaugh Dec. ¶¶ 43-61 (discussing Pyrotronics' generation and disposal of perchlorate waste). As Dr. Stephens

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[16] The leakage from the pit was severe enough to cause "mounding" in the saturated zone, a localized increase in elevation of groundwater as leakage through the vadose zone "piles up" at the top of the water table. Dr. Stephens described the mounding as "minor" but conceded that he had not done the calculations to determine how much mounding would be seen under the McLaughlin Pit. Stephens Dep. 301:20-302:8. Review of the groundwater elevations found in 2006 when wells CMW-01, CMW-02 and CMW-03 were drilled shows that the groundwater elevation in CMW-01 (immediately downgradient of the McLaughlin Pit) was 390 feet below ground surface, approximately 40 feet higher than the groundwater at crossgradient well CMW-02, and approximately 30 feet higher than upgradient well CMW-03. Ex. 30053 (boring logs for CMW-01, 02, 03). Lateral migration from the McLaughlin Pit explains the perchlorate found at CMW-02 – the only groundwater contamination Dr. Stephens attributes to Goodrich. Kresic Dec. ¶¶ 28-35, Kresic Rebuttal Dec. ¶ 32.

concedes at his deposition, Pyrotronics could have disposed of perchlorate and its waste TCE in those clarifiers, along with thousands of gallons of water, pushing the perchlorate and TCE into the groundwater. Stephens Dep., 244:24-245:6, 258:10-259:24, 346:4-6.

The amount of water Pyrotronics used to hose out its buildings and discharged into these sumps is a critical fact in these proceedings that both the Advocacy Team and the Rialto Lawyers appear to have ignored. Apollo Manufacturing, a division of Pyrotronics operating at the site, used 11 acre-feet per year of water, which equates to 16,500 gallons per day. Ex. 11090 at 6-14. This use of thousands of gallons of water each day to wash perchlorate-containing waste out of Pyrotronics buildings is an obvious potential source groundwater contamination at the site, but one the Advocacy Team and Rialto Lawyers have chosen to ignore:

> Even if one assumes that Pyrotronics was discharging the maximum design flow rate to its septic system of 3,000 gallons per day, and the maximum design flow rate for industrial waste discharge of 3,000 gallons per day to the McLaughlin Pit [Berchtold, 2007, Exhibit 3552 (RWQCB, p. AS015)], an additional 10,500 gallons of water per day was used by Pyrotronics. Pyrotronics did not use water to manufacture its fireworks [Stephens, 2007b, p. 248], and even Dr. Stephens testified that it is likely that the additional 10,500 gallons of water per day were used by Pyrotronics to wash the floors of its manufacturing buildings [Stephens, 2007b, p. 256]. This very significant amount of water – 10,500 gallons of water per day containing perchlorate and any other contaminants from Pyrotronics operations being washed directly into unlined sumps during the more than 20 years of Pyrotronics operations at the site – is more than sufficient to transport contaminants through the 400 foot vadose zone to groundwater.
>
> Although the Roadmap recognizes that similar catch basins at the Stonehurst site "appear to be major sources of perchlorate impacts to soil and probably to groundwater" [p. 53], the City and Dr. Stephens do not indicate that these catch basins, used by Pyrotronics, are likely sources of contamination in the soil and groundwater at the 160-acre parcel. Pyrotronics' daily practice of hosing down the press rooms and allowing the contaminated water to drain into unlined sumps is consistent with the presence of perchlorate in the groundwater downgradient from the Pyrotronics production facilities at wells CMW-04 and CMW-05 [Kavanaugh, 2007, ¶47, 50]. It is my opinion that the City and Dr. Stephens have ignored the significance of Pyrotronics operations to the contamination in the Rialto-Colton Basin.

Kavanaugh Reb. Dec. ¶¶ 28-29. Even Dr. Stephens was forced to concede that Pyrotronics' use of the catch basins and McLaughlin pit make their operations a significant source of contamination at the site:

Q. Yes. Would you agree with me that, based upon the historical operations, the millions of pounds of perchlorate that they brought to the site, the thousands upon thousands of pounds of perchlorate that were discharged, the use of the site with free water and washing out of these buildings, the use of the McLaughlin pit, that by far the greatest contributor to perchlorate contamination on and off the 160-acre parcel is Pyrotronics?

MR. SOMMER: Objection, vague, compound, assumes facts not in evidence, calls for speculation.

THE WITNESS: As I said I haven't done the allocation. But, based on the available information, it appears that Pyrotronics has probably used a significant portion of the water that was put into the catch basins and they were responsible for the McLaughlin pit.

Stephens Dep. 472:18-473:9.

Given this overwhelming evidence – the presence of massive amounts of perchlorate, sloppy waste management practices, the discharge of thousands of gallons of free water containing perchlorate and TCE into unlined sumps, and the disposal of tons of perchlorate containing waste into a leaking residential swimming pool – there is no legitimate reason for the Advocacy Team and the Rialto Lawyers' refusal to acknowledge that Pyrotronics is the source for the deep soil and groundwater contamination emanating from the 160-acre parcel.

V.
BOTH RIALTO'S AND THE ADVOCACY TEAM'S INACTION RESULTED IN CONTAMINATION OF THE RIALTO-COLTON GROUNDWATER BASIN

A. The City Failed to Enforce a CEQA Mitigation Measure It Imposed on Ken Thompson, Inc. in 1987 Requiring Proper Cleanup and Closure of the McLaughlin Pit

The following facts are undisputed: (1) In 1987 the City adopted a mitigated negative declaration under the California Environmental Quality Act ("CEQA") requiring ("Ken Thompson, Inc.")[17] to properly and lawfully clean up and close the McLaughlin Pit as a condition of his right to grade and redevelop property on the 160-acre parcel for use as a

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[17] The term "Ken Thompson, Inc." herein refers to Mr. Ken Thompson, Ken Thompson, Inc., Western Precast Products, Inc., and Rialto Concrete Products.

concrete pipe manufacturing facility; (2) Ken Thompson, Inc. redeveloped the property but did not comply with this mitigation measure, and unlawfully closed the Pit without the necessary public agency approval by burning the waste, burying the surface impoundment, and paving over it; (3) the McLaughlin Pit is the only confirmed source of perchlorate contamination to the groundwater in Rialto, and the highest concentrations of detected perchlorate in the basin have been found near and under the Pit; and (4) the City has a continuing duty to enforce the mitigation it imposed on Ken Thompson, Inc. in 1987 but has made no effort to do so to the present day. *See, e.g.,* Goodrich Brief, at 96-114; 270-72; *see also* Exs. 30014, 30046, 30047.

Despite the fact that the City itself has had the relevant files for 20 years, Goodrich has now made the City keenly aware of these facts – most recently by letter dated April 30, 2007 requesting that the City enforce the long-delayed mitigated negative declaration against Ken Thompson, Inc. – but the City has refused to take any action. Exs. 30014, 30046.[18] Instead, the City has apparently chosen to ignore the irrefutable evidence linking the perchlorate contamination from the McLaughlin Pit, and the legal responsibility for its remediation,[19] to Ken Thompson, Inc.; conspired with Ken Thompson, Inc. to remove it as a party from the federal court cost recovery litigation initiated by the City; and continued to manufacture a case against Goodrich (and others) as a joint prosecutor in these proceedings despite its total inability to produce any evidence demonstrating that Goodrich's chemicals have reached or threaten the Rialto groundwater.

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[18] In response to Goodrich's letter to the City Attorney requesting that the City enforce the mitigation against Ken Thompson, Inc., Robert Owen, Rialto's City Attorney, claimed that the City just doesn't know how to enforce CEQA mitigation. Mr. Owen did acknowledge in deposition, however, that he is familiar with CEQA, has given general CEQA advice in the past, and is familiar with mitigated negative declarations and mitigation measures under CEQA. Owen Dep., 96:24-99:8. Also, the City's outside counsel, Pillsbury Winthrop Shaw Pitman LLP has substantial experience with CEQA matters. Ex. 30047.

[19] In addition to the mitigated negative declaration, Ken Thompson, Inc. agreed, as a condition of his purchase of property on the 160-acre parcel from Pyrotronics, to fully and properly close and clean up any releases from the McLaughlin Pit. Representations to the Pyrotronics bankruptcy court made by the then-president of Pyrotronics confirm Ken Thompson, Inc.'s agreement to take responsibility for closing the Pit. Ex. 11116.

1. The City Imposed, But Never Enforced, CEQA Mitigation Requiring Ken Thompson, Inc. to Properly Close the McLaughlin Pit

To facilitate Ken Thompson, Inc.'s plan to redevelop Parcels 10 and 11 on the 160-acre parcel for use as a concrete pipe manufacturing facility, the City adopted a Mitigated Negative Declaration under CEQA which included the following mitigation measure:

> Prior to any grading, construction or installation of equipment on Parcel 11, the applicant shall have completed a satisfactory cleanup program of the fireworks residual pit on Parcel 11 and shall have certified the satisfactory completion of that program in a report to the City Engineer. As part of that cleanup program, the applicant shall obtain all necessary permits or approvals from local, state and/or federal agencies as required.

Ex. 11162.

Even Rialto, which has failed to enforce this mitigation for some twenty years now, acknowledges in its brief that it "required mitigation measures [from Ken Thompson, Inc.] to clean-up the Pit" and cites the foregoing text of the measure. Rialto Brief, at 71:26-72:4. But there is absolutely no evidence that Ken Thompson, Inc. (or anyone on his behalf) ever submitted to the City the mandatory certification report regarding closure of the "fireworks residual pit" (i.e., McLaughlin Pit), along with the requisite sign-offs from the County, EPA, DOHS, Regional Board, and SCAQMD. Nor is there any evidence that Mr. Thompson or his agents actually cleaned up the Pit or any of its leaked contents and obtained the proper approvals and sign-offs from the various public agencies as required by the mitigation measure. Instead, Ken Thompson, Inc.'s consultant, William McLaughlin, illegally burned approximately 54,000 pounds (25 tons) of perchlorate-laden waste that remained in the Pit on December 4, 1987, and it appears that the only public agency that signed off on the illegal burn was the Rialto Fire Department. Ex. 10138. Ken Thompson, Inc. then proceeded to grade and redevelop the property without any apparent objection from the City.

In a disingenuous effort to suggest that the City actually enforced the mitigation measure, the City's brief claims that "McLaughlin presented the County's certification letter to Rialto's Planning Department to demonstrate compliance with the conditions of [Mr.

Thompson's approved] development permit." Rialto Brief, at 73:2-4 (emphasis added). But deposition testimony from Steve Van Stockum, the author of the purported "certification letter" – a December 15, 1987 letter from Mr. Van Stockum with San Bernardino County to Mr. McLaughlin – makes clear that the letter was ***not*** intended as the County's sign-off on Mr. McLaughlin's burn, or its authorization to bury the surface impoundment and pave over it. Van Stockum Dep., 152:14-153:3; *see also* Owen Dep., 302:24-304:17 (City Attorney Robert Owen testifying that he had no reason to dispute Mr. Van Stockum's conclusion that the letter was not a "certification" for Mr. McLaughlin to bury the Pit and Ken Thompson, Inc. to construct his facility on top of it). Further, it is undisputed that San Bernardino County simply did not have the authority to authorize closure of a hazardous waste facility such as the McLaughlin Pit, by encapsulation or otherwise. Van Stockum Dep., 46:3-7; 85:15-86:15; 90:5-20; Roberts Dep., 48:18-23; 50:19-25; 51:1-5; Ex. 10141.

In any event, the City certainly has not alleged that all necessary approvals, from EPA, DOHS, Regional Board, and SCAQMD, were obtained in advance of Mr. McLaughlin's illegal burn and the subsequent burial of the ashes and the pit. In this regard, it is telling that Mr. Van Stockum did not sign a December 9, 1987 letter from Mr. McLaughlin which asked for the County's concurrence that "the site is now considered non hazardous" and included a block for Mr. Van Stockum's signature. Instead, Mr. Van Stockum sent his December 15, 1987 letter (the purported "certification letter") asking Mr. Thompson to "provide this Department with a letter from the Rialto Fire Department which explains why this burn was ordered, since no approval to 'treat' the then hazardous waste was granted by the State Department of Health Services." Ex. 20057.

2. The McLaughlin Pit is the Only Confirmed Source of Perchlorate Contamination to the Groundwater in Rialto; and the Highest Concentrations of Perchlorate Detected in Rialto Have Been Found Near and Under the Pit

The City's primary expert, Daniel Stephens, testified that the McLaughlin Pit is the only confirmed source of groundwater contamination in Rialto:

> Question Okay. Let me ask you now, let's go on and let me ask you this, back to Pyrotronics' operations. Okay. When water was leaking

out of the McLaughlin pit, it would go down through the vadose zone to the groundwater, correct?

Mr. Sommer: Objection, assumes facts not in evidence.

Dr. Stephens: Yes.

Mr. Dintzer: Okay. And there's field data, in fact, there's a boring that shows that perchlorate goes literally all the way to the groundwater, right?

Dr. Stephens: Yes.

Question: Okay. It's the only one in the entire site, correct?

Dr. Stephens: The only what?

Question: The only one on the entire site that goes all the way to groundwater, correct?

Dr. Stephens: The only boring that goes to the groundwater table?

Question: No. It's the only boring that goes to the groundwater table that shows a profile of perchlorate all the way?

Dr. Stephens: That's true.

Stephens Dep., Vol. 2, 300:21-301:19.

Deposition testimony from Regional Board staff and members of the Advocacy Team further confirm that the McLaughlin Pit is the only verified source of groundwater contamination in the Rialto/Colton basin, and that by far the highest levels of perchlorate detected at the 160-acre parcel are in the vicinity of and directly below the McLaughlin Pit. For example, Kamron Saremi testified as follows:

Q. Mr. Berchtold and Mr. Thibeault both testified in their depositions, under oath, that the only confirmed source of perchlorate contamination from the 160-acre parcel -- that is, where a boring was put from the surface all the way to the ground, and there was perchlorate seen all the way down -- is the McLaughlin pit. Would you agree with those statements?

A. That's correct.

Q. So there's concurrence in the water board staff that the only confirmed source as of this date is the McLaughlin pit; correct?

A. Source that connects from the surface to the groundwater with continuous soil sampling.

Q. Correct?

A. Yes.

Q. And you'd agree that unquestionably, the most -- the highest concentrations by far of perchlorate that have been found in the subsurface soil are immediately beneath that McLaughlin pit; is that correct, sir?

A. Thus far.

Saremi Dep., 263:19-264:15.[20] Gerard Thibeault also testified that that McLaughlin Pit is the only confirmed source of perchlorate contamination to groundwater at the 160-acre parcel. Thibeault Dep., 378:19-379:5. And Robert Holub likewise conceded that the McLaughlin Pit is a "confirmed source" of contamination on the 160-acre parcel. Holub Dep., 1008:1-6.

Kurt Berchtold confirmed in his deposition that "the highest concentration of perchlorate found adjacent to a source [on the 160 acre parcel] were the samples taken from the McLaughlin Pit." Berchtold Dep., 149:23-150:3. Moreover, samples taken from two soil borings drilled at the McLaughlin Pit in March 2006 (with the approval of Regional Board Staff and USEPA) revealed the highest soil concentrations of perchlorate throughout the vadose zone (i.e. from the ground surface to the groundwater) ever found in the Rialto/Colton Groundwater Basin; ranging from 205,000 u/kg at 20 feet to 1,800 u/kg at 400-440 feet. Ex. 11221., at App. A, Table A2, page A-5. And in April 2006, sampling taken from a monitoring well immediately downgradient of the McLaughlin Pit, which was installed by Goodrich, contained 10,000 ppb of perchlorate, the highest concentration ever recorded in any groundwater sample in the Rialto/Colton Groundwater Basin. *Id.* at App. A, Table A6, page A-16. Goodrich has submitted expert opinion with supporting calculations establishing that perchlorate released from the McLaughlin Pit first reached the Rialto groundwater in 1980 (approximately six years after the Pit began to leak). Kresic Dec., ¶¶ 29 and 45.

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[20] Mr. Saremi also acknowledged it was undisputed that the McLaughlin Pit is a past and present source of groundwater contamination in the Rialto/Colton aquifer. Saremi Dep., 591:19-23.

Since it is undisputed that the McLaughlin Pit is the only confirmed and major source of perchlorate contamination to the Rialto/Colton groundwater from the 160-Acre Parcel, Rialto's failure to enforce pre-existing mitigation measures requiring Ken Thompson, Inc. – to clean up the contamination is very troubling.

3. Had the Pit Been Properly Closed By Ken Thompson, Inc., the Only Confirmed Source of Groundwater Contamination With Perchlorate in Rialto Would Have Been Addressed Twenty Years Ago

As noted, soil data recently taken from beneath the McLaughlin Pit shows the highest levels of perchlorate contamination anywhere in the Rialto/Colton area and pinpoints the McLaughlin Pit as the key source of the groundwater contamination in the Eastern portion of the Basin. Rialto's brief even notes that "substantial levels of perchlorate have been detected in the soil beneath the McLaughlin Pit at nearly all testing locations and depths." Rialto Brief, at 70:15-16. Notably, despite letters from the Regional Board in 1985 and 1986 specifically requiring that the McLaughlin Pit monitoring and closure comply with the then existing Subchapter 15 regulations (Subchapter 15, Title 23, Chapter 3 of the California Administrative Code), Mr. McLaughlin simply ignored these regulations. Exs. 20039; 10385; 20034. As detailed in Goodrich's Opening Brief, Subchapter 15, which was adopted in 1984, comprehensively regulates the discharge of waste to land. Ex. 20072. Subchapter 15 regulations would have required, *inter alia*, monitoring to determine if the Pit had leaked (this monitoring was never performed); and, if leaks were detected, sampling for perchlorate (among other listed chemicals) in the groundwater would have been required.

Of course, in order to comply with the City's mitigation measure, Mr. Thompson would have needed the Regional Board's approval to close the McLaughlin Pit; and the Regional Board would not have been able to lawfully approve the closure without adhering to the Subchapter 15 regulations (which it was mandated to enforce). If Subchapter 15 had been adhered to, leaks would have been discovered, and perchlorate sampling beneath the

McLaughlin Pit would have detected massive quantities of perchlorate in the soil[21]; and steps to remediate the contamination could have been initiated in 1987. Instead, the pit has remained without any formal closure steps being taken, or approved, for decades.

4. The City Has Authority To Compel Ken Thompson, Inc. to Cleanup The McLaughlin Pit Contamination, But Has Chosen Not To

Under CEQA, the City still has the ability, indeed the duty, "to take steps to ensure that any mitigation measures will actually be implemented as a condition of development, and not merely adopted and then neglected or disregarded." *Napa Citizens for Honest Gov't v. Board of Supervisors,* 91 Cal. App. 4th 342, 358-59 (2001) (emphasis added) (citing *Federation of Hillside & Canyon Ass'ns v. City of Los Angeles,* 83 Cal. App. 4th 1252, 1260-61 (2000)). Having placed conditions on Ken Thompson, Inc.'s ability to develop the property, "the city cannot simply ignore them. Mitigating conditions are not mere expressions of hope . . ." *Lincoln Place Tenants Ass'n v. City of Los Angeles,* 130 Cal. App. 4th 1491, 1508 (2005); *see also Federation of Hillside & Canyon Ass'ns v. City of Los Angeles,* 83 Cal. App. 4th 1252, 1260-61 (2000); Cal. Pub. Res. Code § 21002.1(b) ("Each public agency shall mitigate or avoid the significant effects on the environment of projects that it carries out or approves whenever it is feasible to do so."). Rialto has a legal duty to require that Ken Thompson, Inc. comply with the 1987 mitigated negative declaration today.

Following through on enforcement of the mitigation imposed on Ken Thompson, Inc. would promptly require Ken Thompson, Inc. to initiate a cleanup of the contamination caused by the McLaughlin Pit and its ultimate, and final, legal closure under applicable law. It would be a relatively inexpensive way for the City to obtain a prompt evaluation of the McLaughlin Pit's contribution to the Rialto groundwater contamination and would identify at least one party with the clear responsibility to clean it up. It is thus inexplicable that the City has not even sent Ken Thompson, Inc. a letter directing it to comply with the mitigation

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[21] As the City's brief notes, neither the limited soil sampled by McLaughlin nor the ash after the burn were analyzed for perchlorate. *See, e. g.*, Rialto Brief, at 72:28-73:1 ("**However, the ash has not tested for perchlorate and there is no evidence the ash was removed from the site.**") (Original Emphasis).

measure – which would cost next to nothing – but has already spent, by the City Attorney's estimation, at least **$12-15 million in legal fees** seeking to prosecute others, such as Goodrich, even though it is undeniable that Goodrich has absolutely no responsibility for the McLaughlin Pit release. Owen Dep., 231:3-21; 326:14-21.

Strangely, the City *did* initially sue Ken Thompson, Inc. in its complaint filed in federal court, but dismissed Ken Thompson, Inc. from the action when the City filed its First Amended Complaint. E-mail traffic indicates that Mr. Thompson's representatives requested this dismissal from the City and that City officials including the City Attorney willingly obliged in that request. Ex. 11218. At his deposition, Robert Owen, the City Attorney for Rialto, could give no explanation for why the City initially chose to sue Mr. Thompson and then, simply based on his request, dismiss him from the lawsuit without requiring any effort by Mr. Thompson to comply with the law and properly close the McLaughlin Pit:

> Question: So if I just ask you that question straight up, has Mr. Thompson or any of his businesses, to the best of your knowledge, Mr. Owen, provided any assistance to the City of Rialto to help out in the perchlorate contamination, what would your answer be?
>
> Mr. Owen: Not to my knowledge. They may have spoken with our lawyers, but – No, nothing comes to mind. Any assistance.[22]

Owen Dep., 48:9-16.

Given the plain culpability of Ken Thompson, Inc. in the illegal closure of the McLaughlin Pit, Ken Thompson, Inc.'s unambiguous legal duty to cleanup the McLaughlin Pit release, and the undisputed and major contribution of the McLaughlin Pit to the perchlorate contamination in Rialto, the City's failure to enforce the CEQA mitigation

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[22] Apparently, there was some rationale for the City dismissing Mr. Thompson from the lawsuit without requiring him to do anything, but Mr. Owen refused to disclose it in his deposition, claiming that it was "confidential" and something that he had communicated to the City Council in closed session. ***Owen Dep., 64:8-14 (Q: . . . And I want to be real clear, and we'll move on. You are not going to tell us today what the rationale was for dismissing Ken Thompson, Inc., Inc., the business, from the City of Rialto lawsuit three years ago; right? A. That's correct.).***

measure it imposed against Ken Thompson, Inc., or seek redress from Ken Thompson, Inc. in its federal litigation, must be viewed with the deepest suspicion. The City has had the knowledge and ability to take this simple step for years, indeed decades, and has never done so.

As of the date of the submission of this Rebuttal Brief, the City has taken no action in response to Goodrich's April 30, 2007 letter to the City Attorney, Robert Owen, which detailed the foregoing issues and asked the City to advise Goodrich if it intended to enforce the 1987 CEQA mitigation measure against Ken Thompson, Inc.

B. The Regional Board's Mismanagement of the McLaughlin Pit Resulted in Contamination of the Rialto/Colton Basin

The Advocacy Team has doggedly pursued Goodrich and the other alleged dischargers in this and prior proceedings, but it has ignored the only confirmed source of perchlorate contamination in the Rialto/Colton Basin, the McLaughlin Pit. This is not, however, the first time that the Regional Board has ignored the McLaughlin Pit; the Regional Board's failure to require the institution of a groundwater monitoring program for the pit in 1985 and it's failure to require proper closure of the pit in 1987 have resulted in significant contamination in the Rialto area. To this day, the pit has not been properly closed in compliance with Subchapter 15. *See* Goodrich Brief, at 85-114 (describing violations of subchapter 15); *see also* Lass Dep., 47:12-22 (because the closure of the McLaughlin Pit was not supervised by a registered civil engineer or a certified engineering geologist it is not considered closed). And the Advocacy Team has no idea how much perchlorate from the McLaughlin Pit has gotten into the groundwater since 1987, when the Advocacy Team failed to require closure of the pit under Subchapter 15. Berchtold Dep., 524:11-525:5. Goodrich's Opening Brief, at pages 85 through 114, specifically addressed the many failures of the Regional Board in regulating the McLaughlin Pit; this section will address the new arguments raised in the Advocacy Team's brief and newly discovered evidence relating to the McLaughlin Pit.

1. The Regional Board's Failure to Comply with Subchapter 15

As an existing surface impoundment in 1985-87, the McLaughlin Pit's operator, Pyrotronics, was required to submit a monitoring program by May 1985, as the Executive Officer of the Regional Board stated in the April 1985 letter to Pyrotronics. Ex. 10385; *see* Ex. 20072 (Title 23 Cal. Admin. Code Section 2510(d)(1) (1987). That program was to have included detection monitoring designed to sample the unsaturated zone and the groundwater beneath the waste management unit and look for evidence of any leaking of constituents from the waste management unit. *See, e. g.*, Ex. 20072 at §§ 2550(b) & 2556; Lass Dep., 36:11-13 (Ms. Lass, head of the Subchapter 15 Division of the Regional Board in 1987, stated that the installation of groundwater monitoring wells was a "primary thrust of the new [Subchapter 15] regulations."). Because the Regional Board was aware that potassium nitrate and potassium perchlorate were contained in the McLaughlin Pit, proper detection monitoring designed for the pit would have certainly included testing for those constituents. *See* Ex. 10428 (Pyrotronics' September 24, 1971 Report of Waste Discharge) (indicating that potassium nitrate will be disposed of in the Pit); Ex. 11115 (February 6, 2004 Section 13267 Order to Ken Thompson, Inc.) (acknowledging that the Regional Board was in possession of documents demonstrating that large quantities of potassium perchlorate were used in Pyrotronics' operations).

In 1985, however, the Regional Board did not require the submittal of a groundwater monitoring program from Pyrotronics because, according to the Advocacy Team's Brief, Pyrotronics sent a letter to the Regional Board indicating that it was in the process of getting permission to burn the waste stored in the McLaughlin Pit. Advocacy Team Brief, at 89. But the Subchapter 15 regulations clearly require that "the regulations under this article [Water Quality Monitoring for Classified Waste Management Units] apply during the active life of the waste management unit (including the closure period)." Ex. 20072 at §§ 2550(d), 2554(a), 2580(a); *see also* Lass Dep., 46:9-47:10 (confirming that waste management units must comply with monitoring requirements throughout closure and post closure maintenance periods). As such, Pyrotronics' expressed intent to close the McLaughlin Pit in

no way satisfied Subchapter 15's monitoring requirements. The Regional Board had an obligation to enforce the Subchapter 15 regulations and require Pyrotronics' submission of a groundwater monitoring report, and it's failure to do so permitted the McLaughlin Pit to continue leaching perchlorate and other contaminants into the Rialto/Colton Basin. Indeed, the type of contamination that resulted from the Regional Board's failure to require a monitoring program at the McLaughlin Pit is the very reason why three separate sections in Subchapter 15 were mandated with the monitoring requirements throughout and after closure. Ex. 20072 at §§ 2550(d), 2554(a), 2580(a).

The Advocacy Team also seems to claim that because the waste discharge requirements for the McLaughlin Pit adopted in 1971 and 1978 did not mention perchlorate, the Regional Board had no obligation to test for perchlorate as part of either a monitoring program for the pit or the closure of the pit. Advocacy Team Brief, at 90. This could not be further from the truth because the Regional Board was required to reexamine the waste discharge requirements for the McLaughlin Pit in light of the adoption of Subchapter 15. Ex. 20072 at § 2510(d), 2591. Surely, such a reexamination in light of Subchapter 15 would have resulted in the inclusion of the many hazardous constituents, including perchlorate, known to be stored and disposed of in the McLaughlin Pit. *Id.* at § 2556(a)(2). The Regional Board's failure to review the 1978 waste discharge requirements for the pit does not excuse it from requiring Pyrotronics to institute a detection monitoring program, rather it is yet another example of the Regional Board's failure to enforce Subchapter 15.

Moreover, the Advocacy Team's assertions that in 1987 it could not have tested for perchlorate and that "perchlorate was not known at the time to regulatory agencies, or others, as a threat to the beneficial uses of groundwater" are false. Advocacy Team Brief, at 90. Subchapter 15, itself, requires, as part of a verification monitoring program, that "[f]or Class I waste management units, dischargers shall analyze samples from all monitoring points for all constituents identified in Appendix III of this subchapter," and potassium perchlorate is expressly listed in Appendix III. Ex. 20072 at § 2557(e). The inclusion of perchlorate in Appendix III indisputably proves that (1) perchlorate could be detected in

samples from monitoring wells and (2) that perchlorate was a contaminant that regulators, including the State Board, considered a threat to groundwater.

In 1985, the requirements for the closure of surface impoundments, like the McLaughlin Pit, were set forth in Section 2582. Those requirements mandated complete removal of all liquids in the surface impoundment, *plus* any remaining "residual wastes, including sludges, precipitates, settled solids, and liner materials contaminated by wastes." Ex. 20072 at § 2582(b)(1). A proper closure under Subchapter 15 would have included sampling to confirm that there was no remaining contamination under the liner of the McLaughlin Pit, and if contamination was detected, Pyrotronics or Ken Thompson, Inc. would have been required to establish a corrective action program to investigate and remediate that contamination, including groundwater contamination. Ex. 20072 at § 2558. The regulations further mandated a showing of proper financial assurance by the discharger to complete its closure and post-closure obligations. But the Regional Board did nothing to make a claim against Pyrotronics or Ken Thompson, Inc. or otherwise obtain any financial assurances for cleanup of the contamination from the McLaughlin Pit. Moreover, closure of the McLaughlin Pit was required to be done under the supervision of a "registered civil engineer or a certified engineering geologist", and Ms. Lass recently testified that if it was not closed under the supervision of a "registered civil engineer or a certified engineering geologist", ***it would not have been considered closed***. Ex. 20072 at § 2580(b); Lass Dep., 47:12-22.

None of the above requirements were satisfied by Pyrotronics or Ken Thompson, Inc. Instead, on December 4, 1987 after taking one soil sample from beneath the pit, Mr. McLaughlin, Ken Thompson, Inc.'s consultant, set fire to pit. *See* Ex. 10143 (12/9/87 letter from McLaughlin to Van Stockum).[23] Ultimately, the contaminated ash from the December

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[23] The Advocacy Team claims that "[i]n September 1987, the contents of the pit were burned, the ashes hauled away, and the pit was covered." Advocacy Team Brief, at 90. Like most claims in the Advocacy Team Brief, the Advocacy Team provides no citation for this statement, and all evidence discovered to date points to a December 4 burn date

[Footnote continued on next page]

4 burn was left in place and buried. *See id.* Proper monitoring and closure under Subchapter 15 would have readily revealed what the current site investigations have only recently discovered –the McLaughlin Pit leaked, and leaked substantially, and that it caused groundwater contamination with perchlorate and other compounds.

On May 7, 2007, counsel for Goodrich sent a detailed letter to Mr. Thibeault and the members of the Regional Board demanding, pursuant to Government Code Section 815.6, that the McLaughlin Pit be properly closed once and for all. Ex. 30009. On May 30, 2007, Goodrich sent a follow up letter to Mr. Thibeault and the members of the Regional Board indicating that the deposition testimony of Ms. Lass, the former head of the Subchapter 15 division at the Regional Board, had confirmed Goodrich's understanding that the monitoring and closure of the McLaughlin Pit failed to comply with Subchapter 15. Ex. 30030. As of the filing of this Rebuttal Brief, Goodrich has not received a response from the Regional Board. And Mr. Berchtold testified in his recent deposition that even after receiving Goodrich's letter, "we have not determined what, if anything, to do related to the letter or related to the McLaughlin pit." Berchtold Dep., 375:3-376:25. After twenty years, why not?

2. The Advocacy Team's Failure to Prosecute the Parties Responsible for the McLaughlin Pit

In addition to the Regional Board's failure to properly monitor and close the McLaughlin Pit, the Advocacy Team has failed to pursue Pyrotronics and Ken Thompson, Inc. as parties responsible for the perchlorate contamination in Rialto. The Regional Board never sought to require Pyrotronics, either before or after its 1986 bankruptcy, to close the pit or remediate any of the contamination that emanated from the pit. Goodrich Brief, at 89-90. And in July of 2005, after issuing a 13267 order the year before, the Advocacy Team expressly relieved Ken Thompson, Inc. of any duty to investigate the contamination coming from his property, even though Ken Thompson, Inc. had expressly agreed to close the McLaughlin Pit and assumed responsibility for any releases therefrom. Goodrich Brief, at

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[Footnote continued from previous page]
and the ash being left in place. *See* Ex. 10143 (12/9/87 letter from McLaughlin to Van Stockum).

159-61; *see also* Berchtold Dep., 517:19-518:1 (testifying that at least three members of the Advocacy Team were present at the meeting with Ken Thompson, Inc. that preceded the Regional Board's release of Ken Thompson, Inc.'s obligations under its 13267 order).

The Regional Board's failure to prosecute these two obviously responsible parties not only violates common sense, but it also violates a September 24, 2002 agreement between Goodrich and the Regional Board. From January 2003 to January 2005, the Regional Board agreed to make good faith efforts to prosecute responsible parties in connection with the contamination in the Rialto/Colton Groundwater Basin. Owen Dep., Ex. 4295 (September 24, 2002 agreement between Goodrich and Regional Board) at 2. Mr. Berchtold testified that no efforts were taken to enforce the Advocacy Team's 2004 investigative order against Ken Thompson, Inc.:

> Q. Why, during the term of this agreement, was Mr. Thompson not required to conduct any investigation in connection with the McLaughlin pit as required in the 13267 letter that you sent?
>
> A. I don't recall.

Berchtold Dep., 529:2-6. Mr. Berchtold also testified that he didn't know if Ken Thompson, Inc. had been forced to spend a single penny on the investigation and cleanup of the McLaughlin Pit. Berchtold Dep., 523:24-524:10, 525:6-18, 527:13-528:7.

Currently, the Regional Board recognizes that it has the power to require Ken Thompson, Inc. to investigate and remediate the McLaughlin Pit:

> Q. What current responsibilities does the regional board have with respect to overseeing a proper closure of the McLaughlin pit under Subchapter 15?
>
> A. I think we have indicated to the owner of the property that until such time that the work that we believe needs to be done on the property is not complete in our satisfaction, we have that opportunity to come back and ask them to do that work. And I can't tell you what that work is going to include, investigation, cleanup. I cannot tell that.

Saremi Dep., 1241:21-1242:5. But the Regional Board has had the opportunity to require Ken Thompson, Inc. to conduct investigation and cleanup since 1987; so the question is: when does the Regional Board plan on finally doing something to remedy the contamination from the McLaughlin Pit?

The Regional Board continues to refuse to pursue Ken Thompson, Inc., the party that is statutorily and contractually liable for the cleanup of the McLaughlin Pit and now the Rialto/Colton Basin. The reason for this is simple: the Regional Board does not want to concede that the McLaughlin Pit is a major source of contamination in the Rialto/Colton Basin for which the Advocacy Team is responsible because that would exculpate Goodrich, one of the parties that it has chosen, without any justification, to pursue for the last five years.

C. The Discovery of a Significant Release of Perchlorate at the Former Broco/Denova Site On The 160-Acre Parcel Has Been Ignored By The Advocacy Team and Suppressed by the City

Given its charge to investigate contamination in the Rialto-Colton groundwater basin and prepare a cleanup and abatement order compelling responsible parties to remediate that contamination, the Advocacy Team should naturally keep itself apprised of all perchlorate investigations conducted by other public agencies in Rialto, and obtain and utilize relevant evidence from any such investigations in crafting a CAO and prosecuting the instant proceedings. Likewise, because the City is jointly prosecuting the alleged dischargers as part of the "Rialto Prosecutorial Team" formed with the Advocacy Team, (*See generally* Ex. 30010), the City bears a similar responsibility.

But it is clear that the Advocacy Team and the City have each failed in their duty to properly and vigorously investigate a very significant perchlorate release discovered by DTSC in April 2006 on the southeast corner of the 160-acre parcel, at the former Broco/Denova site; a detection that Advocacy Team members and the City's hydrogeologist acknowledge shows "significant" concentrations of perchlorate in soil samples taken from the 160-acre parcel. The Advocacy Team and City have also failed to notify the Hearing Officer of this release in connection with these proceedings. While the Advocacy Team's failure to respond appropriately to this discovery may just be the result of negligence or lack of diligence, recently discovered e-mail communications from the City's counsel establishes that the City has deliberately chosen not to pursue the substantial perchlorate contamination discovered at the former Broco/Denova site because doing so might impair its case against

Goodrich and other alleged dischargers. Such behavior is highly inappropriate in proceedings such as these and only highlights the Advocacy Team/City's inability to prove their case and their associated willingness to overlook obvious sources of contamination and responsible parties in the effort to cover up their historical failures.

1. DTSC's Investigation of the Former Broco/Denova Site in April 2006 Detected Significant Concentrations of Perchlorate in the Soil

From approximately 1981-1999, Broco, Inc. maintained corporate offices and manufacturing operations on a 9.75 acre parcel located at 2824 North Locust Avenue, on the south-east portion of the 160-acre parcel. Broco Environmental, Inc. ("BEI") also maintained corporate offices and operated a hazardous waste testing laboratory at this site from approximately 1992-1999. In 1999, Denova Environmental Inc. took over BEI's office/laboratory, and operated at the site until 2002, when Denova's authority to operate a hazardous waste facility was terminated by DTSC.

An April 2006 investigation of the former Broco/Denova facility on behalf of DTSC uncovered exceedingly high levels of perchlorate contamination in the shallow soil, in a location directly downgradient of the 160-acre parcel, as reflected in a June 23, 2006 report prepared by DTSC's environmental consultant, Kleinfelder, Inc. Berchtold Dep., Ex. 4350. Kleinfelder detected perchlorate in 30 of 34 soil samples it collected, and in concentrations as high as ***183,000*** µg/kg and ***65,800*** µg/kg. *Id.*[24] As part of its investigation, Kleinfelder also discovered a waste disposal pit at the former Broco/Denova facility, which measured 30-35 feet wide and 6-7 feet deep, and which, according to an email written by the City's counsel, was located well east of any disposal pits used by Goodrich. Ex. 30010 at DBS000413-414. The investigation further revealed a "white-gray crust" forming in the sampling trench which correlated to higher perchlorate concentrations. Based on

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[24] These elevated levels of perchlorate in soil rival the levels found beneath the McLaughlin Pit (in the 200,000 µg/kg range) and make the Broco disposal pit the second most contaminated source of groundwater contamination in the Rialto Colton Basin. *See* Ex. 11221.

Kleinfelder's report, there can be no doubt that massive quantities of perchlorate were discharged to the ground at the former Broco/Denova site.

2. The City's Counsel Has Manipulated Its "Investigation" To Suppress Evidence Exculpating Goodrich From Responsibility For The Perchlorate Contamination

On February 24, 2007, Jenny Sterling, a hydrogeologist retained by the City to assist with its "Roadmap" to investigate and remediate Rialto's perchlorate contamination, sent an e-mail to several lawyers for the City (and others) with the Subject line - "New information - Goodrich/Black & Decker Site." Ex. 30010 at DBS000413-414. According to Ms. Sterling, information that she had just received from DTSC "indicates that a *significant release of perchlorate has occurred from a former disposal pit at [the Broco/Denova] site and presents a threat to groundwater." Id.* Ms. Sterling proceeded to describe the extremely high perchlorate concentrations detected in soil sampling done by Kleinfelder in April 2006[25]; the discovery of a disposal pit at the Broco site; and further noted that the sampling trench was open during the heavy rains of 2004-2005, when more than 27 inches of rain fell in the area, which "increased the likelihood of perchlorate impacts to deep soil." *Id.* The e-mail further noted that neither the lateral nor vertical extent of the perchlorate had yet been determined.

Chris Carrigan, counsel for the City, responded to Ms. Sterling's e-mail the next day and explained to Ms. Sterling that the primary purpose of the City's investigation was not to make a good faith effort to uncover the actual source of perchlorate contamination in Rialto, but rather to manufacture a liability case against Goodrich and other Alleged Dischargers. Mr. Carrigan wrote:

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[25] Ms. Sterling wrote: "Investigations in May 2005 and April 2006 found perchlorate was more widespread than previously thought. A shallow disposal pit at least 35 feet wide and 7 feet deep was discovered. Perchlorate was detected (at concentrations up to 65,800 µg/Kg) in 26 of 28 soil samples collected in and around the original trench. A white-gray crust was reported forming on the north and south walls of the main trench and correlating to the higher perchlorate concentrations. Samples of a white granular powder and a bluish substance were collected from one of several shallow potholes around the trench and perchlorate was detected at 58,100 µg/Kg and 58,600 µg/Kg, respectively." Ex. 30010 at DBS000413-414.

> One thing to keep in mind about Broco, Broco Environmental and Denova is that, as far as we know, they are all judgment proof. Another is that, as far as we know (and we have looked closely) DTSC has tapped all available insurance assets. **If this pit was used by Broco/Denova in the time frames it operated at 2824 Locust, then Goodrich, WCLC and the fireworks occupants are all out of the picture on liability . . . leaving the current owner as the only potentially viable financial entity for this pit** . . . Goodrich witnesses have consistently located its disposal pits on aerial photographs and site diagrams further west. Obviously, we need to account for this perchlorate and its remediation in the Roadmap, **but we should also be thinking of who the responsible party is/should be, and what might happen if the costs of remediating this pit are "orphaned" because there is no solvent responsible party.**

Ex. 30010 at DBS000413-414 (emphases added).

So while Ms. Sterling's e-mail began by explaining that the recent discovery at the former Broco/Denova site "highlights the nature of the [Roadmap] as a *developing position that will change as new information is obtained*"; Mr. Carrigan made sure to remind Ms. Sterling that the City's position had actually been pre-determined, and that any information obtained would need to be manipulated or suppressed as necessary to ensure that Goodrich and other alleged dischargers appeared liable. *Id.* Needless to say, this type of results-based "investigation"[26] on behalf of a public body and self-styled "co-prosecutor" is totally inappropriate, especially in light of the magnitude of the perchlorate contamination in Rialto and the very serious nature of the allegations being raised here.

3. The Advocacy Team Didn't Bother to Monitor DTSC's Investigation of the Former Broco/Denova Site, and Key Members of the Advocacy Team Weren't Even Aware That Extremely High Levels of Perchlorate Had Been Detected Until Notified By Goodrich's Counsel In Deposition

While the City's lawyers were aware of the major perchlorate detections at the former Broco/Denova site by at least February 24, 2007, when Ms. Sterling sent her above-

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[26] Other evidence discovered so far demonstrates the biased nature of the City's investigation. For example, an e-mail written by City Attorney Robert Owen on September 28, 2006 explained that as part of the City's "PR efforts" "we need a map of the plume, or at least what WE believe the plume to be. I understand that there are concerns over preparing and disseminating one, but we need to figure out a solution and get one ready for all to see asap . . . As a suggestion, perhaps we could put question marks on the map where we believe the data is inadequate to reach firm conclusions. This would make the point that more characterization needs to be done, and it might actually (and appropriately) scare people into realizing this fact." Ex 30010 at DBS00390.

referenced e-mail, it appears that the City did not share this information with its joint-prosecutors at the Advocacy Team; key members of which weren't aware of the Kleinfelder report's findings until May 2007 when they were shown the report for the first time during their depositions. Mr. Berchtold testified at deposition on May 10, 2007 that he had never seen Kleinfelder's June 23, 2006 report, (Berchtold Dep., 560:4-24), and Ms. Sturdivant also testified that she had not seen the report before her deposition on May 12, 2007. Sturdivant Dep., 1517:3-12. It is deeply disturbing that Advocacy Team members were not aware (nor made aware by their "co-prosecutor") of major perchlorate detections on the 160-acre parcel that were recorded more than a year ago, on behalf a sister public agency, since it is the Advocacy Team that has been assigned the critical task of investigating Rialto's perchlorate contamination and prosecuting potentially liable parties. This gross lack of diligence is made worse by the fact that Mr. Berchtold and Ms. Sturdivant were both aware that the DTSC was investigating the former Broco/Denova site, and that the DTSC, also part of California EPA, would readily have provided information regarding its investigation to the Regional Board. Berchtold Dep., 559:20-560:3; 567:13-23; Sturdivant Dep., 1521:5-20. Apparently, the Advocacy Team has chosen to ignore the documented presence of significant areas of perchlorate discharges, which is quite contrary to the written commitments they have made to the various stakeholders.

Upon reviewing the Kleinfelder report, both Mr. Berchtold and Ms. Sturdivant acknowledged that the perchlorate concentration in the soil samples taken from the former Broco/Denova site were very high. Berchtold Dep., 562:21-563:4; Sturdivant Dep., 1519:9-12 (noting soil concentrations were "significant"). It is therefore troubling that the prosecution still has not raised this perchlorate discovery with the Hearing Officer, since it is certainly exculpatory evidence for Goodrich and the other Alleged Dischargers and bears directly on any determination of culpability. When asked why this information had not been presented to the Hearing Officer, Mr. Berchtold could only testify on May 10, 2007 that "I haven't told the hearing officer because I didn't know about this information." Berchtold Dep., 568:14-19; *see also* Sturdivant Dep., 1521:21-1522:2 (Ms. Sturdivant testifying that

she didn't know if the information should be presented at the hearing because the Advocacy Team didn't know about it). Since the Advocacy Team is now clearly on notice of this perchlorate release, there is no reason why this information will not be included in its presentation at the hearing of this matter.

D. Regional Board's Failure to Properly Investigate the Potential Effects of Robertson's Silt Ponds

The Regional Board's failure to monitor and close the McLaughlin Pit is not the only example of Regional Board neglect that resulted in contamination of the Rialto/Colton Basin. As discussed in detail in Goodrich's Opening Brief at pages 149 to 154, in 1999, the Regional Board approved the construction of massive unlined silt ponds in the bunker area formerly occupied by Broco, several fireworks companies, and the United States. These silt ponds were essentially washwater disposal ponds for the Robertson's Ready Mix (a contractor of San Bernardino County) gravel washing operation. Lass Dep.[27], 109:4-6. Robertson's would wash the gravel from the excavation of the nearby Mid-Valley Landfill Expansion, and the water from the gravel washing would then go into these unlined silt ponds, which had a capacity of 13 million gallons. Lass Dep., 109:7-110:4. Once in the ponds, water was free to percolate through the bottom of the pit and into the groundwater below. Lass Dep., 117:15-118:11; Ex. 20083.

Although the Regional Board was aware of the likelihood that the former operations in the bunker area resulted in perchlorate contamination of the surrounding soil, the Regional Board did not require the County of San Bernardino or its contractor, Robertson's Ready Mix, to conduct any soil sampling on the proposed site specifically for the siting of the unlined silt ponds. Thus, Robertson's was permitted to construct its silt ponds in the bunker

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[27] Dixie Lass, a Regional Board employee, and the key Regional Board staffer who approved the siting of the silt ponds in 1999, was deposed on May 17, 2007. Lass Dep., 90:20-91:12, 113:6-23. Her deposition had originally been noticed for April 6, 2007, but then by letter, her counsel advised that because of her physician's concerns about her health, her deposition would have to be put off. As a result, neither Goodrich nor any of the other parties had an opportunity to depose Ms. Lass before the April 17, 2007 date for filing their opening briefs.

area, and the massive volume of water stored in these unlined ponds was able to mobilize significant amounts of perchlorate to the groundwater. Goodrich Brief, at 149-52. This section supplements Goodrich's Opening Brief on this subject with evidence that was only made available after the submission of Goodrich's Opening Brief.

1. The Regional Board Knew of the Potential Perchlorate Contamination in the Bunker Area

By September of 1997, Dixie Lass, the Regional Board staff member with ultimate responsibility for approving the construction of the silt ponds, was aware of the prior uses of the bunker area on which the unlined silt ponds would be constructed, as she was intimately involved in the approval of the nearby Mid-Valley Landfill Expansion. Lass Dep., 100:11-23, 113:6-23. Ms. Lass testified that the proposed site for the silt ponds was "part of the old . . . bunker area", that the bunker area was used for "the storage of everything from fireworks to munitions", and that such information was widely known among Regional Board staff. Lass Dep., 117:7-13, 140:9-141:9. Indeed, "[i]t was common knowledge that it was a bunker area and common knowledge that there was a potential for perchlorate to be present." Lass Dep., 147:12-148:1. Further, Ms. Lass was aware that Broco Environmental had been operating in the bunker area, and that its operations were a likely source of perchlorate contamination in the area. Lass Dep., 100:1-23.

It was also well known that the bunker area was located directly above high quality groundwater that needed to be protected. Ms. Lass testified that she was initially opposed to the expansion of the Mid-Valley Landfill in the bunker area because "[t]hat expansion was going to overlie high quality groundwater, a drinking water source, and my concern was that the landfill would have an impact on water quality and I didn't want that to happen." Lass Dep., 96:3-11. As such, Ms. Lass and the Regional Board were aware that constructing the silt ponds in the bunker area could have negative consequences due to the likely presence of perchlorate in the surrounding soils and the groundwater directly below the bunker area.

2. The Regional Board's Approval of the Silt Ponds

In May of 1999, Robertson's presented Ms. Lass with a letter describing its proposal

to construct silt ponds in the bunker area and a May 1999 Geologic Associates report in support of the proposed silt ponds. Ex. 20083 (May 20, 1999 letter from C. Phillips to D. Lass with attachment). This letter and report made clear that as part of the operation of the silt ponds a certain amount of water was expected to percolate through the bottom of the ponds. *Id.*; Lass Dep., 117:15-118:11. And Ms. Lass testified that she was personally concerned about the location of the proposed silt ponds because they were overlying the bunker area and adjacent to the Mid-Valley Landfill. Lass Dep., 148:13-149:1. As such, Ms. Lass realized that it was vital that the Regional Board consider whether perchlorate salts were present in the soil underneath the silt ponds before deciding whether to approve the unlined silt ponds. Lass Dep., 126:7-13.

Despite her admitted concerns, however, Ms. Lass did not require the County or Robertson's to conduct any soil sampling specific to the proposed ponds.[28] Lass Dep., 161:9-12. Instead, she chose to rely on the soil samples described in the June 1998 Final Report Perchlorate Investigation Northeast Expansion Area Mid-Valley Sanitary Landfill ("1998 Perchlorate Report"), which the County of San Bernardino had submitted in support of its 1998 expansion of the Mid-Valley Landfill. Lass Dep., 151:14-152:10, 155:3-16, 157:15-22 (Ms. Lass made the decision to rely exclusively on the June 1998 Report completed a year before she had even heard of the silt pond project and with sampling that was not planned for the silt ponds); Ex. 11076. But this 1998 Perchlorate Report only addressed whether there was perchlorate in the soil at five discrete locations on the site of the proposed Mid Valley Landfill Expansion, not whether there was perchlorate contamination at the proposed site of Robertson's silt ponds. Lass Dep., 150:24-151:12, 153:17-154:12, Ex. 11077 (figure 3-1 Boring Location Map from June 1998 Report) [Ex. 46242 to lass], *see also* Lass Dep., 154:10-12 (Ms. Lass was not aware of the proposed silt ponds until a year after receiving the 1998 Perchlorate Report).

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[28] Ms. Lass also testified that she does not recall speaking to anyone from the Regional Board's Perchlorate Unit (the Unit that handled all perchlorate related issues) during the approval process for the development of the silt ponds. Lass Dep., 114:2-12.

The 1998 Perchlorate Report was in no way a suitable analysis of the presence of perchlorate on the site of the proposed unlined silt ponds. In fact, Ms. Lass testified that none[29] of the five borings from which soil samples were taken in connection with the June 1998 Report were located within the area of the proposed silt ponds. Lass Dep., 169:17-170:2; *see also compare* Ex. 11077 (figure 3-1 Boring Location Map from June 1998 Report) *with* Ex. 20083 (May 20, 1999 letter from C. Phillips to D. Lass) at Figure 2. Despite the obvious error in relying on largely irrelevant sampling data, Ms. Lass approved the unlined silt ponds without any further analysis of the soil on which they were to be constructed: "we have determined that the proposed project should not have any negative impacts on water quality at the landfill." Lass Dep., 135:6-136:1, 149:3-9; Ex. 11123 (July 6, 1999 letter from D. Lass to C. Phillips). Further, the Regional Board did not require any liners for the ponds, any groundwater monitoring, or any waste discharge requirements. Lass Dep., 174:4-17.[30] And it should not go unnoticed that Ms. Lass and Gary Lass, the project director for the proposed silt ponds at Geologic Associates, share the same last name. Ex. 20083; Lass Dep., 27:19-28:4.

Rialto was also involved in the approval of this project. Rialto was responsible for conducting the environmental review process, under CEQA, for the County of San Bernardino's Mid-Valley Landfill Expansion and Robertson's gravel washing operation. Owen Dep., 342:2-5, 351:11-352:8. Indeed, Rialto received a "$14 million prepayment of the Tonnage Charge due from the County to Rialto" in exchange for concessions granted to

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[29] It appears that despite Ms. Lass's testimony to the contrary, one of the samples taken for the June 1998 Report may have been within the area that was proposed for the construction of the silt ponds. *Compare* Ex. 11077 (figure 3-1 Boring Location Map from June 1998 Report) *with* Ex. 20083 (May 20, 1999 letter from C. Phillips to D. Lass) at Figure 2. Of course, even just a single sample of subsurface conditions for an area the size of the silt ponds and in the Bunker Area with known perchlorate contamination would have been grossly inadequate.

[30] When Ms. Lass approved the silt ponds without any liners, groundwater monitoring or waste discharge requirements, she was reporting directly to Kurt Berchtold, the present day Assistant Executive Officer and a member of the Advocacy Team. Lass Dep., 111:16-112:13.

the County in connection with the approval of the Landfill Expansion and Robertson's gravel washing operation. Owen Dep., 346:2-14.

Less than two years after Ms. Lass and the Regional Board authorized the construction of the four unlined silt ponds, a monitoring well immediately downgradient from the ponds detected drastically increasing perchlorate concentrations. Ex. 20349; Goodrich Brief, at 150-51. It was clear that water percolating from the unlined ponds had mobilized perchlorate in the soil and contaminated the groundwater below. Ex. 20325 (CAOR8-2003-0013) at 3; Goodrich Brief, at 151-52; Lass Dep., 176:13-178:18 (confirming that the ponds were the most likely cause of the increased perchlorate contaminations).

There is no doubt that the Regional Board failed to require adequate soil sampling before approving the silt ponds:

> Question: Do you have any concerns about the adequacy of that sampling today?
>
> * Objection Omitted *
>
> Ms. Lass: Forgive me, but you're not seriously asking me if I think this was adequate in hindsight?
>
> Question: Yes, I am.
>
> Ms. Lass: ***Obviously Not.***

Lass Dep., 184:23-185:4 (emphasis added); *see also* Thibeault Dep., 463:7-18 (investigation into discharges from the silt ponds "wasn't careful enough"). As a result of the Regional Board's negligent failure to require proper soil sampling, the silt ponds were permitted to flush perchlorate from the contaminated soils in the Bunker Area to the Rialto/Colton Groundwater Basin in a matter of just two years because of the substantial hydraulic pressure supplied by the massive amounts of water used in the operation of the ponds. In her deposition, Dixie Lass confirmed that when the County reported back to the Regional Board in 2001 that they had concluded that the silt ponds were the source of the perchlorate contamination in the groundwater that had caused the increases in perchlorate levels in the downgradient wells, she did not have any reason to disagree. Lass Dep., at 176:13-178:18.

As the foregoing section of the brief shows, the entire Rialto/Colton Groundwater Basin is contaminated with perchlorate, at least in part, due to the failure of both the Regional Board and Rialto to act. The Regional Board and Rialto permitted the McLaughlin Pit to leach perchlorate into the groundwater for twenty years on the Westside of the basin, and on the Eastside, with only extremely superficial investigation and no remediation, they allowed the construction of the Mid-Valley Landfill Expansion and Robertson's silt ponds, which indisputably resulted in perchlorate contamination of the Rialto/Colton Basin.

VI.
THE STATE BOARD CANNOT ISSUE A SECTION 13267 ORDER AGAINST GOODRICH

A. *There is No Evidence that the Burden, Including Costs, of Requiring Goodrich to Perform Additional Work Bears any Reasonable Relationship to the Need for the Investigation*

California Water Code Section 13267(b) provides in pertinent part:

> In conducting an investigation . . ., the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging waste . . . within its region, . . . shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. ***The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports.*** In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

(emphasis added). The Draft CAO, which is the operative pleading in the present proceeding, seeks an order pursuant to Water Code Section 13267(b) ("Section 13267 Order") against Goodrich and the other Alleged Dischargers based on the following stated need:

> There is a need for additional groundwater investigation and continued groundwater monitoring, in order to delineate the lateral and vertical extent of the perchlorate and TCE and to complete a remedial investigation/feasibility study for the purpose of selecting an effective long-term remedial action plan.

Draft CAO at 28. But the Draft CAO does not elaborate on exactly what investigation is sought, the extent of the investigation sought, or the burden (including costs) faced by Goodrich and the other Alleged Dischargers if such an order is issued. *Id.* Nor have any

findings been made with respect to whether or not Goodrich is a discharger. Such evidence is essential before the State Board can make any determination that the burden, including costs, of the additional investigation bears a reasonable relationship to the need for the additional investigation. *See also* Goodrich Brief at 224-227.

In 2004, the Riverside Superior Court struck down a Section 13267 Order issued by the Regional Board concerning the very same matters as the present proceeding. The Superior Court held that due process required that the Regional Board must hold an evidentiary hearing and consider

> (1) the size of the burden in producing the requested reports; (2) the scope of the danger to public health if the reports are not produced; (3) the immediacy of the danger to public health if the reports are not produced; (4) whether the required testing is to [be] performed solely on the property owned by the entity being ordered to do the testing, or whether the § 13267 order seeks testing on other property.

Emhart Industries, Inc. v. California Regional Water Quality Control Board, Riverside County Superior Court, Case No. RIC 397528 (November 8, 2004). In a case such as this, where the large size of the burden (potentially many hundreds of thousands to many millions of dollars), the investigation is sought on property not presently owned by Goodrich, and the non-emergency nature of the public health threat, due process requires that a Section 13267 Order cannot be issued absent an actual finding of a discharge that postdates the enactment of Section 13267 based upon on a preponderance of evidence standard. *Id.*

In this case, such an Order must be supported by findings that (1) Goodrich has discharged waste to the groundwater or immediately threatening the groundwater; (2) the scope of the danger to the community, if the specific investigative work is not performed; (3) the immediacy of danger to the public health, if the specific investigative work is not performed; (4) why Goodrich, a third party, as opposed to the property owner, is being required to perform the investigative work in the first instance; (5) what the cost of the investigation will be relative to costs already incurred by Goodrich; (6) the benefits of the

work to be performed; and (7) how the need for further investigative work bears a reasonable relation to the past and future costs incurred. Neither the Advocacy Team nor Rialto has presented any evidence to the State Board to support any of these findings.

1. The Advocacy Team Has Not and Cannot Provide Any Evidence to Support the Issuance of a Section 13267 Order by the State Board

The Draft CAO suffers from the same shortcomings found by the Court in *Emhart*. The Advocacy Team has not and cannot establish that Goodrich discharged any waste to groundwater and has never provided the State Board, nor the Alleged Dischargers, any documentation describing (1) the proposed additional investigation, (2) the necessity of proposed additional investigation given the non-emergent nature of the public health threat, or (3) the reasonableness of the burden on Goodrich. Most importantly, without this information, it cannot be determined whether the proposed order bears a reasonable relationship to the need and thus there is no support for the issuance of Section 13267 Order against Goodrich.

No Description of Additional Investigation. The Advocacy Team has made no attempt to provide any information regarding the Section 13267 Investigation Order sought in the Draft CAO. The Draft CAO contains no description of the investigation sought. Draft CAO at 28. The Advocacy Team's Opening Brief contains no description of the investigation sought. No exhibits or other documents submitted by the Advocacy Team explain or illustrate the proposed additional investigation. Indeed, no document has ever even been prepared by the Advocacy Team evidencing any additional investigation.

Question:	Has [the Regional Board] prepared any document that identifies what specific additional investigation [it] believes is necessary with respect to the 160 Acre Site?
Mr. Berchtold:	No.
Question:	Has staff done that?

Mr. Berchtold: No.

Question: Has staff hired any consultant who has done that?

Mr. Berchtold: No.

Berchtold Dep., 545:13-21. The Advocacy Team was unable to describe in detail the investigation sought, the need for such investigation, or the costs associated with any additional investigation during depositions. Saremi Dep., 1037:4-24, 1038:21-1039:6; Sturdivant Dep., 1436:11-24. Nor has the Advocacy Team designated any witness to testify at the Hearing about any of these topics. *See* Ad. Team Witness Stmt.

No Necessity Given the Non-Emergent Nature of the Public Health Threat. Not only has the Advocacy Team made no effort to provide a description of the requested additional investigation, but the Advocacy Team has failed to provide any support for the necessity of further investigation and the Advocacy Team does not plan to provide such testimony during the Hearing in this matter. *See* Ad. Team Witness Stmt.

Even if the Advocacy Team intended to provide such substantiation, there is no evidence that additional investigation is necessary because the Superior Court, the Regional Board, Rialto, and the medical science all concur that there is no emergency to the public health.

- With regards to this same perchlorate contamination, the Superior Court found that the "health risk that prompted the [2002 13267 Order], while important, was not of an emergency nature that would require expedited procedures." *Emhart Industries, Inc. v. California Regional Water Quality Control Board*, Riverside County Superior Court, Case No. RIC 397528 (November 8, 2004).
- Mr. Ted Cobb, counsel for the Regional Board, stated that "because of the policies that have been followed by the city, they have assured that no one is drinking water above the four level, which I hope you appreciate, because you

are being protected by your own city. . ." Ex. 30044 (November 16, 2005 Special Board Meeting).

- Rialto has informed its citizens that "[i]f your water bill comes from Rialto, then your water is **safe**." Ex. 30024 (Rialto website). Moreover, Rialto has plenty of water to continually provide its citizens with "safe" water, as the County of San Bernardino and the United States Department of Defense are providing treatment on perchlorate impacted Rialto wells. *See* Section VII.D., *infra*.
- It is the opinion of Dr. Jonathan Borak, an Associate Clinical Professor of Epidemiology & Public Health and Medicine at Yale University, that "the smallest perchlorate dose reported in the peer reviewed literature to cause an adverse effect was 900 mg/day (≈ 12,900 µg/kg-day) for four weeks, while the largest dose reported to <u>not</u> cause an adverse effect was 500 µg/kg-day for two weeks. Thus, on the basis of the peer reviewed literature, it is my opinion that adverse effects would be expected at some dose level between 500 and 12,900 µg/kg-day; the current database is not sufficient to further refine that estimate [or between 17,500 and 450,000 µg/L]." Borak Dec. ¶ 40. At present there is no well anywhere in the Rialto-Colton Groundwater Basin with concentrations of perchlorate at those levels and certainly these levels of perchlorate are not found in the drinking water supply.

<u>No Evidence of the Reasonableness of the Burden (or Cost).</u> The Advocacy Team has failed to provide any evidence regarding the potential burden (including the costs) on Goodrich for any additional investigation, making it impossible for the State Board to weigh the reasonableness of the requested investigation with the burdens on Goodrich. Saremi

Dep., 1037:4-24, 1038:21-1039:6; Sturdivant Dep., 1436:11-24.[31] Of course, this impossibility is compounded by the fact that that the Advocacy Team has not set forth any description of the proposed investigation.

No Evidence in Support of **Any** of the Findings Necessary. In sum, the Advocacy Team's failure to provide this crucial evidence means that the State Board has no support for making the six findings necessary to issue a Section 13267 Order against Goodrich. On the other hand, the only evidence before the State Board requires a finding that no additional characterization work by Goodrich is necessary:

> [t]o a reasonable degree of scientific certainty, site characterization efforts funded by Goodrich, representing a total cost of approximately $4 million, as well as information from site documents and testimony, are sufficient to demonstrate that no remedial action is required as a result of Goodrich operations.

Kavanaugh Rebuttal Dec. ¶42. Thus, the State Board simply cannot find that the burden of requiring Goodrich to perform additional work bears any reasonable relationship to the need for the additional investigation. As the Regional Board is the only entity that can issue a Section 13267 Order, there is no evidence before the State Board supporting any issuance of a Section 13267 Order. Rialto has no authority under California law to determine the appropriateness of a Section 13267 Order and the State Board cannot rely upon Rialto in issuing a Section 13267 Order.[32] Any assertion of the scope of the Section 13267 Order proffered by Rialto is clearly outside the scope of the pleadings (the Draft CAO submitted by

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[31] The Advocacy Team has also failed to provide any justification as to the need for further investigation when Goodrich has already incurred approximately $4 million in investigative costs pursuant to work plans approved by the Regional Board and U.S. EPA and another $4 million for wellhead treatment, in lieu of investigation as agreed to by the Regional Board.

[32] The State Board can only issue a Section 13267 Order if it first complies with Section 13267(f). As discussed below, the State Board cannot satisfy the requirements of Section 13267(f) and is therefore precluded from issuing any investigation order to Goodrich.

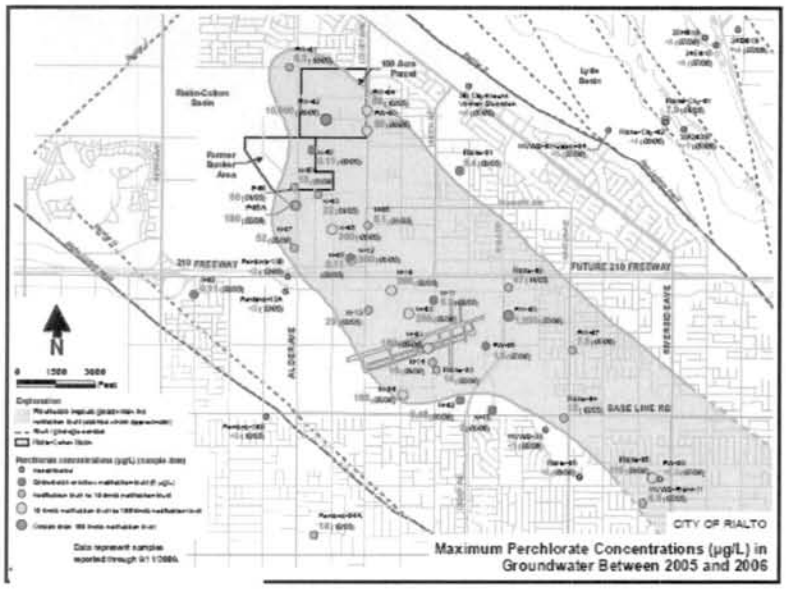
the Advocacy Team). As will be documented in further detail below, Rialto has both a financial interest and litigation interest in advocating for a specific type of investigation – it is for this reason, among others, that the State of California provides only the Regional Board with this authority. Because the Regional Board has not met its burden, the State Board cannot issue any order pursuant to Section 13267 for further investigation.

2. Rialto has Failed to Identify Any Necessary Additional Investigation by Goodrich that Could Bear Any Reasonable Relationship to the Need, in Light of the Burden

a. Rialto's Proposed Investigation is Contrived for an Improper Purpose

Rialto's contention that there is insufficient characterization of the groundwater basin and the proposed work is manufactured for an illicit purpose. This illicit purpose is aptly illustrated by Rialto's manipulation of the record through its expert – Dr. Daniel Stephens. Rialto has not demonstrated that the investigation is necessary under Section 13267. Rather, it is fabricated merely to pressure the alleged dischargers.

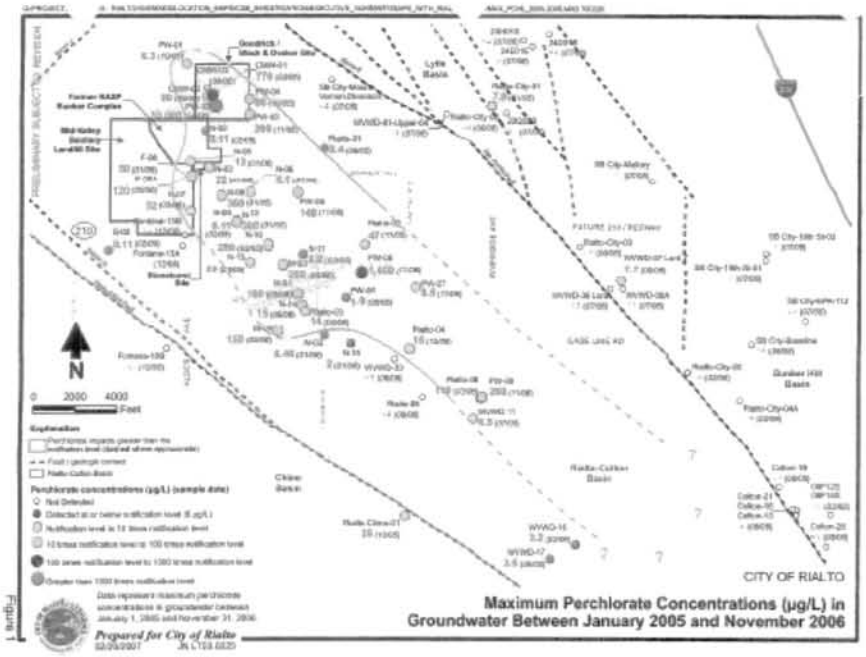
For instance, prior to September of 2006, Dr. Stephens, Rialto's designated expert, believed that the perchlorate plume in the Rialto-Colton basin was fairly characterized. Rialto posted on its website the following perchlorate plume map (partially redacted by Rialto) with contours at locations with less than 6 parts per billion of perchlorate in the groundwater.



Ex. 30028 (Initial Plume Map). But, then something happened. On September 28, 2006, Mr. Robert Owen, the City Attorney for Rialto, requested that the plume map be altered to illustrate the Rialto Lawyers' position that the data is inadequate and more characterization needs to be done:

> As a central part of the next month's PR efforts, we need a map of the plume, or at least the latest version of what WE believe the plume to be. I understand that there are concerns over preparing and disseminating one, but we need to figure out a solution and get one ready for all to see asap. In no event can this go past the Oct. 18 Town Hall meeting we are trying to set up.
>
> ***As a suggestion, perhaps we could put question marks on the map where we believe the data is inadequate to reach firm conclusions. This would make the point that more characterization needs to be done, and it might actually (and appropriately) scare people into realizing this fact.***

Ex. 30010 (DBS000390-391) (emphasis added). Based on this direction by the City Attorney, Dr. Stephens and his staff added question marks that changed the plume map to make the groundwater basin *appear* uncharacterized:



Ex. 30027 (February 20, 2007 Email from J. Sterling to R. Owen and others). When Dr. Stephens was confronted with this discrepancy (i.e. how Rialto's rendition of the perchlorate plume became *less* definitive over time) Dr. Stephens testified that he obtained "more information."

Question:	So why is it the case that, between October 11, 2006, and April 10, 2007, this plume map became less definitive in terms of characterization of the perchlorate plume from North Rialto?
	[objection omitted]
Mr. Stephens:	***I think we just had a little more information, more updated information.***
Question:	I'm sorry. You had more information?
Dr. Stephens:	There was some updated information.
Question:	Well, what updated information would lead you to make the concentration map less definitive?
	[objection omitted]
Dr. Stephens:	It was just our interpretation at the time.

Stephens Dep., 428:5-20 (emphasis added). Dr. Stephens' lame excuse for changing the plume map to create a false record that more investigation is necessary is unpersuasive. The documentary evidence demonstrates that the City Attorney ordered his expert to put question marks on the plume map to "***scare people***" and to fabricate a false record that basin wide investigation was necessary.

Rialto's nefarious desire to burden Goodrich and the other Alleged Dischargers with millions of dollars of needless investigative work is further evidenced by the notes of Dr. Stephens' chief project manager, Jenny Sterling. In Ms. Sterling's notes, she repeatedly states that money is not an issue (despite the clear mandate of Section 13267) and that Dr. Stephens proposed investigation can be used as a "carrot" to PRPs and "parlay[ed] into more $." Ex. 30006 (Sterling Notes).

Even more appalling is Ms. Sterling's deliberate manipulation of the estimated costs associated with Rialto's needless investigative work – done solely at the request of the Rialto Lawyers. Documents produced in connection with a federal subpoena on Dr. Stephens, but never produced in the State Board proceeding, confirm Ms. Sterling's manipulation of the estimated costs.

- In a January 29, 2007 email from Ms. Sterling to the Rialto Lawyers, she estimates that the additional site characterization Rialto desires would cost approximately $4,210,530.00 plus $603,370.00 in annual monitoring expenses. Ex. 30051 (January 29, 2007 email from Ms. Sterling to Rialto Lawyers).
- Then, the next day, during a January 30, 2007 "Rialto Group Conference Call," Ms. Sterling notes ***"$ to implement roadmap – parlay into more $ - carrot"*** and ***"get more $ from PRPs."*** Ex. 30006 (Sterling notes) (DBS000208).

- Based on the direction received during this conference call, Ms. Sterling revised the costs associated with Rialto's needless additional site characterization on February 15, 2007. Ex. 30052 (February 15, 2007 email from Ms. Sterling to Rialto Lawyers). Now, based on the identical proposed additional investigation, Ms. Sterling estimates a cost of $5,091,952.00 for site characterization, $831,557.00 in annual monitoring costs, and there is an additional cost of $3,437,500 for reporting included.[33] *Id.*

Ms. Sterling's notes remove any doubt that under the false veil of protecting its citizens, the managers of Rialto and its outside counsel/experts will say anything, and stop at nothing, to find some excuse for having now spent upwards of $15 million in attorneys' fees in litigation that has, to date, created an insurmountable record of Rialto's and the Regional Board's gross mismanagement and negligence leading to the contamination emanating from the 160 acre parcel. Of course, Rialto is wrong, the costs to the Alleged Dischargers do matter, the rights of the alleged dischargers do count, and falsifying evidence to drive up the costs of needless investigations is **illegal**.

The Rialto Lawyers' desire to depict a "dire situation" is further evidenced by the documents produced by Dr. Stephens in response to a federal subpoena, but never submitted to the State Board. Dr. Stephens, Rialto's purported expert, repeatedly told the Rialto Lawyers that he could prepare a conceptual model of the Rialto groundwater basin.

- August 11, 2005 telephone call between Jenny Sterling and Mr. Scott Sommer (Rialto's lead counsel) during which the need for vadose zone and fate and transport modeling was discussed. Ex. 30006 (Sterling Notes) (DBS000240).

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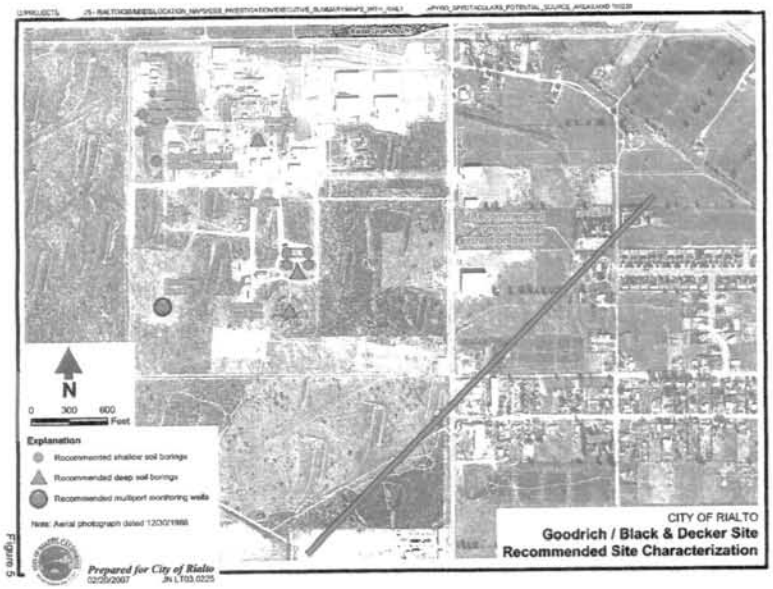
[33] Apparently in an effort to further deceive, Dr. Stephens testified that he did not believe his office had "costed out" the site investigation detailed in Exhibit 11 to his declaration. Stephens Dep., 450:8-10. This is clearly false as Ms. Sterling, his chief project manager, had prepared several cost analyses and emailed them to Dr. Stephens.

- November 14, 2005 Email from Ms. Sterling to Mr. Sommer and others, states that "[Dr. Stephens'] Scope of Services includes and we have been waiting for the appropriate time to conduct groundwater fate and transport modeling. . . . This may be an appropriate time to move forward on this task." Ex. 30010 (Stephens Emails) (DBS00365).

- October 23, 2006 Email from Ms. Sterling to Mr. Sommer and others, includes an outline of proposed work, including "groundwater flow and transport simulation of basin" Ex. 30010 (Stephens Emails) (DBS000392-396).

Why, despite the willingness of their expert, did the Rialto Lawyers choose not to prepare a model? The answer is simple, the Rialto Lawyers doubted the model would benefit their case and instead wanted the Rialto groundwater basin to appear uncharacterized in an effort to falsely manipulate evidence in an effort to support a Section 13267 Order for additional investigation so as to drive up the costs for the Alleged Dischargers.

Similarly, Dr. Stephens was prepared to propose a remedy to address contamination from the 160 acre parcel. On February 21, 2007, Ms. Sterling emailed the Rialto Lawyers updated figures detailing Dr. Stephens' proposed additional investigation and proposed remedies – one of which delineated a cleanup plan through a "Recommended groundwater extraction barrier." Ex. 30027.



Ex. 30027. Notably, Dr. Stephens' proposed investigation in this illustration does not relate in any way to Goodrich's former operations. Predictably, the Rialto Lawyers chose to exclude this information (and fabricate alternative investigative "recommendations" implicating Goodrich) because including this illustration in their submission would eliminate any need for a Section 13267 Investigative Order against Goodrich. Such a contrived argument containing false allegations and half truths for the sole purpose of driving up unnecessary investigation costs and ***scaring people*** is improper and has no place in these proceedings. Such a manufactured necessity does not support a Section 13267 Order.

b. The Additional Investigation Proffered by Rialto has no Reasonable Relationship with Identifying the Source or the Future Cleanup of the Rialto-Colton Groundwater Basin, Especially in Light of the Heavy Burden

It is obviously improper under Water Code Section 13267 for the State Board to rely in any way whatsoever on Rialto's desires for additional investigation (given its financial interest); nonetheless, Rialto offers the State Board a schizophrenic approach for requiring the further investigation it deems necessary. On the one hand, Rialto contends that the substantial available evidence already establishes that the 160 acre parcel is a source of perchlorate and TCE contamination and that Goodrich is a "known discharger." Rialto Brief at 37-58; Stephens Dec., at 3-4, 17. Yet, on the other hand, Dr. Stephens, Rialto's sole liability expert, contends that extensive further investigation is needed to identify the sources of perchlorate and TCE contamination on the 160 acre parcel. Stephens Dec. 24-26. Dr. Stephens' "Declaration" provides ***no proposal for further basin wide investigation, he only provides recommendations for additional investigation on the 160 acre parcel***. Stephens Dec., Ex. 11. If the 160 acre parcel is already a "known source," then why is additional investigation needed on the 160 acre parcel? The answer is simple – Rialto wants to use the State Board proceedings as a subterfuge to "parlay" additional

investigation into more "$" for Rialto. Ex. 30006 (Sterling Notes) (DBS000208). Moreover, if, as Rialto concedes, additional investigation is necessary to identify the sources, then there is no conceivable reasonable basis for ordering Goodrich to investigate the entire groundwater basin until it is first proven that Goodrich is a source of the discharge.

This ulterior motive is further evidenced by the locations Dr. Stephens recommends that further investigation be conducted on the 160 acre parcel – many of the recommendations have no relationship to any suspected discharge by Goodrich (or any other Alleged Discharger named in the Draft CAO). For instance, Dr. Stephens proposes investigation of the "Broco Pit," "Powder Mixing Complex," "South Trench" and "Building 6 Burn Pad" – none of these locations have any relation to Goodrich's former operations (or any other named Alleged Discharger). Stephens Dec., Ex. 11. Why, other than Rialto's desire to drive investigative costs, should Goodrich be forced to conduct an investigation at these locations? There is no reasonable relationship to the need. Obviously, Rialto's desire to parlay investigation into money does not comprise a "reasonable relationship to the need" under Section 13267.

Moreover, the additional investigation on the 160 acre parcel proposed by Dr. Stephens is based upon inaccurate information. For example, Dr. Stephens relies upon Exhibit 4 to his "Declaration" in determining what additional work he believes should be completed on the 160 acre parcel. Stephens Dep., 115:7-11. Yet, Dr. Stephens admits that Exhibit 4 contains incorrect information regarding the location and concentration of perchlorate sampling reported. Stephens Dep., 115:12-19. Indeed, Dr. Stephens admits that Exhibit 11 to his "Declaration" detailing his proposed additional investigation must be changed due to the inaccuracies in his "Declaration."

Question: All right. And how many revised exhibits are there? Would you tell us which of the exhibits to your declaration which I believe is

Exhibit 4901 have you revised and then you have copies of in front of you?

Dr. Stephens: ***We've revised exhibits I believe 1 through 4, Exhibit 5, 6, 7, 8, and 11. Probably all of them to some extent.***

Stephens Dep., 476:3-10 (emphasis added). Therefore, any recommendations by Dr. Stephens of locations for additional investigation is admittedly inaccurate and cannot be considered in determining what, if any, additional investigation should be conducted.

While Dr. Stephens has the unsubstantiated opinion that "[t]here are numerous data gaps outside the [160 acre parcel] that must be filled to design an effective remedy to restore the groundwater basin," he provides no detail as to a recommended investigation in his "Declaration," other than referencing a document entitled "Roadmap to Remedy Selection." Stephens Dec. at 26. Yet, Dr. Stephens admits that the "Roadmap to Remedy Selection" is still in draft form and that he does not know when the document will become final. Stephens Dep., 134:11-14, 135:11-15. Further, Dr. Stephens admits that he has recently obtained information that will require him make further changes to the "Roadmap to Remedy Selection." Stephens Dep., 135:21-136:1. Therefore, even in the "Roadmap to Remedy Selection" Rialto has failed to describe, with accuracy, its proposed investigation.

Moreover, Rialto's proposed additional investigation suffers from the same deficiency as the Advocacy Team's, in that Rialto fails to provide any evidence that the burden on Goodrich bears any reasonable relationship to the need for the investigation. Based on this insufficient record, the State Board cannot make the necessary findings to support a Section 13267 Order. (1) Rialto has not and cannot establish that any discharge of perchlorate by Goodrich is in the groundwater or threatening the groundwater. *See* Section III, *supra*. (2) There is no danger to the community if the specific work proposed by Dr. Stephens is not conducted. (3) As described above, there will be no emergency to the public health if the investigation is not conducted; therefore, it is unreasonable to require Goodrich, as opposed

to any other party, to conduct the additional investigation. (4) Rialto has not provided any explanation as to why the current property owners (such as Ken Thompson, Inc.) are not being required to perform the investigation as opposed to Goodrich. (5) Fifth, Rialto provides no evidence regarding the cost of its proposed additional investigation on the 160 acre parcel or any particular investigation.[34] Stephens Dep., 450:8-10. As for its amorphous investigation of the entire basin - Dr. Stephens estimates that ***such an investigation would cost upwards of $15 to $18 million***:

> Question: . . . Do you think that you could do every single investigation of the entire Rialto-Colton groundwater basin that you ever could conceivably want to do with that kind of money?
>
> Dr. Stephens: ***No, I don't think so.***
>
> Question: Really? I mean would you spend more than 15 or $18 million investigating this and you still wouldn't be satisfied, is that right, sir.
>
> Dr. Stephens: Well, these are -- the reason is because the water table depths are so significant.

Stephens Dep., 449:18-450:8 (emphasis added). The State Board cannot issue a Section 13267 Order against Goodrich for an investigation that will cost upwards of $18 million, given the present lack of necessity for any such investigation. (6) Rialto has not shown any of the benefits of its proposed $18 million dollars of additional investigation. (7) Rialto has not shown how the need for further investigation bears a reasonable relationship to the past costs incurred by Goodrich.

Thus, not only is the State Board precluded from entering a Section 13267 Order on behalf of Rialto, but given the present record, the State Board is in no position to find that

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[34] Rialto has never presented evidence regarding the cost of investigation in the present proceeding, despite, as shown in Ms. Sterling's notes described above the fact that they had these estimates. Therefore, these cost estimates cannot be used by the State Board as evidence in support of a Section 13267 Order.

the burden of requiring Goodrich to perform the additional work proposed by Rialto bears any reasonable relationship to the need articulated by Rialto.

3. After Five Years of Investigation on the Present Record, No Further Investigatory Effort is Justified under Section 13267

Goodrich has already incurred millions of dollars conducting investigations for the Regional Board and the United States Environmental Protection Agency (U.S. EPA). After five years of investigation and the installation of nine mulit-nested and Westbay, deep groundwater monitoring wells, there is no justification or reasonable need for any further investigation by Goodrich. Kavanaugh Rebuttal Dec. ¶ 42.

- In 2002, in response to a Section 13267 Order issued by the Regional Board, Goodrich entered into an agreement with the water purveyors, including Rialto, whereby Goodrich paid the water purveyors ***$4 million for wellhead treatment***. Berchtold Dep., Ex. 4342 (2002 Interim Settlement Agreement).
- In 2004, Goodrich conducted a comprehensive investigation, including the ***installation of four groundwater monitoring wells, soil sampling and soil-gas sampling***, on the 160 acre property under a work plan approved by the U.S. EPA and the Regional Board. Berchtold Dep., 486:2-21.
- Then, in 2005, Goodrich entered into an Administrative Settlement Agreement and Consent Order with the Regional Board wherein Goodrich agreed to conduct further remedial investigation. Berchtold Dep., Ex. 4347 (2005 Administrative Settlement Agreement). As part of the Administrative Settlement Agreement and Consent Order, under a work plan approved by the Regional Board, Goodrich agreed to ***install five Westbay multi-port groundwater monitoring wells at locations chosen by the Regional***

Board. In addition, at the direction of the Regional Board, Goodrich agreed to ***install up to four additional groundwater monitoring wells***. *Id.*

After Goodrich completed this extensive investigation on time, Mr. Thibeault, Executive Officer of the Regional Board, concluded that

> Based on Regional Board staff review of the IRI Report, and Regional Board staff oversight of the groundwater investigation, I find that Goodrich has complied with Remedial Investigation Order by Consent No. R8-2005-0121 and with the Administrative Settlement Agreement between the Regional Board and Goodrich.

Berchtold Dep., Ex. 4348 (January 25, 2007 Letter from Mr. Thibeault to Mr. Duchesneau). After complying with every request of the Regional Board and spending approximately $4 million dollars investigating the perchlorate contamination in the Rialto groundwater basin to the satisfaction of the Regional Board, there is still no evidence establishing that Goodrich contaminated the groundwater.[35] *See* Section III, *supra*. To the contrary, the overwhelming evidence establishes that Goodrich has not contributed to any groundwater contamination.

Any Section 13267 Order can only be issued naming Goodrich as a *suspected discharger*. Yet, because any proposed investigation is not on property owned by Goodrich, an order requiring Goodrich to conduct further investigations "can only be justified by a finding that [Goodrich] is somehow responsible for the need for the testing." *Emhart Industries, Inc. v. California Regional Water Quality Control Board*, Riverside County Superior Court, Case No. RIC 397528 (November 8, 2004). Because there is no evidence to support such a finding, Goodrich cannot be required to conduct any additional investigation.

The Regional Board cannot justify that further groundwater investigations by Goodrich are necessary. In fact, it never requested that Goodrich install the

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[35] As noted, Goodrich also paid $4 million to the four Water Purveyors (including Rialto) for wellhead treatment.

additional four multi-port groundwater monitoring wells that Goodrich had agreed to do under its prior agreement with the Regional Board. Berchtold Dep., 537:18-23. The Regional Board's decision to voluntarily forego the installation of four additional deep groundwater monitoring wells demonstrates that no further investigation is needed by Goodrich. Goodrich agreed to provide further investigation of the Rialto groundwater basin and the Regional Board decided that the additional wells were unnecessary and instead issued the Draft CAO against Goodrich and failed to present a shred of evidence of additional necessary investigation. Berchtold Dep., 543:7-24 The Advocacy Team cannot reconcile the fact that they told Goodrich not to conduct further investigation with their present position that further investigation is now necessary.

Question:	. . . if Goodrich was already under contract to agree to do this work, which is going to be very expensive work, and you could put the wells anyplace you want to, why didn't you just ask for them?
Mr. Berchtold:	Because we thought work beyond what was provided for in our agreement with Goodrich was necessary.
Question:	Well, but did you ask anybody else to go and do that work?
Mr. Berchtold:	Well, prior to this letter, we had issued the latest version of our Cleanup and Abatement Order.
Question:	Your Cleanup and Abatement Order has an allegation in it under 13267; is that right?
Mr. Berchtold:	Yes.
Question:	To do investigative work; right?
Mr. Berchtold:	To conduct investigation, yes.

Berchtold Dep., 543:7-24.

B. The State Board Cannot Satisfy Section 13267(f), and Therefore Cannot Issue a Section 13267 Investigatory Order

California Water Code Section 13267(f) provides that

> The state board may carry out the authority granted to a regional board pursuant to this section if, after consulting with the regional board, the state board determines

that it will not duplicate the efforts of the regional board.

Thus, under California State Law, the State Board is not authorized to issue any order under Section 13267 against Goodrich until it has consulted with the Regional Board and determined that an investigation order will not duplicate the efforts of the Regional Board. The State Board cannot satisfy this requirement because it has never consulted with the Regional Board regarding any additional investigation sought in the present proceedings.

First, pursuant to California Government Code Section 11430.10(a), the State Board is prohibited from having any *ex parte* communications with the Regional Board "regarding any issue in the proceeding." Cal. Govt. Code § 11430.10(a). If such a prohibited *ex parte* communication took place between the State Board and the Regional Board, California State Law mandates that the communication be promptly disclosed. Cal. Govt. Code § 11430.50. On March 28, 2007 and then again on May 11, 2007, the Hearing Officer disclosed approximately 90 *ex parte* communications that have taken place while the present proceeding was pending. Ex. 30041 (May 11, 2007 Letter from E. Jennings to R. Wyatt). Yet, not one of these disclosed *ex parte* communications reveals any consultation between the State Board and the Regional Board regarding the additional investigation sought as required pursuant to Water Code Section 13267(f). *Id.*

Second, it is impossible for the State Board to determine that the additional investigation is not duplicative of work the Regional Board has or will order because the Advocacy Team has not presented any evidence of the additional investigation it seeks in the Draft CAO, or any other evidence to support a Section 13267 Order. Substantial work has already been completed by Goodrich, the Emhart Parties and Pyro Spectaculars, Inc. Without knowing what work the Advocacy Team is now seeking, the State Board cannot make any determination as to whether this additional work is duplicative of work already completed, or work that the Regional Board has planned for other suspected dischargers.

Moreover, the Regional Board has issued various Section 13267 Orders to several other Potentially Responsible Parties who are not participating in these proceedings, such as American Promotional Events, Inc. – West, Wong Chung Ming, and Ken Thompson, Inc. Presumably, the Regional Board intends, or will be ordered, to follow through on these Section 13267 Orders and will require further investigative work in the future. As for Ken Thompson, Inc., the Regional Board must require the performance of investigative work under Section 13267 relating to the closure of the McLaughlin Pit. Section V.B., *supra*; Ex. 30047. Without knowing what this future Regional Board ordered work will involve, there is no basis for a finding that any additional investigative work under Section 13267(f) the State Board orders would not be duplicative. Absent such a finding, the State Board cannot order Goodrich to do any investigative work under Section 13267(f).

In its 2002 decision rescinding Cleanup and Abatement Order R8-2002-0051, the Regional Board already recognized the necessity and practicability of having all Potentially Responsible Parties involved:

- "many other potentially responsible parties were mentioned . . . ***it is important to broaden the investigation to bring in those other potentially responsible parties***;"
- it is "***not reasonable to focus on two parties*** when there is evidence that many others might bear some responsibility;"
- "the practical approach ***required broadening the order to include all potentially responsible parties***."

Ex. 11202 (Res. No. R8-2003-0070) (emphasis added). Despite the Regional Board's decision stating that "all potentially responsible parties" should be involved in any future orders; the Advocacy Team has once again excluded numerous other parties who bear responsibility for the contamination in the Rialto groundwater basin. Without the participation of these other Potentially Responsible Parties, it is impossible for the State

Board to ensure that any investigation order under Section 13267 is not duplicative and therefore the State Board is precluded from issuing any such order. Cal. Gov't. Code § 13267(f).

VII.
RIALTO IS NOT ELIGIBLE FOR WATER REPLACEMENT OR REIMBURSEMENT OF COSTS

Rialto joins in the Advocacy Team's attempt to ascertain water replacement and the reimbursement of certain costs alleged to be associated with the perchlorate contamination from the 160-acre parcel. As with the Advocacy Team, Rialto's arguments for water replacement amount to mere unsupported, and quite often plain false, rhetoric and speculation without any legal basis and must be denied. In addition, no one has put forth any evidence with respect to water replacement for the City of Colton ("Colton") and the West Valley Water District ("WVWD"), who, tellingly, have not been designated parties in this proceeding and have not even submitted statements as interested persons. [36] Water replacement should therefore also be readily rejected as a result.

A. Rialto has not proven the basic elements of a Water Replacement Order

1. No evidence has been proffered demonstrating that at any Rialto's wells have been "affected" by Goodrich

To start with, neither the Advocacy Staff nor Rialto has demonstrated that any production well at issue has been affected by Goodrich. As previously set forth in

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[36] The draft CAO would require responsible dischargers to reimburse WVWD and Colton for "past and ongoing reasonable costs incurred in cleaning up the waste, abating the effects of the waste, supervising cleanup or abatement activities, or taking other remedial action." Draft CAO, Order, ¶ 13. Responsible dischargers would further have to submit a reimbursement plan to the Executive Officer for approval. The draft CAO also refers to certain monies having been provided to these water purveyors either from Goodrich or the State for water treatment, and that only "the remainder of" costs is being borne by the water purveyors . Draft CAO, Findings ¶ 57.

Neither Colton nor WVWD has appeared. Neither they nor the Advocacy Team have offered evidence in this proceeding to substantiate claims of past or ongoing costs or for water replacement. Neither Colton nor WVWD have demonstrated that they have incurred costs, detailed which costs have been reimbursed, or that the costs, well closure or water treatment were caused by Goodrich, the 160-acre parcel or are recoverable under the law.

Goodrich's initial brief, prior to considering water replacement, it must first be demonstrated that *Goodrich's discharge* has affected the drinking water well and that such discharge has contaminated a well to a degree constituting "pollution" or "nuisance." Water Code Section 13304(a). Goodrich Brief, 207-211, 221. Yet, in its brief, Rialto merely describes how perchlorate has been detected in some of its wells without demonstrating that the contamination was caused by Goodrich. Rialto's silence speaks volumes. Rather, the City advocates that further investigation is first necessary.[37] *See, e.g.*, Stephens Dec., 24-26. Obviously, any further consideration by the State Board of water replacement should and must stop at this point.

2. Rialto's Zero Tolerance Policy is an Insufficient Basis for Water Replacement

Rialto, also acknowledges that there are no enforceable standards. Rialto Brief, 128. Despite its acknowledgement, Rialto nonetheless seeks water replacement even though water replacement under Section 13304 requires an enforceable standard. *See* Goodrich Brief, 221-224.

Rialto has chosen to govern its wells with its "zero tolerance" policy for perchlorate, "in an abundance of caution," without any scientifically defensible support or input and has no other such policy for any other constituent. Fox Dep., 35:20-36:14:43:11-47:9, 135:5-10, 258:3-6; Hunt Dep., 80:25-83:20, 271:4-274:7, 277:8-12; Owen Dep., 172:25-175:2. The State Board has no legal authority to recognize it. Goodrich Brief, 221-224. In fact, Rialto has consciously chosen to disregard the written recommendations of the California Department of Health Services ("DHS"):

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[37] Likewise, Rialto does not provide admissible evidence which supports a claim of pollution or nuisance, a necessary element of any order under Section 13304(a). *See* Goodrich Brief, Section XIV(B)(3). For instance, it fails to put forth any admissible evidence as to a safe level for perchlorate. Instead, Rialto attempts to rely upon the "Ginsberg Study," which amounts to inadmissible hearsay. Nor has Rialto proffered any witnesses with expertise in toxicology, epidemiology or any other qualifications to testify as to the safe level of perchlorate.

> The Department does not require or recommend the City to put the wells, which contain perchlorate levels below ten times of its action level, offline.

Fox Dep. Ex. 4133 (DHS Letter, Feb. 20, 2003); Fox Dep., 129:8-132:11, 135:12-136:21; *see also* Hunt Dep., 109:18-112:12, 212:8-17; Owen Dep., 203:1-205:2 (denying that as the City Attorney he was even aware of this policy). While Rialto may chose to make up its own rules as it wishes, it may not impose the consequences on others.

3. Rialto Concedes that a Civil action is necessary for the recovery of costs

As explained in Goodrich's Brief, Rialto also concedes that the Advocacy Staff's claim that past costs and damages can be awarded by the State Board is ill conceived as Section 13304(c)(1) expressly requires a civil action. Rialto Brief at 133; Goodrich Brief at 211. Despite this concession, Rialto apparently insists that Section 13304(a) can nonetheless provide the basis for the reimbursement of past costs. Putting aside that Rialto has failed to demonstrate how the water replacement provisions of Section 13304(a) enacted decades after Goodrich ended its operations can be enforced against Goodrich (see Goodrich Brief at 186-205, 212-215), Section 13304(a) *offers at best only prospective relief*. No where does the Water Code authorize the State Board to award damages or past costs. Any recoverable costs must be sought in the Superior Court, such as with Section 13304(c)(1). Because Rialto concedes that a civil action is necessary, the Hearing Officer should rule that costs will not be imposed in this proceeding.

4. There Is No Legal Authority for Water Supply Contingency Plans in Cleanup and Abatement Proceedings

Rialto advocates that any dischargers found responsible in this proceeding be ordered to prepare water supply contingency plans. Rialto purports to find authority for such plans based on the appearance of the word "uninterrupted" in Section 13304(a). The very nature of the contingency plans sought by Rialto and the Advocacy Team make them based on speculation. As explained below, neither Rialto nor the Advocacy Team demonstrated that water was lost in the past, or is in any way reliably anticipated to be lost in the future,

due to perchlorate contamination in the Rialto Basin, let alone caused specifically by Goodrich. The State Board cannot become a soothsayer and speculate that water replacement could become necessary and will indeed be due to a discharge by Goodrich. As explained below, any alleged instability of Rialto's water supply has nothing to do with alleged perchlorate contamination from the 160-acre parcel. At best, Rialto would need to wait for such an event to occur.

In support of its claim, Rialto cites the entirety of two inapposite State Board orders issued out of the Division of Water Rights (DWR). Rialto Brief at 123. *Neither of the two orders cited by Rialto involves water replacement under Section 13304.* The first DWR order cited by Rialto concerned a draft cease and desist order alleging violations of Water Right Permit 17593 involving improper diversions of water from streams for domestic and agricultural purposes. *In re Permit 17593 (Application 24955),* SWRCB 2005-13-DWR, Section 4.0 ("To avoid being penalized for taking water illegally, Redwood must demonstrate that the water it takes from Lake Mendocino during periods that are not covered by Permit 17593 is covered by another water right."). The primary aim of that contingency plan ultimately imposed was to ensure that diversions of water not in compliance with permit 17593 *were covered by another water right.* The second DWR order cited by Rialto is equally off base as it involved the diversion of water from streams for municipal use and planning for the contingency that such diversions may not be able to occur if flows are insufficient. *In re Petitions for Reconsideration by Coast Action Group and Don McDonald Regarding Division of Water Rights Order 99-09-DWR*, SWRCB 99-011-DWR, Section 3.0 (In ordering the preparation of a contingency plan, the Board relied on Water Code Sections 1243 and 1253 and other authority not relevant in this proceeding).

B. *Rialto Has Not Lost Water Due to Perchlorate in the Rialto Basin Nor Has Otherwise Justified Water Replacement*

As Rialto concedes in its brief, "[i]t is not within the scope of this proceeding to engage in the damages." Rialto Brief at 133. Rialto, nonetheless attempts to convolute the issues before the State Board with its unsubstantiated, confusing claims throughout its brief

mixing alleged damages with its water replacement claim. Yet, despite all its unsubstantiated assertions, the truth is that perchlorate in the Rialto Basin, where the 160-acre parcel is located, has never stopped Rialto from meeting its water demands. Rather, as Rialto admits, its right to withdraw water from the Rialto Basin is quite limited for reasons wholly unrelated to perchlorate. Rialto Brief at 4-5, 11. Perchlorate contamination has not prevented the City from withdrawing its allotment of water in the past and Rialto has not demonstrated that it will in the future. Rialto has not lost any water, and therefore no water is in need of replacing, due to perchlorate in the Rialto Basin from the 160-acre parcel. The State Board has no authority to consider any of the other unsubstantiated allegations of the City, which are clearly outside the scope these proceedings and the State Board's authority.

1. Rialto's Water Rights in the Rialto Basin are Quite Limited

a. The 1961 Decree

Rialto asserts that its water rights in the Rialto Basin are adjudicated under a stipulated judgment in *Lytle Creek Water and Improvement Company v. Fontana Ranchos Water Company, et. al.* (the "1961 Decree") and certain subsequent agreements whereby it acquired additional rights. Rialto Brief, at 5; McPherson Dec., Ex. A. According to Rialto, under the 1961 Decree, should water levels in the basin fall below 1002.3 feet above mean sea level, the City is limited to withdrawing 4366 acre-feet per year of water. *Id.* Should levels drop below 969.7 feet, Rialto's rights are further diminished by 1 percent for each foot decrease in water level up to a maximum reduction of 50 percent. *Id.*

The restrictions under the 1961 Decree were triggered in July 2003 and remain in place.[38] Fox Dep., 101:13-102:1; 102:20-103:4; 104:13-111:11; Fox Dep., Ex. 4131 (City Of Rialto Regular Meeting Agenda, July 15, 2003); Hunt Dep., 97:3-11; 147:23-148:2. In fact, Rialto acknowledges in its own "Road Map" that the restrictions are now permanent:

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[38] Amazingly, Rialto's purported "water rights" expert, Michael McPherson, did not know whether or not the restrictions were presently in place, nor when it had been triggered in the past, including since 1997. McPherson Dep., 107:16-109:16; 112:17-113:18; 309:25-310:4.

> Under current production patterns in both the Rialto Basin and in the unadjudicated portion of the Rialto-Colton Basin, it appears that ***dry-year conditions have become permanent***. Production of groundwater out of the basin as a whole has grown to the point that groundwater levels remain low enough to trigger dry-year conditions even following wet winters. (emphasis added.)

Road Map, 25. No witness for Rialto has any basis to differ. Hunt Dep., 40:19-41:21; 90:2-91:1; 95:11-24; 97:14-102:21; McPherson Dep., 185:11-186:8.

b. Water Rights Leases to the County

On top of the restrictions in place under the 1961 Decree, Rialto has set forth how it has entered into other agreements further limiting its right to withdraw water from the Rialto Basin. In 2000, Rialto agreed to lease 1600 acre-feet per year, for twenty (20) years, to the Fontana Union Water Company[39] in order that the County of San Bernardino could treat VOC contamination from its Mid-Valley landfill.[40] The City does not dispute that this lease is entirely unrelated to the 160-acre parcel and perchlorate *and that it counts against its water rights under the 1961 Decree*. Rialto Brief at 11; McPherson Ex. I; McPherson Dep., 155:8-21; Hunt Dep., 171:2-9; Fox Dep., 99:9-101:15.[41]

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[39] Now the San Gabriel Valley Water District/Fontana Water Co.

[40] As detailed below, in return for the lease, Rialto received significant funding for a new well and receives payment for the leased water each year.

[41] In 1999, prior to entering into the lease, the City predicted that the Mid-Valley Landfill VOC plume would lead to the triggering of the restricted adjudicated rights under the 1961 Decree:

> The existing landfill has created a VOC plume that has contaminated two SGVWC wells . . . With the added pumping in the Rialto Basin, the water levels in the index wells will probably drop below the 1002.3' msl average and the Rialto Basin will be restricted to the adjudicated rights in the 1961 Decree. Ex. 30038 (Memorandum from R. Bierschbach to J. Gerardi, May 14, 1999).

As recently as February 2007, the City's counsel recognized that the real limitation on withdrawing water from the Rialto Basin was indeed the effects of the Mid-Valley VOC plume and the Fontana Water Company:

> Our belief is that Fontana Water Company has behaved in an opportunistic manner to pump enough out of its unadjudicated and adjudicated Rialto Basin wells to trigger the free water it gets under its 1600 AFA lease agreement with Rialto which Rialto made with it at the request of the County when the County was attempting to move forward with the Mid-Valley Sanitary Landfill expansion and FWC, CCVWD, San Gabriel Valley Water Company, and

[Footnote continued on next page]

In 2005, the City entered into a second agreement involving the County to lease away the rights to pump another 2,400 acre-feet per year, under the 1961 Decree. Rialto Brief, at 7, 11; McPherson Dep., 155:13-156:3; McPherson Dec, Ex. J. In return, the County has funded the installation and operation of wellhead treatment for perchlorate on Rialto Well No. 3[42] from which the City receives the cleaned water. Rialto Brief, 7, 11; McPherson Dec., Ex. J; Hunt Dep., 112:13-22; 113:6-22. Neither the Advocacy Team nor Rialto has alleged that Goodrich or the 160-acre parcel has contaminated Rialto 3.

In the end, the City's remaining right to withdraw from the Rialto Basin is limited to 366 acre-feet per year. Rialto Brief, 7, 11; McPherson Dep., 156:22-158:21; 160:6-20. None of this limitation is due in any way to the alleged discharges at the 160-acre parcel.

2. Rialto Has Met its Water Demands without Interference of Perchlorate in the Rialto Basin

Rialto has met is water demands to date. Perchlorate in the Rialto Basin has not prevented it from meeting its water demands. Fox Dep., 191:9-192:4; Hunt Dep., 177:13-21, 182:13-183:7. Rialto has not set forth any quantity of water it asserts has been lost to perchlorate in the Rialto Basin and should be replaced. Nor can it. McPherson Dep., 169:8-12, 185:3-10, 319:7-15, 326:24-327:4; Hunt Dep. 300:21-301:2.

The reason is apparent. Rialto 5, which has been unaffected by perchlorate, produces 3500 acre-feet of water per year, far more than the 366 acre-feet per year remaining after Rialto's agreements with the County. Fox Dep., 210:1-14; Hunt Dep., 115:8-

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[Footnote continued from previous page]

> Fontana Resources threatened a CEQA suit. At the time, Rialto acceded to the County's request because it received money it desperately needed to avoid bankruptcy. . .
>
> . . . It is FWC's pumping that seems to us to place the Rialto Basin ***in a permanent drought condition***, so that the lease can be triggered, and FWC gets more of that cheap, clean water. For some years, it's a lack of precipitation, but we didn't see the rebound that should have occurred following the huge rains a couple of years ago. Ex. 30039 (S. Trager' e-mail to J. Sweetland, February 23, 2007).

[42] All subsequent references to wells in the Rialto and Chino Basins will simply state the name of the basin and then the well number. Using this convention, Rialto Well No. 3 becomes "Rialto 3."

11, 182:13-183:7. Sliced another way, *the City has ample capacity from Rialto 5 and Rialto 3 (with wellhead treatment) that far exceeds its total water rights under the 1961 Decree.* Fox Dep., 210:16-20. Moreover, it has not even accounted for the additional capacity from Rialto 4 after its wellhead treatment goes online, as explained below, nor for Rialto 1, which has never exceeded the PHG for perchlorate and must be considered an available source of supply by the State Board under its own policy. Hunt Dep., 173:22-174:14.

3. The City's Claim that Perchlorate Has Inhibited Recharge of the Rialto-Colton Basin is Completely Unfounded

Aside from being outside the scope of these proceedings and despite Rialto's rhetoric throughout its brief that perchlorate interferes with or inhibits recharge of the Rialto-Colton Basin and its potential use for storage of state water project and Santa Ana Watershed Project Authority water, the City has provided absolutely no admissible evidence to support such claim. *See, e.g.*, Rialto Brief, 8, 129. In deposition, the City's witnesses have admitted that the City has done nothing to verify such unfounded contentions with respect to recharge of the Rialto-Colton Basin, or how it would affect the contamination. McPherson Dep., 194:4-197:18; Hunt Dep., 184:24-187:19, 352:24-353:11. Its witnesses only claimed that the effect of perchlorate on recharge needs to be, or is in the process of being, studied. *Id.;* Fox Dep., 205:12-206:2. At this point in time, the City has done nothing to determine whether any locations would be available for recharge, how, if at all, recharge in such areas would be effected by perchlorate contamination, or anything else. *Id.*[43]

Similarly, the City disingenuously implies that recharge to the Rialto-Colton Basin through the Linden Avenue spreading grounds ceased and is prevented as a result of perchlorate. Rialto Brief, 4. In reality, the use of the spreading ponds all but stopped in 1993, four years prior to the discovery of perchlorate, and ended entirely in 1999. Hunt Dep., 65:11-67:22; 69:4-70:18. Studies by the U.S. Geological Survey (USGS) have found

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[43] Nor has Rialto completed any assessment to determine whether or not there are viable well locations in the Rialto-Colton groundwater basin. Fox Dep., 217:18-218:10; McPherson Dep., 84:20-25.

that recharge in the Linden grounds do not significantly benefit the Rialto Basin. Ex. 30040; [44] Ex. 30038 (Memo from R. Bierschbach to J. Gerardi, Public Works Director, May 14, 1999). Rialto has also failed to disclose that its own consultants have been skeptical that other locations, such as the Cactus basin, could be used for recharge given the lithology and screening depths of its wells. *Id.* Further, the City has not put forth evidence that recharge could even take place at the Linden grounds, which have since been converted for use by the West Valley Water District for use as a wastewater treatment plant. Hunt Dep., 65:11-67:22.

With respect to the Rialto-Colton Basin's potential use for State Water Project water or water from the Santa Ana River being thwarted by perchlorate, again, the City has put forth no evidence and merely speculates. In its brief, the City cites to the Santa Ana Watershed Project Authority's ("SAWPA") 2005 Integrated Watershed Plan ("SAWPA 2005 IWP") in support of its claim. Rialto Brief, 129. Yet, in the nearly 200-page plan, the only entry pertaining to the Rialto-Colton Basin turns out to be the City's own proposal to locate an artificial recharge basin. SAWPA 2005 IWP, 76. As indicated above, it has not attempted to do so. The City also refers to the SBCMWD and Western Municipal Water District Environmental Impact Report ("WMWD EIR") for their applications to appropriate surplus water from the Santa Ana River. Such reports do not demonstrate the Rialto-Colton Basin would in fact be recharged nor that perchlorate contamination will prevent it.

Several basins are considered for recharge and, at best, under the EIR, additional study of the Rialto-Colton Basin would need take place prior to a decision to recharge. Indeed, recharge is occurring or planned for other basins with widespread contamination,

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[44] A ground-water investigation, in cooperation with the San Bernardino Valley Municipal Water District in the Rialto Colton Basin of San Bernardino County, California, has showed that artificial recharge ponds operated by the Municipal Water District are isolated from the main ground-water system by a previously unmapped fault. As a result of these findings, the Municipal Water District has ceased there charge operations at these facilities. Ex. 30040 (1998 Annual Financial Report: Resources, USGS).

including the Bunker Hill basin notwithstanding contamination in that basin. WMWD EIR; Hunt Dep., 183:25-185:13.

4. The City's Claims that it Might not Be Able to Meet Water Supply Planning Requirements are False

The City asserts that "perchlorate contamination of the Rialto-Colton Basin calls into question the ability of the City to issue legally defensible water supply assessments, such as Urban Water Management Plans pursuant to Water Code Section 10610, *et seq.* Rialto Brief at 9-10, 127. Similarly, Rialto makes hollow claims that "the City's system may well be in violation of pending regulations governing public water systems." Rialto Brief at 11. Both claims are not only false, but such water planning requirements further show that the City has absolutely no basis to contend that perchlorate in the Rialto Basin will inhibit its ability to grow or comply with public water system planning requirements.

a. The Urban Water Management Plan Adopted by the Rialto City Council in 2006 Makes Clear that the City Has Adequate Supply and Reliability, including for Growth

On May 16, 2006, the City Council of Rialto adopted its Urban Water Management Plan prepared by John Egan and Associates, Inc., pursuant to the Urban Water Management Planning Act, California Water Code Sections 10610-10657 ("Rialto's UWMP"). Hunt Dep., 150:1-10, 150:22-151:8; 153:7-156:18; Fox Dep., 242:9-245:7, Hunt Dep., Ex. 4716. Rialto's UWMP makes clear that the City not only has plans in place to meet all intended growth through 2030, in normal, dry and multiple dry years, but that it has no plans to rely upon the Rialto Basin for water beyond its restricted water rights under the 1961 Decree and its lease concerning the County. *See, e.g.*, Rialto's UWMP, 64-70 (Hunt Dep., Ex 4716); Hunt Dep., 175:14-176:7 Despite some rhetoric as to perchlorate contamination mentioned in the UWMP, the UWMP makes it clear that it will not hinder the City to either grow or meet the requirements of the Act.[45] Moreover, regardless of the City's potential attempts to back away from this plan adopted by the City Council, it has not

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[45] The City further admitted in deposition that it has adequate water supply even should its largest well (City Well 4) be taken out of service. Fox Dep., 192:6-193:2, 255.

provided any substantive basis for doing so. Hunt Dep., 62:12-63:21; 149:5-150:10; 156:20-162:21; 163:11-167:2; 343:24-347:10; 382:7-19.

b. The City Can Comply with Proposed Waterworks Standards

The City also inaccurately claims that it "may well be in violation of pending regulations governing public water systems," referring to Waterworks Standards, Title 22, Section 64554(a) and (b), proposed by DHS on November 9, 2006 ("proposed Waterworks Standards"). Rialto Brief at 11; Hunt Dec. pp. 12-13; Hunt Dep. Ex. 4715. It also demands that any water replacement plan allow the City "to operate in accordance with the pending California Water Works Standards." Rialto Brief at 124.

To start with, as the proposed Waterworks Standards have not been finalized, it is mere speculation that such standards will take effect or be issued as proposed. Aside from speculation, more importantly, Mr. Hunt, the City's expert, confirms that Rialto is able to meet the proposed standards. Mr. Hunt's other claims with respect to the City's inability to comply with elements of the proposed Waterworks Standards are off-base and plain wrong.

Under the proposed standards, "systems with 1,000 or more service connections [such as Rialto]. . . shall be able to meet four hours of peak hourly demand ("PHD") with source capacity, storage capacity, and/or emergency source connections." Proposed Section 64554(a)(1). With respect to the PHD, Mr. Hunt admits that Rialto is able to meet the requirement.[46] Hunt Dec., 13; Hunt Dep., 130:5-24. Mr. Hunt attempts to down play his own calculation by pointing out that the PHD is met with the aid of the City's 28 million gallon reservoir capacity. Yet, as set forth above, proposed Section 64554(a)(1) requires the system meet the four hours of PHD "with source capacity, *storage capacity*, *and/or* emergency connections." (emphasis added). There is no expectation or requirement that a system meet its PHD based solely upon source capacity. Hunt Dep., 130:5-24. In the case of Rialto, according to Mr. Hunt's own calculations, Rialto can meet the PHD based only

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[46] Mr. Fox also admits that the City has adequate capacity under Title 22. Fox Dep., 255:6-13.

upon its storage capacity alone. Taking into account its source capacity, which alone is over half the PHD by Mr. Hunt's calculations, the City vastly exceeds the PHD requirements.

In his declaration, however, Mr. Hunt claims that "[t]he data shows Rialto's perchlorate-limited production capacity to be 16,862 gallons per minute, well below the required 20,314 gallons per minute MDD [Maximum Daily Demand] required by pending State regulations." Hunt Dec., at 16. Yet, again, under the proposed Waterworks Standards, Mr. Hunt is off base with respect to his disregard of storage capacity when formulating his opinion as to the City's ability to meet the MDD. Rather, the proposed regulation clearly provides that the MDD's primary focus is on adequate storage capacity, rather than source capacity. It provides that "the system shall have *storage capacity* equal to or greater than MDD, unless the system can demonstrate that it has an additional source of supply or has an emergency source connection that can meet the MDD requirement."[47] Proposed Section 64554(a)(2). (emphasis added.) As with his estimated PHD, Mr. Hunt's own numbers prove that storage capacity pretty much alone is ample enough to meet the MDD and that the City's source capacity can nearly meet it on its own, even despite Mr. Hunt's clear over estimate of the MDD and under accounting of the source capacity.[48] Nor is the eventual use of Rialto 4 with wellhead treatment or the City's self imposed inability to use Rialto 1, which has never even exceeded the PHG, been considered, not to mention the unspent funding from Goodrich, the County and DoD, or other wells closed for reasons

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[47] It is quite likely that Rialto will not even be subject to the MDD requirement since proposed Section 64555(a)(2) is expressly limited to a water system with less than 1,000 service connections. Hunt Dep., 44:23-45:5 (Rialto has more than 1,000 connections).

[48] Mr. Hunt has many obvious errors in his calculations. Hunt Dep., 123:22-124:20, 132:11-140:22, 141:9-13. For instance, Mr. Hunt's MDD calculations are simply wrong by looking at his units in "gallons per minute", rather than per day. Nor did he abide by the requirements for calculating the MDD as proscribed in Section 64554(b) of the proposed Waterworks Standards. Mr. Hunt's calculations are further in error as he overestimates the maximum water demand by dividing the August 2005 water demand by 30 days rather than 31 days, and under estimates the City's water production capacity for the Baseline Feeder by using an estimate of 1,271 gpm based on past use, rather than capacity of 2500 gpm as set forth in its contract with the SBVMWD, as indicated in the Urban Water Management Plan (Table 2-2).

unrelated to perchlorate. Hunt Dep., 146:18-147:22.

C. Rialto Cannot Recover its Alleged Costs

In these proceedings, Rialto seeks to recover a total of $2,342,137.80[49] that it claims to have incurred for treating perchlorate. *See*, Rialto Brief, Section VIII; Fox Dec. Ex. A-D; Fox Dep., 54:13-55:25; 56:16-21; 59:1-64:17. The State Board is neither authorized under the law to order the alleged dischargers to reimburse Rialto for any amount, nor has Rialto incurred such costs due to perchlorate contamination from Goodrich.[50] Goodrich Brief, 211-224.

1. The City Cannot Recover for Wellhead Treatment of Chino 1 and Chino 2

The majority of money that Rialto improperly seeks is $1,945,021.54 for costs it claims to have incurred to install and operate wellhead treatment on its Chino 1 and Chino 2 wells, which Rialto indicates are located in the Chino basin and North Riverside basin, respectively. Rialto Brief, 5. Any claim that somehow Goodrich should pay for wellhead treatment on Chino 1 and 2 for alleged contamination in the Rialto Basin is entirely without legal or factual support. The City cannot recover any money as to these wells nor can the State Board order Goodrich to provide for future water replacement on these or any other wells.

a. The City Admits that Chino 1 and Chino 2 Are Not Connected to the Rialto-Colton Basin or Impacted by the 160-Acre Parcel

While the City asserts that both wells have had detections of perchlorate and Chino 2 has had detections of TCE and PCE, it is entirely unrelated to any conditions caused by operations in the North Rialto area, let alone the 160-acre parcel or Goodrich. Rialto's own witnesses concede this point. Hunt Dep., 48:4-16, 51:14-57:15; Stephens Dep., 795:7-

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[49] Of this amount, in deposition, the City later withdrew $14,462.36 for "water and electrical charges" (Riverside Highland Water Co.); $11,536.58 for United Strategies, Inc.; and $10,194.72 for certain repairs to City Well Nos. 2 and 4. Fox Dep., 147:18-149:5, 199:8-200:2; 200:16-21.

[50] Goodrich further objects that Rialto has not produced sufficient proof and admissible evidence that it has incurred such costs.

797:4, Fox Dep., 186:1-187:5; 234:18-236:10. Indeed, Chino 1 and Chino 2 are not in the Rialto-Colton Basin, the fault located in the area of these wells between the basins is not permeable, and contamination in the wells is not from the 160-acre parcel.[51] *Id.*

The presence of perchlorate, TCE and/or PCE, unrelated to operations in North Rialto, reported in Chino 1 and 2 further demonstrates that there are other unaccounted-for sources. Fox Dep., 186:1-187:5, 234:18-236:10. In fact, on January 25, 2002, DHS advised Rialto:

> Due to detections of tetratchloroethylene (PCE) and trichloroethylene (TCE), Chino 2 is considered vulnerable to activities that may have contributed to or caused the release of PCE and TCE. In particular, PCE and TCE are believed to be associated with automobile car washes.

Fox Dep. 125:9-21, Fox Dep., Ex. 4132. Yet, Rialto has done nothing to investigate or pursue such other potential sources. Fox Dep., 125:9-128:21. Perhaps most troubling is the Advocacy Team's insistence in claiming that perchlorate and TCE in Chino 2 is from the 160-acre parcel:

> The presence of both perchlorate and TCE in Chino No. 2, located about 4.5 miles from the Property, indicates that perchlorate and TCE discharging from the Property have advanced farther than about 4.5 miles.

Ad. Team Brief, at 103. As with the Advocacy Team's outlandish claim as to the awarding of costs under Section 13304(c), not even Rialto supports such a preposterous position. The Advocacy Team did not even know which basins the Chino wells reside in. Berchtold Dep., 500:12-501:1. This further demonstrates that the Advocacy Team can neither be relied upon for its technical judgment nor for being forthright.

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[51] Rialto attempts to downplay this in its brief by stating "Rialto's water treatment and water replacement activities to date have involved Chino No. 1 and Chino No. 2, which are necessarily pumped because the wells downgradient from the Goodrich/Black & Decker site are unavailable due to Perchlorate contamination, and recharge into the contaminated aquifer is inhibited." Rialto Brief at 133. As explained below, this is utterly false as the Chino wells are not necessarily pumped because of perchlorate contamination and, as demonstrated above, Rialto has not shown recharge is inhibited. Rather, the two wells are pumped due to Rialto Basin water rights restrictions that have nothing to do with perchlorate.

b. Rialto has not incurred its claimed costs since it has been reimbursed for the wellhead treatment

Rialto's claim for wellhead treatment costs is further disingenuous as it has already been reimbursed for nearly all of its alleged costs for the wellhead treatment for Chino 1 and 2.[52] The City's own witnesses and documents, as well as the Advocacy Team, confirm that the City has been reimbursed over $1.8 million for treatment of these wells from Prop. 50 funds, State Board cleanup and abatement accounts, and other miscellaneous funds.[53] Rialto Brief at 7; Fox Dep., 150:1-153:5, 158:11-159:6, 183:25-185:24; Berchtold Dep., 496:4-499:11; Draft CAO, ¶ 57. The City has no basis for recovery of reimbursed costs.

c. Wellhead Treatment on the Chino Wells is not Replacing Water from Rialto Basin Wells

Any claim by Rialto that may imply that it installed treatment on Chino 1 and 2 to replace water lost to perchlorate in wells located in the Rialto Basin is patently false. Rialto installed wellhead treatment on Chino 1 and 2, rather than on wells in the Rialto Basin, recognizing it was restricted in its water rights in the Rialto Basin and had a water shortage from drought conditions:

> Question: Mr. Fox, going back to the process that you and Mr. Baxter undertook . . . to decide where to place wellhead treatment back in around 2003, I had a number of other questions for you in that respect.
>
> What – What wells did you consider placing wellhead treatment on at the time besides Chino 1 and Chino 2, if any?
>
> Mr. Fox: Those were the only two.

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[52] This is not the first time Rialto has inflated its expenditures or hyped the extent of the perchlorate contamination, such as with its representations to Congress in 2004 claiming it had already expended $4 million to address an 11 mile long plume. Hunt, Dep. 288:4-297:14; Hunt Dep. Ex. 4721. In light of Rialto's own claims in these proceedings, its representations under oath to Congress were clearly false.

[53] Rialto has not supported any claim that it is obligated to repay such money. Moreover, the State Board is statutorily prohibited from ordering Goodrich to repay the cost of such funding, as Section 13304(c) makes it clear that the State Board must file a civil action to attempt to recoup such costs.

Question: You testified a moment ago that you seem to recall at the time in 2003 that at least Rialto 2 and Rialto 6 also had had detections of perchlorate in them at the time?

Mr. Fox: Yes

Question: And is it my understanding of your testimony that you didn't consider those at the time for wellhead treatment, given the restrictions put into place, given the- the drought and the decree, 1961 decree?

Mr. Fox; Yes.

Fox Dep., 118: 6-25; *see also* Fox Dep., 81:5-82:13.

d. Rialto is Attempting to Saddle the Alleged Dischargers with the Cost on Treating Nitrates

Moreover, with respect to Chino 1, nitrates are the primary contaminants being treated and the primary driver of the wellhead operating costs. In light of the several orders of magnitude difference in concentrations between the nitrate and perchlorate (if any) it would be unreasonable to consider the Chino 1 wellhead treatment as an acceptable replacement for a Rialto basin. Fox Dep., 76:18-81:3, 259:7-261:5; Hunt Dep., 219:6-9, 382:22-383:15. Rialto has not explained why the alleged dischargers of perchlorate in the Rialto Basin would be responsible for such costs.

e. The State Board's Own Policies Preclude it From Ordering Water Replacement below the PHG

The State Board found in *Olin Corp. and Standard Fusee Corp.*, WQ 05-07 (2005), that it could not order water replacement below the PHG for perchlorate. While Goodrich has taken issue with the State Board's policy as described in its initial brief (Goodrich Brief, 221-224), Rialto has never shown a detection of perchlorate above the PHG in Chino 2, which has been non-detect recently. Fox Dep., 119:18-24, 121:12-14; Draft CAO, ¶56. Similarly, neither Rialto nor the Advocacy Team has put forth evidence of the level of perchlorate currently found in Chino 1, which Rialto admits has experienced a steady decline of perchlorate. Accordingly, under its own decision, the State Board may not require water replacement related to Chino 2 and cannot consider Chino 1 without even knowing the perchlorate level. Rialto has proceeded at its own peril with its "zero tolerance" policy for perchlorate. The State Board, California taxpayers and Rialto ratepayers should be

questioning how Rialto has spent these funds.

f. Rialto did not Comply with the NCP as to its Wellhead Treatment

Rialto did not comply with the National Contingency Plan ("NCP") with respect the wellhead treatment on Chino 1 and 2, or its other costs, and has not even attempted to demonstrate so. As Goodrich explained in its Opening Brief, there is an elaborate federal regulatory mechanism, the NCP, that must be followed. Goodrich Brief, 215-19; 40 C.F.R. Part 300, *et seq.* The costs incurred with respect to the wellhead treatment of the Chino wells are not consistent with the NCP. Prior to the wellhead treatment installation, the City did not prepare a remedial investigation/feasibility study, remedial action plan, or community relations plan, among other things, and has not put forth any evidence that it otherwise complied or was consistent with the NCP. *See* 40 C.F.R. § 300.415; Fox Dep., 179:24-181:17; Hunt Dep., 225:16-226:1; 233:14-234:12; 238:8-239:4; 239:21-240:4; McPherson Dep. 312:14-21. Payment of these costs in lieu of other cleanup measures required by the federal law would impermissibly conflict with the federal scheme designed to quickly and cost-effectively remediate contaminated sites. *See* Goodrich Brief, 215-219.

2. The City Cannot Recover its Other Claimed Costs

The City's other claimed costs in these proceedings are equally flawed and unrecoverable from Goodrich. For instance, the City seeks $166,500 for water leased from the City of Colton in 2003 in order that it could pump additional water from the Rialto Basin. In July 2003, the City had pumped its full allotment of water from the Rialto Basin, three months prior to the end of the annual period under the 1961 Decree. Hunt Dep., 180:21-181:14; Fox Dep., 110:8-12, 115:23-116:12; Fox Dep., Ex. 4131. At best, the lease was necessary given shortfalls *outside the Rialto Basin*, such as due to its closure of Chino 1 under its zero tolerance policy, which is wholly unrelated to the Rialto Basin or 160-acre parcel, as explained above. Fox Dep., 111:13-113:20. In fact, this merely serves to further demonstrate that Rialto has ample capacity to pump its Rialto Basin water rights despite perchlorate, as under it did under the 2003 Colton agreement. Similarly, Rialto seeks

$92,088.77 in connection with a tie-in made in 2004 to the Riverside Highland Water Company, which the City claims is for emergencies. Yet, as with the Colton agreement, this cost was not caused by perchlorate in the Rialto Basin.

The City also improperly seeks reimbursement for other expenditures unrelated to perchlorate contamination in the Rialto Basin, let alone unconnected in anyway to Goodrich. For instance, Rialto seeks the recovery of $2,100 paid to Engineering Resources purportedly for a report, not produced in this proceeding, concerning well placement in the Bunker Hill Basin to be funded by the County of San Bernardino under its 2000 agreement. Fox Dep. 211:13-218:10. Other costs prayed for by Rialto are equally improper on its face and tenuously connected to its claims for contamination in the Rialto Basin, such as the maintenance of wells in other basins, or the recovery of employee compensation and benefits who purportedly worked on projects related to wellhead treatment on the Chino wells, despite that the City would have paid the benefits and most of the compensation (with the possible exception of overtime) anyways. Fox Dep., 224:22-229:5.

D. Rialto Has a Surplus and Has Mismanaged Its Funds

In its brief, the City states that "Rialto lacks the resources and funding to install water treatment on many of the most affected wells downgradient of the Goodrich/Black & Decker site, such as Rialto No. 1, Rialto No. 2, Rialto No. 4 and Rialto No. 6" Rialto Brief, at 133. Rialto's statement is perplexing to say the least, given the funding it has received from the federal and state governments and that it has yet to spend a $1 million received from Goodrich in December 2002. On top of this, in 2000, Rialto received funding from the County of San Bernardino to install a new well, which it has yet to do, and is compensated each year for leasing away a significant component of its Rialto Basin water rights. Then there is Rialto's "perchlorate surcharge" on its ratepayers which has done nothing to address the contamination or supply additional water. Not only has Rialto not demonstrated it is legally entitled to water replacement, but Rialto needs to account for how it spent money already received in connection with its groundwater contamination claims.

1. Rialto has received significant government funding that it squandered on wells with perchlorate levels even below the PHG

As described above, Rialto chose to spend approximately $1.8 million of State funds on Chino 1 and 2, rather than on wells in the Rialto Basin (in light of its water rights restrictions on the Rialto wells). Fox Dep., 150:1-153:5; Berchtold Dep., 498:8-499:11. The City has never demonstrated that Chino 2 had any detection of perchlorate above the PHG and non-detect at present. In fact, the City blatantly leaves Chino 2, and its corresponding perchlorate concentration, off its "Road Map" figures in an apparent effort to conceal the obvious. Rialto also suspiciously neglects to point out that it has received funding from the federal government as well. A wellhead treatment system is in the process of being installed on Rialto 4, that will have a capacity to produce approximately 1,000 gpm of water, under federal funding. Fox Dep., 138:23-140:15; Hunt Dep., 113:23-115:6. Research on perchlorate treatment technologies by DoD is also being conducted on Rialto 2. Fox Dep., 153:7-154:14; Hunt Dep., 253:22-254:11; 255:17-256:4; 266:16-22; 267:6-17. The City also received $119,000 from the federal government. Fox Dep., 156:5-157:18. And, Rialto has been awarded another $500,000 in federal funding, which Rialto is in the process of planning to use to install another wellhead treatment on Rialto 1, *even though the well has never detected perchlorate above the PHG* and has not detected perchlorate recently. Hunt Dep., 258:19-259:5, 261:6-19; Fox Dep., 229:12-230:10. Such funding could be applied to Rialto 6.

2. Rialto Received $1 million from Goodrich for Wellhead Treatment, Which It Has Not Spent

Rialto amazingly fails to mention that it received $1 million from Goodrich over four years ago specifically for wellhead treatment and *has not spent it.* Fox Dep., 155:10-156:10, 187:6-17. In December 2002, pursuant to an interim settlement with Rialto, the City of Colton, the West Valley Water District and the Fontana Water Co., Goodrich provided $4 million for wellhead treatment. Berchtold Dep., Ex. 4342; Berchtold Dep., 496:9-498:3. While the City admits that it received $1 million from the settlement with Goodrich, it has no good explanation as to why it has not spent this money on wellhead treatment and that it

has sat idle in the bank, despite the City's claims for want of resources.[54] Fox Dep., 187:14-190:2; Owen Dep. 70:4-71:4, 72:22-8, 75-77:14.

3. Rialto Has Funding for a New Well, which it has yet to install, and from Leasing its Water Rights

The City has other resources available to it for addressing its claimed water supply shortage, which it has yet to make use of, further demonstrating that the City has not direly lacked water due to perchlorate in the Rialto Basin or otherwise. In its brief, the City is silent on the funding it received for a new well to replace water in the Rialto Basin. Inexplicably, the City cites to the FUWC lease as a reason why the City must receive water replacement in this proceeding from sources ranging as far a field as connecting the City to the State Water Project. However, in exchange for leasing 1600 acre-feet per year to FUWC, the City received $1.375 million from the County of San Bernardino to install a new production well. McPherson Dec., Ex. I. The City has yet to install this fully funded production well for reasons wholly unrelated to perchlorate contamination in the Rialto Basin. Rialto Brief, at 11. Under the same agreement, the City also receives $40 per acre foot for leasing standby water rights to 1600 acre-feet annually and another $100 per acre foot since 2003 after the 1961 Decree water rights restrictions were triggered, which amounts to $224,000 per year. McPherson Dec., Ex. I. According to the terms of the agreement, in light of the water restrictions triggered in 2003, the City has received approximately $1 million from the County since entering into the lease. The City has not explained how such funding is or has been used.

4. Rialto's Perchlorate Surcharge

As further evidence of its financial inability to address the perchlorate, Rialto cites its "perchlorate surcharge" imposed by its City Council on its ratepayers. Rialto Brief, at 7. CCAEJ goes so far as to demand reimbursement of the surcharge to the residents of Rialto.

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[54] Goodrich is confused by Rialto's repeated characterization of this payment as a "loan." The payment was made as part of an Interim Settlement Agreement. If Rialto continues to take the position that the payment was a loan, then Goodrich will need to evaluate its right to repayment with interest.

Perhaps its Rialto's own ratepayers who should question the necessity and use of such surcharge, which cannot be refunded to them under the law. The City has spent upwards of $15 million on legal costs. Owen Dep., 231:3-21. Yet, in this proceeding, Rialto has put forth, at most, a few hundred thousand dollars allegedly incurred due to treating perchlorate, given most of its costs have been reimbursed. Indeed, Rialto, as explained above, still has at least another $1 million received from Goodrich that remains unspent with millions of dollars of more funding coming from the federal government and San Bernardino County for wellhead treatment and well replacement for wells in the Rialto Basin, where it already has more than the capacity to pump its limited water rights. The truth is that almost all of the surcharge is used for legal fees and costs, for which the State Board has absolutely no authority to order alleged dischargers to pay. Nor can the City recover such legal costs in its action in federal district court. *Key Tronic Corp. v. United States*, 511 U.S. 809 (1994).

Further, the whole premise of the surcharge shows that it is lawyer-driven, not cleanup or supply-driven. The March 2004 Rate Study performed by Bookman-Edmonston for the Rialto City Council, upon which the surcharge is based, only raises more questions as to the propriety of the surcharge and how surcharge is being spent. Hunt Dep. 192:20-193:13; 193:25-195:15, Hunt Dep., Ex. 4718. For instance, the Rate Study justifies the surcharge by assuming that the City will need to expend $1.7 million per year over at least the next thirty years (totaling $46 million) to conduct wellhead treatment on three wells, Chino 1, Chino 2 and Rialto 2. Yet, the very support cited by the Rate Study, a December 3, 2003 memorandum prepared by the City's consultant, Bill Hunt, sets forth an anticipated cost of $1,122,982 per year. Hunt Dep., 189:11-191:13, Hunt Dep., Ex. 4717. Moreover, of this amount, $484,198 is presumed to be spent per year to perform wellhead treatment on Rialto 2, yet the City has decided not to treat Rialto 2 and is installing wellhead treatment on Rialto 4 instead, which is being paid for by the DoD, as indicated above.[55] Hunt Dep.,

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[55] Nor did the City even attempt to consider the net present value of the cost intended to be spent over the course of thirty years or the likelihood that the cost of treatment would be significantly reduced overtime as the technologies progress.

206:7-25. Mr. Hunt testified that he could not defend the Rate Study's $46 million wellhead treatment estimate (which according to Mr. Hunt's figures, Chino 1 and 2 would cost approximately $17 million over 30 years). Hunt Dep., 208:10-16; Owen Dep., 236:10-24. As explained above, the treatment of the Chino wells is unrelated to the Rialto Basin and cannot be attributed to operations in the North Rialto area. Equally off base, on the other hand, is the Rate Study's assumption that it could fund litigation from a perchlorate surcharge over the course of four years in the amount of $9.6 million, a cost which the City admittedly has already greatly exceeded three years later. Owen Dep., 231:3-21; 236:10-24. Rather, it has spent upwards of $15 million on legal costs and has virtually spent nothing treating its wells.

VIII.
RIALTO DOES NOT SUPPORT ITS PROPOSED CLEANUP STANDARD, WHICH IS ALSO PREMATURE TO CONSIDER

Rialto spends a significant portion of its brief arguing that the Rialto-Colton Basin must be cleaned up to "background." Rialto not only fails to make its case, but determination of any such cleanup standard is well beyond the issues in this proceeding and outside the scope of the pleadings. Apparently ignorant to the fact that the cleanup level is outside the scope of these proceedings as defined by the pleading (i.e., the draft CAO), Rialto's brief unsuccessfully attempts to hobble together nonbinding and unrelated legal authorities as far reaching as the Global Warming Solutions Act in an in artful attempt to support its cause. In the end, the City provides no valid support for its assertions as to the background level.

As specified in the same Cleanup Policy[56] that Rialto purports to interpret, the Draft

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[56] The "Cleanup Policy" referenced by Rialto is primarily a document issued by the State Water Resources Control Board to provide guidance to the regional boards. Rialto P&As, 125-126; "Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304", SWRCB Res. No. 92-49. *Rialto implies that the Cleanup Policy is binding upon the State Board, as opposed to the regional boards* (*see, e.g,* Rialto P&As, 125 ["the Cleanup Policy *directs* the SWRCB..."]), and fails to clarify that, because the policy is a resolution rather than order, the policy does not have precedential effect. State Water Resources Control Board Website, "Resolutions, Orders & Decisions," *available at*

[Footnote continued on next page]

CAO provides for additional investigation and analysis that would first need to be undertaken before arriving at a cleanup level. Draft CAO, Order, ¶¶ 1-8. The determination of whether to cleanup to background water quality or some other reasonable level depends on making findings on various factors that require an understanding the results of such work and cannot be made in a vacuum. For this very reason, even the draft CAO itself reserves the issue for disposition in the future. Draft CAO, p. 31, para. 9. Even the City's "Road Map" spends hundreds of pages outlining the additional work that it contends must be done prior to designing a remedy.

Further, as with the rest of its brief, the City merely makes repeated conclusory statements such as to the "total values" involved and interprets the nine separate Section 2550.4 factors without any apparent analysis or evidence upon which to base its conclusions. Likewise, Rialto suggests that the potential cleanup level could even extend to levels below the currently accepted detection level by the State for perchlorate in drinking water. Rialto Brief, at 129. Rialto cites to an inadmissible study, the "Ginsberg Study," for the proposition that the "safe" level should be one part per billion (ppb) or possibly lower. It also refers, without citation, to an EPA laboratory test that can "reliably" detect perchlorate at 2.5 ppb "or higher." Yet, the DHS sets the detection limit for purpose of reporting (DLR) for perchlorate at .004 mg/L or 4 ppb. Table 64432-A, *Proposed Perchlorate MCL Regulation,* R-16-04.[57]

Further contradicting Rialto's own argument is its citation to U.S. EPA's reference dose for chronic oral exposure ("RfD") of 0.0007 mg/kg/day. The City neglects to point out that EPA has further indicated that its

> RfD translates to a Drinking Water Equivalent Level (DWEL) of 24.5 ppb. A Drinking Water Equivalent Level, which assumes that all of a

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[Footnote continued from previous page]
http://www.waterboards.ca.gov/resdec/index.html#resdec ("Resolutions are not precedential.")

[57] DLRs define the analytical detection of a contaminant in drinking water supplies, identifying the level at which DHS is confident about the quantification of the chemical's presence.

> contaminant comes from drinking water, is the concentration of a contaminant in drinking water that will have no adverse effect with a margin of safety. Because there is a margin of safety built into the RfD and the DWEL, exposures above the DWEL are not necessarily considered unsafe., which the EPA has set forth as being the equivalent of 24.5 ug/L . . . (U.S. EPA News Release, Feb. 18, 2005).

Similarly, Rialto recognizes that the PHG established by OEHHA is 6 ug/L yet somehow implies that a cleanup level should be lower.

Moreover, while the City seeks to attain undefined "background levels" in the groundwater, it conspicuously fails to address other relevant and necessary considerations, such as the contribution of perchlorate from Chilean fertilizer and Colorado River water. *See, e.g.,* Goodrich Brief at 171-181; Fox Dep., 234:18-235:2, 257:1-11; Hunt Dep., 313:23-316:11; 317:5-16. Nor has the City reconciled its position with perchlorate detections admittedly unrelated to operations in the North Rialto area, such as at Chino 1 and 2.

Simply put, addressing the cleanup standard of the Rialto Basin is "putting the cart before the horse" and is well outside the scope of these proceedings.

IX.
AS WITH THE ADVOCACY TEAM, RIALTO HAS FAILED TO GET THE LAW RIGHT

In its opening brief, Rialto makes various specious claims regarding the current and retroactive application of Water Code Sections 13304 and 13267. Rialto misstates its burden of proof, Section 13304(a)'s requirements, and the statute's retroactive effect. Nor does it anticipate or address the multiplicity of other legal issues set forth in Goodrich's Brief at 181-256.

A. Rialto Gets Wrong its Burden of Proof

At numerous points in its brief, Rialto argues that "substantial evidence" exists to support its contentions. *See, e.g.,* Rialto Brief, 1, 37, 38, 39. Similarly, Rialto advocates that the State Board should "reasonably find" that replacement water will be required. Rialto Brief, 123. However, Rialto cites no authority for the proposition that a substantial evidence standard or a "reasonable finding" applies in this proceeding. In this proceeding, and should it be reviewed by the Superior Court, Rialto and the Advocacy Team must instead prove

their claims by a *preponderance of the evidence*. Goodrich Brief, 182-83. According to the various hearing notices and claims of the Hearing Officer, this proceeding is being held pursuant to the State Board's power to review matters on its own motion as authorized under Water Code Section 13320(a). Courts review proceedings brought under this statute by applying Code of Civil Procedure Section 1094.5. Water Code Section 13330(d). In such instances, the Code of Civil Procedure directs reviewing courts to exercise "independent judgment" as to the weight of the evidence and to adjudge an abuse of discretion when the agency's findings are not supported by the weight of the evidence. The weight of the evidence is equivalent to the preponderance of evidence standard, which is a higher standard than substantial evidence. *Kapelus v. State Bar*, 44 Cal. 3d 179, 206 fn. 10 (1987).

B. Rialto Misstates Section 13304(a)'s Requirements

Rialto gets wrong fundamental requirements of Section 13304(a). To start with, it asserts that Section 13304(a) "authorizes the State and/or Regional Boards to issue a Cleanup and Abatement Order (CAO) to any party responsible for discharging, or threatening to discharge any waste into waters of the state *or* for creating or threatening to create a condition of pollution or a nuisance." Rialto Brief, at 87 (emphasis added). Rather, the statute actually requires that both a discharge (or threatened discharge) to the groundwater occur *and* the creation of (or threat thereof) a condition of pollution or nuisance. Water Code Section 13304(a). Goodrich Brief at 207-211. With a similar lack of attention to detail, Rialto's Brief is replete with allegations such as "discharges to the environment," but wanting of evidence that Goodrich discharged perchlorate into the groundwater, which created a condition of pollution or nuisance. *Id.*

While Rialto or the Advocacy Team may wish not to concern themselves with such details, it is their burden to demonstrate that their case meets the elements of the Water Code. They have not done so.

C. *Rialto Does Not Satisfactorily Address the Lack of Retroactively of the Water Code*

As with the Advocacy Team's brief, Rialto's opening brief is silent as to the retroactivity of Sections 13304 and 13267. Notably, it does not even attempt to assert and demonstrate how these statutes *unequivocally* imposes retroactive liability, which is necessary for statutes to be given retroactive application to Goodrich's alleged acts that occurred years prior to the passage of the Porter-Cologne Act. Goodrich Brief, 186-90.

Moreover, in a portion of its brief not concerning Goodrich, Rialto alleges that the State Board or regional board "have authority to issue CAO for discharges under the Dickey Act." Rialto Brief, at 87. In support of this contention, Rialto merely cites the March 27, 2007 Advocacy Team submission and the same State Board orders cited in that document. A few pages later, again not as to Goodrich, Rialto merely claims that past actions "had the potential to form the basis for liability under California law." Rialto Brief, at 92. Rialto *does not,* however, either allege against Goodrich or even attempt to prove a violation of the Dickey Act by citing a specific section of that law and mounting evidence that proves the violation. Goodrich Brief at 193-205. The Advocacy Team similarly failed to make a case in its opening brief.[58] Despite being fully cognizant of the need to do so, neither the Advocacy Team nor Rialto has bothered to attempt to demonstrate a claim against Goodrich under the Dickey Act nor any other prior statute at the time of its operations. With that alone, the State Board must dismiss the case.

Rialto apparently tries to salvage its problematic claim by asserting that "because the perchlorate continues to migrate into the soil and groundwater, the discharge constitutes a

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[58] Also in a section of its brief unrelated to Goodrich, Rialto cites *City of Modesto Redevelopment Agency v. Superior Court,* 119 Cal. App. 4th 28 (2004), for the proposition that liability under Water Code Section 13304(a) can attach to parties that create or assist in creating a system that results in the unauthorized discharge or disposal of hazardous waste. Rialto Brief, at 87. This case does not apply to Goodrich, nor does Rialto suggest that it does, and does nothing to overcome the shortcomings of the claim against Goodrich under Section 13304(a). The case does not address the retroactivity of Section 13306 and does not do away with the need to find a discharge to groundwater and pollution or nuisance.

continuing violation subject to the Porter-Cologne Act." Rialto Brief, at 87. This is simply not correct as Goodrich previously pointed out in its initial brief. Goodrich Brief, at 195-196. Any such reading would run afoul of Water Code Section 13304(j). The single State Board order cited by Rialto, *Zoecon Corporation*, SWRCB No. WQ 86-2, is off-point and holds that the current landowner must be held responsible. *Id.* Again, the present landowners are inexplicably absent from this proceeding.

X.
THE ADVOCACY TEAM IS UNJUSTLY PROSECUTING GOODRICH TO MASK ITS OWN GROSS NEGLIGENCE IN REGULATING THE ONLY CONFIRMED SOURCE OF PERCHLORATE CONTAMINATION IN GROUNDWATER ON THE 160 ACRE PARCEL

Since 2002, the Advocacy Team has engaged in an unrelenting campaign to hold Goodrich responsible for the perchlorate and TCE contamination in the Rialto-Colton Basin, in spite of a total lack of evidence to support its position. Goodrich Brief, at Section XVIII. In 2002, the Advocacy Team issued a CAO against Goodrich and Kwikset on the basis of a single, one-and-one-half-page document from the Rialto Historical Society generally describing Goodrich's operations. Ex. 11114 (CAO No. R8-2002-0051); Saremi Dep., 76:15-77:13. Of course, after an evidentiary hearing, the Regional Board rescinded the Advocacy Team's 2002 CAO for failure to prove its allegations against both Goodrich and Kwikset, and ordered the Advocacy Team to issue investigation orders to operators and property owners at the 160 acre parcel: ***"it is not reasonable to focus on two parties when there is evidence that many others might be the cause or have contributed to the contamination and bear some responsibility."*** Ex. 11202 (Res. No. R8-2003-0070). Nonetheless, Goodrich is once again confronted with a proposed CAO that ignores other PRPs (including parties responsible for the only confirmed source of perchlorate groundwater contamination), and that is based solely on insufficient hearsay evidence. *See* Section V.B., *infra*.

A. The Advocacy Team has No Case Against Goodrich and its Witnesses Lack Personal Knowledge on the Subjects Which They Were Belatedly Designated To Testify About

The recurring theme throughout the Advocacy Team's Mach 27, 2007 submission is the complete lack of evidence offered in support of the Advocacy Team's claims. Consistent with this theme, the Advocacy Team apparently will not be offering any evidence during its "direct examination" at the Hearing; instead, it seeks to have three team members simply "describe documents, reports, studies and the deposition testimony of others and discuss their significance" during "direct examination." Ex. 30002 (4/30/07 letter from J. Leon to T. Doduc at 3). These witnesses have no first hand knowledge of the topics on which they intend to testify, whether those topics are technical or historical in nature. Thus, any such presentations by Advocacy Team members are not admissible evidence as they are nothing more than rank hearsay and speculation.

Goodrich's Opening Brief set forth in great detail the insufficient knowledge of the Advocacy Team witnesses regarding the topics on which they were designated to testify (Goodrich Brief, at 299-330). Because the Advocacy Team's April 6, 2007 submission set forth previously undisclosed topics for Advocacy Team witness testimony, Goodrich was unable to examine the potential witnesses on all the topics on which they are now designated to testify. As such, after Goodrich submitted its Opening Brief, the depositions of Mr. Saremi and Ms. Sturdivant were taken to explore, among other things, the testimony that these witnesses intended to provide at the Hearing regarding to the new topics set forth in the Advocacy Team's April 6, 2007 submission. During these depositions, Mr. Saremi and Ms. Sturdivant testified that they have no basis to make the conclusions attributed to them in the April 6, 2007 submission.

1. Kamron Saremi

Mr. Saremi lacks the requisite knowledge and expertise to testify on nearly all of the subjects on which he is identified to testify about in the April 6, 2007 Advocacy Team Witness Statements.

- "General characteristics of perchlorate," "solubility and mobility of . . . perchlorate," and the "solubility and mobility of trichloroethylene." April 6, 2007 Advocacy Team Witness Statements at 3.

Mr. Saremi is not an expert on any of these subjects, He has repeatedly testified that he is not an expert in perchlorate, TCE, or chemistry in general. Saremi Dep., 829:15-830:1, 831:2-23, 844:7-16. Further, Mr. Saremi also conceded that he is not an expert in hydrogeology, geology, vadose zone transport of chemicals, or groundwater modeling. Saremi Dep., 851:7-852:17. And despite the fact that Mr. Saremi admits "I'm not a hydrogeologist or an expert", he has also been designated to testify regarding the "impacts of perchlorate and TCE on the municipal water supply." Saremi Dep., 1048:12-13. Without any expert qualification, Mr. Saremi should not be permitted to testify on these topics.

- The perchlorate plume from the Mid-Valley Landfill is distinct from the plume emanating from the 160 acre parcel. April 6, 2007 Advocacy Team Witness Statements.

Because Mr. Saremi, as shown above, is not an expert in hydrogeology or groundwater modeling, his testimony on this topic is both improper and without value. Cal. Evid. Code §§ 350, 702, 801. Further, Mr. Saremi, in addition to not being an expert in this subject, had not reviewed or critiqued the GLA groundwater model for the Mid Valley Landfill at the time of his recent deposition. Saremi Dep., 892:2-893:8, 899:17-900:21. And he testified that his current opinion on the alleged distinction between the two plumes does not even take into account whether pumping at Rialto's wells influenced the groundwater flow direction from the Mid Valley Landfill. Saremi Dep., 920:12-23, 924:24-926:18, 934:16-935:1. Mr. Saremi's lay opinion on the distinction between the Mid Valley Landfill and 160 acre plume has no place in this proceeding.

- "Data and findings from investigations of perchlorate and TCE discharges at and from the property." April 6, 2007 Advocacy Team Witness Statements at 3; Saremi Dep., 942:13-20.

A presentation by Mr. Saremi on this subject is inadmissible hearsay, and should not be permitted. *See* Ex. 30003 (May 2, 2007 letter from J. Dintzer to T. Doduc). In addition, Mr. Saremi testified he cannot identify the specific source of perchlorate or TCE in any soil sample taken from the 160-acre site because of the years of fireworks companies burning waste containing perchlorate on the site, and because of the grading that took place in 1987 after Ken Thompson, Inc. caused the waste in the McLaughlin Pit to be burned, filled in and covered with concrete. Saremi Dep., 995:7-996:1, 998:18-999:16. Mr. Saremi confessed that any particular soil sample that contained perchlorate or TCE could have come from any one of several operators historically at the site, including operators, such as Pyrotronics, that used solvents and massive amounts of perchlorate for 22 years. *Id.*; Saremi Dep., 978:24-980:1, 981:4-14, 981:19-983:12, 984:16-985:1.

- "Perchlorate and TCE were disposed of by Goodrich" and "these contaminants have migrated into the vadose zone and to the groundwater." April 6, 2007 Advocacy Team Witness Statements at 6.

Mr. Saremi is not an expert and has no knowledge on the infiltration of contaminants through the unsaturated soil (i.e. vadose zone) to groundwater (400 feet deep) on the 160 acre parcel. Also, he has not done any modeling or calculations on infiltration; as such, Mr. Saremi may not testify on these subjects at the Hearing. Saremi Dep., 1073:14-16, 1074:1-5; April 6, 2007 Advocacy Team Witness Statements at 5.

- The regulatory history of the McLaughlin Pit

Mr. Saremi admits to having "very little" knowledge of Subchapter 15 regulations. Saremi Dep., 1230:1-12 ("This is something I have to learn if I'm going to testify"). In fact, Mr. Saremi stated that he is the member of the Advocacy Team with the least amount of knowledge on the Subchapter 15 regulations. Saremi Dep., 1243:14-1244:6. This complete lack of knowledge was demonstrated in Mr. Saremi's deposition when he stated that he had no opinion as to whether the failure to install a monitoring well for the McLaughlin Pit or the improper closure of the McLaughlin Pit would constitute a violation of Subchapter 15. Saremi Dep., 1230:9-20, 1239:19-1240:1.

- "Goodrich's use of ammonium perchlorate as an oxidizer in solid rock propellant" and "Goodrich's burn pits at the property". April 6, 2007 Advocacy Team Witness Statements at 5.

During his recent deposition, Mr. Saremi admitted that he never visited the Goodrich site while it was operating and that he has no personal knowledge of any of the operations at the Goodrich facility. Saremi Dep., 1089:5-13, 1090:15-21, 1095:1-6. Mr. Saremi also confirmed that he has never seen the Goodrich burn pit, nor does he have any knowledge regarding Goodrich's use of ammonium perchlorate or the potential waste or ash created by the burning of rocket motors. Saremi Dep., 1094:17-21, 1152:11-1154:2, 1098:2-15, 1103:13-1104:19; *see also* Saremi Dep., 1104:20-1105:15 (cannot conclude that "propellant for almost all of these rockets was ammonium perchlorate"). Moreover, Mr. Saremi testified that he has no knowledge of the use of free water in Goodrich's test firing area or the Goodrich burn pit. Saremi Dep., 1154:3-22, 1194:5-1195:14.[59]

In addition to not having any personal knowledge of Goodrich's operations, Mr. Saremi testified that he had not reviewed any depositions of former Goodrich employees as of May 9, 2007, except for a small portion of Ronald Polzien's deposition having to do with Sidewinder Missiles. Saremi Dep., 1083:11-1084:1, *see also* Saremi Dep., 1084:9-16 (confirming that he did not review any of the cross-examination of Mr. Polzien). Further, at the time of his deposition, Mr. Saremi had not read even one of the eight declarations of former Goodrich employees that were submitted by Goodrich. Saremi Dep., 1084:17-1085:2. Nor had he reviewed any documents from the National Archives concerning Goodrich's historical operations. Saremi Dep., 1085:3-12. Mr. Saremi cannot testify regarding Goodrich's operations because he has no personal knowledge of those operations or relevant expertise, and any attempt by Mr. Saremi to present evidence obtained from other witnesses or documents during his "direct examination" is simply

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[59] Mr. Saremi also confessed that he has no evidence that Goodrich ever used the so called "Area D-1 – South Pit," nor was he aware of any evidence that the D-1 Area Pit was exposed to free water. Saremi Dep., 1167:6-13.

inadmissible hearsay and irrelevant to these proceedings. Cal. Evid. Code §§ 350, 702, 801, 1200.

2. Ann Sturdivant

Much like Mr. Saremi, Ann Sturdivant has been designated by the Advocacy Team to testify on topics on which she is entirely unfamiliar.

- Solubility and mobility of potassium perchlorate, ammonium perchlorate, and TCE as well as other physical and chemical properties of these contaminants. April 6, 2007 Advocacy Team Witness Statements at 8-10.

Such testimony clearly calls for an expert opinion, but Ms. Sturdivant is not qualified to proffer expert opinions on these chemicals, as she admits that she is not a chemist or a chemical engineer and is unable to testify as to certain properties of these chemicals. Sturdivant Dep., 1194:5-6, 1217:11-17; *see also* Sturdivant Dep., 1275:2-9 (Ms. Sturdivant had no knowledge of the friction point for TCE or the by-products of burning TCE).

- The infiltration of contaminants, including perchlorate salts, into the soil and groundwater

Mr. Sturdivant intends to provide testimony on this topic without ever having constructed a model on the infiltration of perchlorate through the vadose zone to groundwater or conducted tests on the porosity of the soil on the site. April 6, 2007 Advocacy Team Witness Statements at 8; Sturdivant Dep., 1283:18-1285:10, 1474:13-19. Indeed, as of the date of her most recent deposition, Ms. Sturdivant had not yet reviewed any of the expert declarations submitted in this case regarding infiltration through the vadose zone. Sturdivant Dep., 1283:18-1285:10, 1476:21-1481:14. And she was unable to give an estimate of the infiltration rate at the 160 acre parcel within an order of magnitude. *Id.*; Sturdivant Dep., 1287:9-13 (cannot testify to the migration rate of perchlorate to groundwater). Indeed, there is no basis for any testimony by Ms. Sturdivant on the infiltration of contaminants to the soil and groundwater.

- "Goodrich's burn pits at the Property"

Ms. Sturdivant testified in her deposition that she has no knowledge or evidentiary basis for concluding that Goodrich operated a second burn pit on the site. Sturdivant Dep., 1278:2-1281:2. Ms. Sturdivant was not present when the alleged second pit was excavated, and she has no idea whether the alleged second pit was bermed or used by fireworks companies, instead of Goodrich, for waste disposal. Sturdivant Dep., 1266:9-1268:1, 1268:19-1271:14, 1264:7-20. Without any personal knowledge regarding the alleged second burn pit, Ms. Sturdivant's testimony is purely hearsay and speculation. Cal. Evid. Code §§ 350, 702, 801, 1200.

Similarly, Ms. Sturdivant's "direct testimony" will cover the disposal of Goodrich's waste materials in its burn pit, and the alleged migration of that waste to the groundwater. April 6, 2007 Advocacy Team Witness Statements at 9,10. And the Advocacy Team has identified her as testifying about the effect of burning perchlorate. April 6, 2007 Advocacy Team Witness Statements at 7. Ms. Sturdivant, however, has no knowledge regarding the burning of perchlorate as a constituent of rocket propellant, or the amount of perchlorate discharged to the ground after burning rocket propellant containing ammonium perchlorate. Sturdivant Dep., 1193:18-1194:23, 1216:10-1217:17, 1222:15-1224:13, 1286:22-1287:8. Ms. Sturdivant also has no knowledge regarding the use or presence of free water at Goodrich's burn pit or the so called "D-1 Southwest Pit," which she admits would be necessary to establish that perchlorate was transported through the soil. Sturdivant Dep., 1271:15-21, 1272:5-7, 1273:17-20, 1281:16-22 (agreeing that "vadose zone transport in the North Rialto area of chemicals would be very slow to zero in the absence of free water"). ***Further, Ms. Sturdivant admitted at her deposition that she cannot testify as to which source on the 160-acre parcel is responsible for the perchlorate contamination in the groundwater at any well on or downgradient from the 160-acre site***. Sturdivant Dep., 1336:9-24.

- "Goodrich's use of ammonium perchlorate as an oxidizer in solid rocket propellant." April 6, 2007 Advocacy Team Witness Statements at 8.

Like Mr. Saremi, Ms. Sturdivant also has no personal knowledge of Goodrich's operations. Cal. Evid. Code § 702. She never visited the Goodrich Rialto facility while Goodrich was operating there, and she never observed Goodrich's Rialto operations. Sturdivant Dep., 1511:20-1512:9. Ms. Sturdivant is also not an expert on the industrial practices of rocket motor loading facilities. Sturdivant Dep., 280:10-13; *see also* Cal. Evid. Code. § 801. Yet the Advocacy Team nevertheless identified her as a witness who will testify regarding Goodrich's use of ammonium perchlorate as an oxidizer in solid rocket propellant, Goodrich's burn pit, and Goodrich's disposal of waste material. April 6, 2007 Advocacy Team Witness Statements at 8. Clearly, none of Ms. Sturdivant's testimony regarding Goodrich can be admitted or relied upon in this proceeding because it fails to come from her personal knowledge or expertise. Thus, it is at best all irrelevant hearsay and not admissible in these proceedings. Cal. Evid. Code. §§ 350, 702, 801, 1200.

- Evidence regarding the McLaughlin Pit. April 6, 2007 Advocacy Team Witness Statements at 10.

Ms. Sturdivant is designated to testify regarding the McLaughlin Pit, but she has never inspected the McLaughlin Pit and was unable to discuss the integrity of the pit at her recent deposition. Sturdivant Dep., 1292:21-1293:9 ("I never saw it."). Further, after examining Goodrich's in-depth May 7, 2007 letter regarding the pit, Ms. Sturdivant was unable to determine whether it accurately described the history and regulation of the pit because she "didn't know the details" of the McLaughlin Pit. Sturdivant Dep., 1297:7-1298:6.

XI.
CCAEJ AND ENVIRONMENT CALIFORNIA HAVE NOTHING SUBSTANTIVE TO ADD TO THESE PROCEEDINGS

The written submission of Environment California and the Center for Community Action and Environmental Justice (CCAEJ), along with their representatives' depositions, reveal they have no relevant testimony or evidence to present in these proceedings. *See* Goodrich Brief, at 273-293. The parties' representatives confirmed this fact in their depositions that took place after their written submission.

Most importantly, CCAEJ and Environment California are not addressing whether Goodrich or any other allegedly responsible party is the source of any contamination in the Rialto-Colton Basin.

> Q. And it's not your intention to submit evidence in these proceedings; is that right?
>
> A. Correct.
>
> Q. And just so we're absolutely clear on that point, it's not CCAEJ or Environment California's intention to submit any evidence that Goodrich Corporation is responsible for any of the perchlorate contamination in the City of Rialto's groundwater; is that correct?
>
> A. Correct.
>
> Q. And the same is true for any other alleged party; is that right?
>
> A. Correct.

Jahagirdar Dep., 429:2-14.

> Q. Is it accurate that none of the documents attached to CCAEJ and Environment California's submission is factual evidence of anyone being responsible for the contamination in the City of Rialto?
>
> A. Correct.
>
> Q. There's no evidence related to ... who's responsible for the contamination anywhere in CCAEJ and Environment California's submission; is that right?
>
> A. Correct.

Id., 428:16-429:1; *accord* Newman Dep., 284:7-285:12.

In fact, CCAEJ and Environment California are not presenting <u>any</u> evidence, either in the form of documents or witness testimony, and are only addressing the four policy arguments presented in their brief.

> Q. Is it your understanding that this document is solely a series of policy arguments and nothing else?
>
> A. Yes.
>
> Q. And that is very clearly your and CCAEJ's intent in terms of how one should read this document; right?
>
> A. Absolutely.

Q. Do you have any intention of broadening that scope in the rebuttal submission that you will be submitting?

A. No.

Q. As you sit here ... right now, do you have any reason to believe that that intention will change between now and the time the submission is made?

A. No.

* * *

Q. Is it your understanding that you have no intention of presenting any witnesses in connection with the submission that has been made, the rebuttal submission, or the comments that you will make at the upcoming public hearing?

A. Yes.

Q. Do you have any reason to believe that intention will change?

A. None.

Jahagirdar Dep., 419:1-420:9; *accord* Newman Dep., 279:3-281:18.

Q. Do you see on that second page there's a list of four policy arguments?

A. Uh-huh, yes.

Q. In general, are these the four policy arguments that CCAEJ and Environment California intend to present at the upcoming public hearing?

A. To my knowledge, yes.

Jahagirdar Dep., 423:14-20; *see also id.*, 430:9-18 (same)[60]; *accord* Newman Dep., 285:18-286:13.

Those policy arguments are nothing more than abstract position statements. CCAEJ and Environment California provide no basis for applying these concepts to the facts and circumstances at issue in these proceedings :

- they did not calculate how much "replacement water supplies" should be ordered, or identify the "wells impacted by contamination" (Jahagirdar Dep., 430:19-432:25, Newman Dep., 288:14-18, 289:23-291:8, 293:13-294:3);

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60 Ms. Jahagirdar testified that the only additional policy issue she and Ms. Newman discussed addressing in rebuttal is that California Water Code section 13304 does not apply to Goodrich's operations because they pre-dated the law's operative date of January 1, 1970. Jahagirdar Dep., 393:16-394:9, 421:4-17, 423:21-24. That is precisely the law. *See* Goodrich Brief, at 183-210, and Section IX.C, *supra*.

- they did not determine the "background level of water quality" that should be used as the clean-up standard (Jahagirdar Dep., 433:1-21, 523:18-524:5);[61]
- they did not calculate "past cleanup costs" or identify the "impacted public water purveyors" (Jahagirdar Dep., 434:23-436:8, Newman Dep., 311:12-313:6, 315:4-11).[62]

The fact that this information must come from another party, if at all, means CCAEJ and Environment California's policy arguments are entirely duplicative or irrelevant. In either case, they have nothing of substantive to add to these proceedings and it is unclear why they are designated parties. (For Goodrich's legal discussion of these issues, which are raised by the Advocacy Team and Rialto, *see* Section VII & VIII, *infra*.).

XII.
JUSTIFICATION FOR GOODRICH'S REBUTTAL EXHIBITS

Because Goodrich was not in a position to respond to Rialto's Opening Brief, as it has just two business days to review the brief before its brief was due, Goodrich's Opening Brief did not address any of Rialto's arguments or the opinions of Rialto's experts. Therefore, rebuttal exhibits are hereby submitted to respond to the Rialto's baseless allegations.

In addition, several depositions were taken after Goodrich's Opening Brief, including the continuation of the deposition of several witnesses (such Mr. Berchtold, Ms. Sturdivant, and Mr. Saremi). Many of the depositions were taken to address both Rialto's and the Advocacy Team's allegations in their respective Opening Briefs, and the belatedly filed

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61 Contrary to Ms. Jahagirdar's testimony, Ms. Newman testified that, in her view, the background water quality level is zero. Newman Dep., 294:10-14. But she conceded she knows of no technology that can achieve a zero cleanup level and believes this should simply be a "goal". *Id.*, 296:6-297:3. After the difference between health goals and clean-up requirements was clarified, Ms. Newman conceded that CCAEJ's policy position is that any clean-up standard should be subject to the best-available technology. *Id.*, 300:6-17.

62 CCAEJ and Environment California's other policy argument calls for "a clear, automatic process for enforcement" if a cleanup requirement or deadline is violated. It is unclear what this means given that their intention is not to eliminate any of the due process rights that exist for challenging an enforcement order: "We want to fully protect the due process rights of any party that would be subject to the order." Jahagirdar Dep., 433:22-434:22; *see also* Newman Dep., 309:10-311:11.

revised April 6, 2007 Advocacy Team Witness Statements. Because this testimony was not available until after Goodrich's initial submission, Goodrich hereby submits these additional deposition transcripts and the accompanying exhibits.

Goodrich also hereby submits the following rebuttal exhibits:

Exhibit 30001. May 10, 2007 Letter from Tam Doduc to Counsel re use of deposition transcripts during the evidentiary hearing. This Letter, sent after Goodrich's initial submission, reinforces the Hearing Officer's ruling regarding the use of deposition transcripts.

Exhibit 30002. April 30, 2007 Letter from Jorge Leon to Tam Doduc re request for pre-hearing conference. Prior to Goodrich's April 17, 2007 submission, Goodrich did not foresee that the Advocacy Team's entire case would be based on the inadmissible, hearsay statements of its members. Yet, on April 30, 2007, after Goodrich's initial submission, Mr. Jorge Leon, counsel for the Advocacy Team, confirmed that the Advocacy Team members on direct will "describe documents, reports, studies and the deposition testimony of others and discuss their significance."

Exhibit 30003. May 2, 2007 Letter from Jeffrey Dintzer to Tam Doduc re response to Advocacy Team's April 30, 2007 letter. Prior to Goodrich's April 17, 2007 submission, Goodrich did not foresee that the Advocacy Team's entire case would be based on the inadmissible, hearsay statements of its members. After learning of the Advocacy Team's intent, Goodrich objected to this procedure in a May 2, 2007 letter.

Exhibit 30004. April 3, 2007 email from Jenny Sterling to Bill Casedevall re testimony regarding marking on aerial maps. This document was obtained from Daniel B. Stephens on May 14, 2007 in response to a valid federal subpoena. This document has never before been produced in the present proceedings and was obtained by Goodrich after its initial submission on April 17, 2007.

Exhibit 30005. "Notes from Nicole Sweetland." These notes were obtained from Daniel B. Stephens on May 14, 2007 in response to a valid federal subpoena. These notes

have never before been produced in the present proceedings and were obtained by Goodrich after its initial submission on April 17, 2007.

Exhibit 30006. "Notes from Jenny Sterling." These notes were obtained from Daniel B. Stephens on May 14, 2007 in response to a valid federal subpoena. These notes have never before been produced in the present proceedings and were obtained by Goodrich after its initial submission on April 17, 2007.

Exhibit 30007. Rialto's website obtained on April 27, 2007. After Rialto's submission on April 12, 2007, a review of its website revealed that the "Roadmap to Remedy Selection" included as part of its submission to the Hearing Officer was merely a draft. It was unclear from the document itself that this was the case; thus, Goodrich could not foresee this fact. Moreover, given the fact that Goodrich had only two business days to response to Rialto's submission, Goodrich could not have possibly addressed this fact in its Opening Brief.

Exhibit 30008. April 24, 2007 Affidavit of Nonappearance of Witness, Robert Owen. Goodrich timely noticed and subpoenaed Mr. Robert Owen for deposition, yet Mr. Owen failed to appear for his deposition. Goodrich could not have foreseen this fact prior to its submitting its Opening Brief, as Mr. Owen's deposition was scheduled to proceed six days after its submission on April 17, 2007. This also serves to rebut the contention that the City is not responsible for the McLaughlin

Exhibit 30009. May 7, 2007 Letter from Jeffrey Dintzer to Gerard Thibeault regarding the "McLaughlin Pit"; Waste Discharge Requirement Nos. 71-39, 78-96 and 91-18. This letter is new evidence that shows that the Regional Board has not responded to Goodrich's concerns about the McLaughlin Pit.

Exhibit 30010. Various emails obtained from Daniel B. Stephens on May 14, 2007 in response to a valid federal subpoena. These emails have never before been produced in the present proceedings and were obtained by Goodrich after its initial submission on April 17, 2007.

Exhibit 30011. Memorandum drafted by the Rialto Lawyers entitled "Water Board Corrective Action Consideration – Goodrich Release Evidence." This memorandum was

obtained on April 12, 2007, just two business days prior to Goodrich's initial submission on April 17, 2007. Given the timing, Goodrich was unable to review and incorporate this memorandum in connection with its prior submission.

Exhibit 30012. April 17, 2007 Letter from Tam Doduc to Counsel re "Further Rulings on Objections and Revisions to Rebuttal Submission Requirements and Hearing Dates." This new evidence (obtained after Goodrich submitted its Opening Brief) confirms that the Hearing Officer knows that Rialto and the Advocacy Team are working together as a "Joint Prosecutorial Team."

Exhibit 30013. Police Incident Report, Exhibit 4063 to the deposition of Officer Joe Viola. This new evidence was obtained during the deposition of Mr. Joe Viola on May 2, 2007 and thus was unavailable for Goodrich's Opening Brief. It was obtained to rebut the admissibility of the Rialto's testimony and argument.

Exhibit 30014. April 30, 2007 Letter from Jeffrey Dintzer to Robert Owen re Rialto Concrete Products, 220 West Lowell Street; Mitigated Negative Declaration (E.A.R. No. 87-16); former fireworks disposal pit and perchlorate groundwater contamination in Rialto. This new evidence shows that the City of Rialto has failed to enforce the Mitigated Negative Declaration requiring Ken Thompson, Inc. to lawfully cleanup and close the McLaughlin Pit.

Exhibit 30015. May 16, 2007 Telephonic Hearing Transcript with Special Master Tassopulos. This new evidence shows the Rialto Lawyers' duplicity regarding Dr. Stephens' improperly changed opinions. Goodrich clearly could not have foreseen that Dr. Stephens would improperly change his opinions after both Rialto and Goodrich had submitted their respective Opening Briefs.

Exhibit 30016. May 31, 2007 Letter from Philip Hunsucker to Tam Doduc re Request for an Immediate Ruling – Materially Changed, Non-Rebuttal Opinion by Rialto's Expert. Mr. Hunsucker's letter shows that Rialto and Dr. Stephens violated the Hearing Officer's prior rulings. Goodrich and the Alleged Dischargers clearly could not have foreseen that Dr. Stephens would change his opinions violation of the Hearing Officer's rulings.

Exhibit 30017. June 1, 2007 Letter from James Meeder to Tam Doduc re Request for Immediate Ruling on Exclusion of Any city of Rialto Expert Opinions on the Rate of Transport of Water Downward through the Vadose Zone. Mr. Meeder's letter shows that Rialto and Dr. Stephens violated the Hearing Officer's prior rulings and violated the applicable California Government Code Sections.

Exhibit 30018. June 1, 2007 Letter from Scott Sommer to Tam Doduc re Response to Mr. Hunsucker's May 31, 2007 Letter in connection with Dr. Stephens' *changed* opinions. Goodrich and the Alleged Dischargers clearly could not have foreseen that Dr. Stephens would change his opinions violation of the Hearing Officer's rulings or the Rialto Lawyers' response to these violations.

Exhibit 30019. Calculation Cover Sheet re Infiltration Rate. This document was obtained from Daniel B. Stephens on May 24, 2007 in response to a valid federal subpoena. This document has never before been produced in the present proceedings and was obtained by Goodrich after its initial submission on April 17, 2007.

Exhibit 30020. Calculation Cover Sheet re Pore Water concentration of Non-Volatile Contaminant from Soil Concentration. This document was obtained from Daniel B. Stephens on May 24, 2007 in response to a valid federal subpoena. This document has never before been produced in the present proceedings and was obtained by Goodrich after its initial submission on April 17, 2007.

Exhibit 30021. Calculation Cover Sheet re Approximate Mass of Perchlorate Dissolved in Groundwater. This document was obtained from Daniel B. Stephens on May 24, 2007 in response to a valid federal subpoena. This document has never before been produced in the present proceedings and was obtained by Goodrich after its initial submission on April 17, 2007.

Exhibit 30022. Calculation Cover Sheet re Rate of Horizontal Transport of Perchlorate in Groundwater. This document was obtained from Daniel B. Stephens on May 24, 2007 in response to a valid federal subpoena. This document has never before been

produced in the present proceedings and was obtained by Goodrich after its initial submission on April 17, 2007.

Exhibit 30023. Calculation cover Sheets re Dr. Stephens' Various Calculations. These documents were obtained from Daniel B. Stephens on May 24, 2007 in response to a valid federal subpoena. These documents have never before been produced in the present proceedings and were obtained by Goodrich after its initial submission on April 17, 2007.

Exhibit 30024. Rialto's Website obtained on June 3, 2007 stating that "if your water bill comes from the City of Rialto then your water is safe." This document is submitted in rebuttal to Rialto's proposed investigative work under Section 13267. Goodrich could not have foreseen what, if any, investigative work Rialto would propose. Goodrich was unable to review and respond to Rialto's Opening Brief in just two business days.

Exhibit 30025. February 27, 2007 Email from Jenny Sterling to Dan Stephens attaching an outline of Dr. Stephens' testimony. This document was obtained from Daniel B. Stephens on May 24, 2007 in response to a valid federal subpoena. This document has never before been produced in the present proceedings and was obtained by Goodrich after its initial submission on April 17, 2007.

Exhibit 30026. March 7, 2007 Email from Nicole Sweetland to Scott Sommer, Susan Trager, Bob Owen, Julie Macedo, Christian Carrigan, Mark Elliot, and Francis Logan re Dr. Stephens' draft "Declaration." This document was obtained from Daniel B. Stephens on May 24, 2007 in response to a valid federal subpoena. This document has never before been produced in the present proceedings and was obtained by Goodrich after its initial submission on April 17, 2007.

Exhibit 30027. February 21, 2007 Email from Jenny Sterling to Dan Stephens attaching updated executive summary figures. This document was obtained from Daniel B. Stephens on May 24, 2007 in response to a valid federal subpoena. This document has never before been produced in the present proceedings and was obtained by Goodrich after its initial submission on April 17, 2007.

Exhibit 30028. Partially Redacted "Rialto Plume Map." This document is submitted in connection with Goodrich's rebuttal arguments regarding Rialto's manufactured "need" for further investigative work. Goodrich could not have foreseen the evidence collected regarding the Rialto Lawyers' manipulation of the "evidence."

Exhibit 30029. March 7, 2007 Email from Nicole Sweetland to Scott Sommer, Susan Trager, Bob Owen, Julie Macedo, Christian Carrigan, Mark Elliot, and Francis Logan re Dr. Stephens' draft "Declaration." This document was obtained from Daniel B. Stephens on May 24, 2007 in response to a valid federal subpoena. This document has never before been produced in the present proceedings and was obtained by Goodrich after its initial submission on April 17, 2007.

Exhibit 30030. May 30, 2007 Letter from Jeffrey Dintzer to Gerard Thibeault regarding the "McLaughlin Pit"; Waste Discharge Requirement Nos. 71-39, 78-96 and 91-18. This letter is new evidence that shows that the Regional Board has not responded to Goodrich's concerns about the McLaughlin Pit.

Exhibit 30031. November 16, 1995 *Vadose Zone Hydrology*, Table 1, by Daniel B. Stephens. This exhibit is being submitted in response to Dr. Stephens' opinions regarding the infiltration rate of natural precipitation on the 160 acre parcel. Goodrich could not have foreseen Dr. Stephens' opinions (and *changed* opinions) prior to its submission on April 17, 2007.

Exhibit 30032. March 7, 2007 Telephonic Hearing before Special Master Tassopulos. This hearing transcript demonstrates both the Advocacy Team's and Rialto's futile attempts to block legitimate discovery relating to the misconduct and liability of both the Advocacy Team and Rialto and is further evidence of both the Advocacy Team's and Rialto's wrongdoing. Goodrich could not have foreseen the extent of the misconduct uncovered during the discovery process after it submitted its Opening Brief.

Exhibit 30033. April 4, 2007 Telephonic Hearing before Special Master Tassopulos. This hearing transcript demonstrates both the Advocacy Team's and Rialto's futile attempts to block legitimate discovery relating to the misconduct and liability of both the Advocacy

Team and Rialto and is further evidence of both the Advocacy Team's and Rialto's wrongdoing. Goodrich could not have foreseen the extent of the misconduct uncovered during the discovery process after it submitted its Opening Brief.

Exhibit 30034. April 9, 2007 Telephonic Hearing before Special Master Tassopulos. This hearing transcript demonstrates both the Advocacy Team's and Rialto's futile attempts to block legitimate discovery relating to the misconduct and liability of both the Advocacy Team and Rialto and is further evidence of both the Advocacy Team's and Rialto's wrongdoing. Goodrich could not have foreseen the extent of the misconduct uncovered during the discovery process after it submitted its Opening Brief.

Exhibit 30035. April 12, 2007 Telephonic Hearing before Special Master Tassopulos. This hearing transcript demonstrates both the Advocacy Team's and Rialto's futile attempts to block legitimate discovery relating to the misconduct and liability of both the Advocacy Team and Rialto and is further evidence of both the Advocacy Team's and Rialto's wrongdoing. Goodrich could not have foreseen the extent of the misconduct uncovered during the discovery process after it submitted its Opening Brief.

Exhibit 30036. May 10, 2007 Telephonic Hearing before Special Master Tassopulos. This hearing transcript demonstrates both the Advocacy Team's and Rialto's futile attempts to block legitimate discovery relating to the misconduct and liability of both the Advocacy Team and Rialto and is further evidence of both the Advocacy Team's and Rialto's wrongdoing. Goodrich could not have foreseen the extent of the misconduct uncovered during the discovery process after it submitted its Opening Brief.

Exhibit 30037. May 16, 2007 Telephonic Hearing before Special Master Tassopulos. This hearing transcript demonstrates both the Advocacy Team's and Rialto's futile attempts to block legitimate discovery relating to the misconduct and liability of both the Advocacy Team and Rialto and is further evidence of both the Advocacy Team's and Rialto's wrongdoing. Goodrich could not have foreseen the extent of the misconduct uncovered during the discovery process after it submitted its Opening Brief.

Exhibit 30038. May 14, 1999 Memorandum to John Gerardi to R. Barry Dierschbach. This exhibit is submitted in connection with Goodrich's rebuttal to Rialto's claim that it is entitled to water replacement and reimbursement of costs. Goodrich could not have foreseen that Rialto would present evidence regarding its "Water Rights" as this subject is not a subject of the operative pleading, the Draft CAO.

Exhibit 30039. February 23, 2007 Email from Susan Trager to Jenny Sterling and Nicole Sweetland re Water Chapter of Roadmap. This document was obtained from Daniel B. Stephens on May 24, 2007 in response to a valid federal subpoena. This document has never before been produced in the present proceedings and was obtained by Goodrich after its initial submission on April 17, 2007.

Exhibit 30040. USGS 1998 Annual Financial Report: Resources. This exhibit is submitted in connection with Goodrich's rebuttal to Rialto's claim that it is entitled to water replacement and reimbursement of costs. Goodrich could not have foreseen that Rialto would present evidence regarding its "Water Rights" as this subject is not a subject of the operative pleading, the Draft CAO.

Exhibit 30041. April 3, 2007 Email from Jenny Sterling to Bill Casadevall and Debbie Salvato re Soil Infiltration Study – Original Broco Site, attaching Evaluation of Planned Low Permeability Cover. This document was obtained from Daniel B. Stephens on May 24, 2007 in response to a valid federal subpoena. This document has never before been produced in the present proceedings and was obtained by Goodrich after its initial submission on April 17, 2007.

Exhibit 30042. May 11, 2007 Letter from Elizabeth Jennings to Counsel re Petitions of Kwikset Locks, Inc., Emhart Industries, Inc., Black & Decker Inc., and Black & Decker (U.S.), Inc.: Ex Parte Inquiry. This exhibit is submitted in support of Goodrich's rebuttal to Rialto's proposed investigation to support Goodrich's position that the State Board cannot issue a Section 13267 Order as it has not complied with Section 13267(f). This document is evidence of the fact that the State Board has never consulted with the Regional Board

regarding any duplication of investigation, as such a consultation would need to be disclosed as an "ex parte communication."

Exhibit 30043. February 27, 2007 Email from Jenny Sterling to Daniel Stephens re "Goodrich Fact Outline." This document was obtained from Daniel B. Stephens on May 14, 2007 in response to a valid federal subpoena after Goodrich's initial submission on April 17, 2007.

Exhibit 30044. Transcript of the November 16, 2005 Transcript of the Special Board Meeting, Santa Ana Regional Water Quality Control Board. This document is submitted in rebuttal to Rialto's request for investigative work. Goodrich could not have foreseen what, if any, investigative work Rialto would propose. Goodrich was unable to review and respond to Rialto's Opening Brief in just two business days.

Exhibit 30045. DVD of Testimony of Dale Jarrett Starbuck. This document is submitted in rebuttal to any portions of Mr. Starbuck's testimony submitted in connection with these proceedings.

Exhibit 30046. May 23, 2007 Letter from Robert Owen to Jeffrey Dintzer re 2250 West Lowell Street, PPD No. 1064. This new evidence shows that the City of Rialto has failed to enforce the Mitigated Negative Declaration requiring Ken Thompson, Inc. to lawfully cleanup and close the McLaughlin Pit.

Exhibit 30047. June 5, 2007 Letter from Jeffrey Dintzer to Robert Owen re Rialto Concrete Products, 2250 West Lowell Street, Mitigated Negative Declaration (E.A.R. No. 87-16); former fireworks disposal pit and perchlorate groundwater contamination in Rialto. This new evidence shows that the City of Rialto has failed to enforce the Mitigated Negative Declaration requiring Ken Thompson, Inc. to lawfully cleanup and close the McLaughlin Pit.

Exhibit 30048. June 5, 2007 Letter from Scott Sommer to Tam Doduc re Preliminary Response to Pyro Spectaculars' Correspondence Dated June 4, 2007. This new evidence shows that Rialto and Dr. Stephens violated the Hearing Officer's prior rulings. Goodrich and the Alleged Dischargers clearly could not have foreseen that Dr. Stephens would change his opinions violation of the Hearing Officer's rulings.

Exhibit 30049. June 5, 2007 Letter from Philip Hunsucker to Tam Doduc re Motions and Request for an Immediate Ruling – Materially Changed, Non-Rebuttal Opinion by Rialto's Expert, Dr. Stephens. This new evidence shows that Rialto and Dr. Stephens violated the Hearing Officer's prior rulings. Goodrich and the Alleged Dischargers clearly could not have foreseen that Dr. Stephens would change his opinions violation of the Hearing Officer's rulings.

Exhibit 30050. February 22, 2007 Email from Jenny Sterling to Bill Hunt, Robert Owen, Scott Sommer, Francis Logan, Julie Macedo, Christian Carrigan, and Bill Hunt re Updated Executive Summary. This document was obtained from Daniel B. Stephens on May 24, 2007 in response to a valid federal subpoena. This document has never before been produced in the present proceedings and was obtained by Goodrich after its initial submission on April 17, 2007.

Exhibit 30051. January 29, 2007 Email from Jenny Sterling to Bill Hunt re Executive Summary and Costs for Proposed Grant. This document was obtained from Daniel B. Stephens on May 24, 2007 in response to a valid federal subpoena. This document has never before been produced in the present proceedings and was obtained by Goodrich after its initial submission on April 17, 2007.

Exhibit 30052. February 15, 2007 Email from Jenny Sterling to Bob Owen, Bill Hunt, Scott Sommer, Susan Trager, and Christian Carrigan. This document was obtained from Daniel B. Stephens on May 14, 2007 in response to a valid federal subpoena. This document has never before been produced in the present proceedings and was obtained by Goodrich after its initial submission on April 17, 2007.

Exhibit 30053. Boring Logs from CMW 01, 02 and 03. These documents are submitted in rebuttal to Dr. Stephens' changed opinion regarding the infiltration rate of natural precipitation on the 160 Acre Parcel. Goodrich and the Alleged Dischargers clearly could not have foreseen that Dr. Stephens would change his opinions violation of the Hearing Officer's rulings. Nor could Goodrich have foreseen and responded to Dr. Stephens opinions.

XIII.
CONCLUSION

Based on the foregoing, Goodrich respectfully requests that all proceedings against Goodrich now pending before the State Board and the Regional Board in the Matter of Rialto-Area Perchlorate Contamination at a 160-Acre Site in the Rialto Area, A-1824, and all related proceedings, be dismissed with prejudice.

Dated: June 6, 2007

Respectfully Submitted,

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