

RESPONSES TO COMMENTS

Goodrich Corporation, Rialto

Resolution No. R8-2005-0120
Remedial Investigation by Consent Order No. R8-2005-0121
Administrative Settlement Agreement
Draft Additional Remedial Investigation Work Plan

Listed below are the parties that submitted written comments on the above documents, a summary of the comments they provided, and Board staff responses to the comments.

- **United States Environmental Protection Agency (November 7, 2005)**

A. **Comments on Work Plan**

Comments No. 1 through 5: *In 2004, Goodrich performed a limited soil and soil gas investigation at the 160-acre site to assess potential source areas in response to a Unilateral Administrative Order issued by USEPA. However, the investigation did not assess all potential source areas. USEPA identifies five suspected source areas and recommends that soil or soil gas sampling be performed in these areas.*

Response: Board staff agrees that although soil and soil gas investigations have been conducted at the 160-acre site by Goodrich and others, additional on-site investigations will be necessary to assess other potential source areas at the site. However, the more critical task at this time is to define the lateral and vertical downgradient extent of perchlorate and trichloroethylene that have impacted production wells. This is a prerequisite in order to develop a remedial response action to mitigate those impacts and to prevent further impacts from occurring. Goodrich has already installed four groundwater monitoring wells at the 160-acre site and further soil and groundwater investigations will be necessary in the future to determine if constituents of concern (COCs) are present in concentrations that warrant soil or groundwater remedial actions at the 160-acre site.

Comment No. 6: *It is difficult to evaluate the proposed monitoring well locations because the work plan does not provide detailed objectives for the investigation or a rationale for the proposed well locations. USEPA provides specific recommendations for locations to install additional wells.*

Response: On November 14, 2005, Goodrich submitted an Addendum to the Work Plan. This Addendum provides detailed objectives for the investigation and the rationale for the proposed well locations.

Comment No. 7: *The work plan states that the proposed depths of the boreholes will be approximately 650 feet. USEPA states that deeper boreholes are necessary to characterize the vertical extent of the contaminants.*

Response: The Addendum states that the minimum depth of the wells will be 700 feet, and discrete-depth sampling will be conducted to determine the ultimate depth of the wells. The appropriate depth of the wells will be determined based on consultation with Board staff.

Comment No. 8: *The work plan states that the number of screens will range from 2 to 7 per well. USEPA recommends that there be a minimum of 4 screens per well. USEPA also provides recommendations for selection of screen locations.*

Response: The Addendum states that in most, if not all, circumstances, each well will have a minimum of three screens. The number and locations of additional screens will be based on downhole geophysics and analyses of discrete-depth samples from temporary wells. The number and locations of screens will be determined based on consultation with Board staff.

Comment No. 9: *The work plan states that the screen intervals could range from 5 to 30 feet long. USEPA is recommending screen lengths of no longer than 10 or 15 feet.*

Response: The Addendum states that the screen intervals are expected to be 5 to 10 feet long.

Comment No. 10: *Because well development is likely to take at least several weeks and there are likely to be large vertical head differences between screened intervals, USEPA recommends that a straddle packer be left in the well at all times that well development is not occurring to minimize the potential for cross contamination.*

Response: The Addendum states that considering the relatively small potential for cross-contamination during the short periods that the wellbore will be open (overnight or on weekends), and the extremely time-extensive task of setting and retrieving the packers, straddle packers are not proposed. The Addendum notes that this procedure is consistent with methods employed by the County of San Bernardino during their recent installation of multi-port wells in the area.

Comment No. 11: *USEPA recommends that a video log be obtained after well development is completed and before the Westbay system is installed to verify that the screens are clean and ready to accept the Westbay equipment.*

Response: The Addendum states that video logs will be obtained after installation and development of wells and prior to the installation of the Westbay system.

Comment No. 12: *The work plan states that production wells will be sampled with a bailer. USEPA notes that many production wells do not allow access at the wellhead for lowering a bailer down into the well.*

Response: The Addendum states that Goodrich has been working closely with the City of Rialto to establish protocols for depth-discrete sampling of five City of Rialto wells. The Addendum describes the procedure that is expected to be followed. The Addendum also notes that Goodrich will be in contact with the West Valley Water District regarding depth-discrete sampling of two of their wells.

Comment No. 13: *To avoid confusion, USEPA recommends that samples be labeled using the same conventions that Westbay uses in numbering the different sampling zones in the monitoring wells.*

Response: Board staff will assure that reporting of sample results does not lead to confusion.

Comment No. 14: *USEPA requests that all submittals be provided to USEPA.*

Response: All submittals will be provided to USEPA.

Comment No. 15: *The work plan describes only one sampling event following well installation and development. USEPA recommends that at a minimum, a second sampling event occur two to three months after the initial event.*

Response: The work plan describes only one sampling event because that is the only sampling event that is expected to occur during the 10-month life of the Agreement. Board staff will assure that an ongoing, appropriate, routine sampling and reporting program is implemented by Goodrich following the initial sampling event.

B. Comments on Agreement

Comment: *USEPA requests that Provision No. 9 be revised as follows: “As long as the Regional Board is satisfied that Goodrich is fully complying with its Order, During the implementation of the Order, the Regional Board shall not otherwise require Goodrich to conduct an investigation, remediation, or otherwise respond with respect to the contamination nor request any other agency, including the U. S. Environmental Protection Agency, to so order it to do so.”*

Response: Provision 9 will be revised as requested.

• **KOMEX, on behalf of Fontana Water Company and the West Valley Water District (November 7, 2005)**

A. Comments on Work Plan

1. **Comment:** *The work plan does not clearly describe the purpose, goals and limitations of the proposed work. The proposed work is not sufficient to provide the complete characterization necessary to develop and evaluate effective remedial alternatives. The work plan does not provide for meaningful aquifer testing. A better description of the objective and evaluation of the work is necessary for the work plan to be compliant with the National Contingency Plan.*

Response: The Addendum provides a description of the purpose and goals of the proposed work. This proposed work plan is considered part of a multi-step investigation process, and is not intended to be a final characterization step in characterizing COCs downgradient of the 160-acre site.

2. **Comment:** *The logic regarding the proposed locations of the wells is not provided. KOMEX recommends collecting data (i.e. installing wells) in transects, perpendicular to the groundwater flow direction. Figures showing the groundwater gradient and the known distribution of the contaminants of concern should be included in the work plan.*

Response: The Addendum provides the rationale for the proposed well locations. The only information currently available regarding the groundwater gradient and the distribution of COCs is from a small number of production wells. This information is extremely limited. The purpose of this work plan is to obtain additional information to better define the groundwater gradient and the distribution of COCs, and figures showing the groundwater gradient and the distribution of COCs will be included in the final report.

3. **Comment:** *The proposed well locations do not take into consideration the higher COCs near the 160-acre parcel, do not build substantially on the data generated by recent investigations by the County of San Bernardino, and the southernmost proposed well may not intercept COCs due to the lack of knowledge regarding the direction of plume migration. KOMEX provides specific recommendations for well locations.*

Response: Board staff is recommending that the second southernmost proposed well (PW-8), located adjacent to Rialto Well No.4, be relocated

to a location closer to the 160-acre site, upgradient of West Valley Water District Well No. 22, to address this concern. The USGS recently installed a well cluster adjacent to Rialto Well No. 4 that will likely provide data comparable to what would have been provided by PW-8.

4. **Comment:** *Collection of discrete-depth groundwater samples should be collected based on the results of borehole geophysics, prior to well design and installation. This will enable design and installation of the optimal lateral and vertical distribution of well screens, and reduce the cost and number of additional wells.*

Response: The Addendum states that discrete-depth groundwater samples will be collected using temporary wells, after the C-zone has been penetrated.

5. **Comment:** *Inclusion of a conceptual model, and identification of data gaps, would greatly assist in designing investigation activities, and would assist in understanding the rationale behind the proposed placement of wells.*

Response: The Addendum provides the rationale for the proposed well locations. A large-scale conceptual model of the Rialto-Colton Basin has been provided by Linda R. Woolfenden in her USGS report titled, "Numerical Simulation of Groundwater Flow and Assessment of the Effects of Artificial Recharge..." The area where Goodrich is proposing to install monitoring wells is included in this USGS large-scale conceptual model. However, additional stratigraphic data, etc. would be necessary to develop a useable smaller scale conceptual model for the proposed investigation area. This investigation would provide much of that data.

6. **Comment:** *Double or triple the number of proposed wells may be necessary to characterize the extent of COCs.*

Response: This proposed work plan is considered part of a multi-step investigation process, and is not intended to be a final characterization step in characterizing COCs downgradient of the 160-acre site. Board staff agrees that additional wells will probably be necessary to fully characterize the extent of COCs. Based on the data that are generated from this investigation, the need for further groundwater investigation by Goodrich, or others, can be determined.

7. **Comment:** *If production wells are to be used for monitoring water levels and water quality, vertical flow testing and discrete-depth sampling should be conducted to assess the vertical nature of COCs entering the well pack and screens. This will allow meaningful interpretation of water*

level and COC data, operation of impacted wells to minimize impacts from COCs, and protect wells that are currently non-detect for COCs.

Response: The Addendum states that vertical flow testing and discrete-depth sampling of production wells will be conducted.

8. **Comment:** *In addition to presenting water level and water quality data for all wells, data and analysis of historic and current groundwater extractions from production wells should be included to evaluate the current contaminant distribution, groundwater gradients, future contaminant migration and eventual remedy development.*

Response: Including this information in this work plan is premature. The final report will include these data.

9. **Comment:** *Decisions regarding remedial actions should include an assessment of aquifer parameters. The lack of any discussion of aquifer parameters implies that additional work beyond the scope of this work plan is intended. However, no such work is mentioned.*

Response: Including this information in this work plan is premature. The final report will include these data.

10. **Comment:** *A requirement for reporting of water level and analytical data in a useable electronic format should be made.*

Response: Goodrich will report data in a useable electronic format.

11. **Comment:** *Although the work plan states the work will be consistent with the NCP, the work plan does not provide the level of documentation and supporting information relative to the earlier work performed by Goodrich under the direction of USEPA.*

Response: The Addendum states that the Field Sampling Plan, Quality Assurance Project Plan and the Data Management Plan that were prepared for the site will be modified as necessary and will be submitted to Board staff prior to mobilization in the field.

12. **Comment:** *Figure 2 does not include either correct locations, or all of the Fontana Water Company and West Valley Water District wells within the area shown.*

Response: Goodrich is obtaining the necessary information update and will update Figure 2 accordingly.

- **Emhart Industries, Inc (November 7, 2005)**

A. Comments on Work Plan

1. **Comment:** *Without clear identification of the sources of perchlorate and other contaminants, it is difficult to place monitoring wells that are both cost-effective and capable of generating meaningful data. The work plan does not contain any explanation regarding the planned location of the proposed monitoring wells. Existing data regarding potential sources of contamination need to be followed up on before monitoring wells can effectively be placed, and the nature and extent of the sources of COCs at their alleged source must be fully characterized before monitoring wells are installed. Installing deep monitoring wells prior to additional site characterization at the alleged source area risks (a) ignoring actual significant source areas; (b) improperly locating remedial actions; and (c) the compounding of an ill defined problem.*

Response: The Addendum provides the rationale for the proposed well locations. Data from existing production wells provide clear evidence of the general area where perchlorate is present in the aquifer. Additional data from potential source areas are not necessary in order to select locations for monitoring wells that will be cost effective and provide meaningful data. Installing deep monitoring wells prior to additional site characterization at the alleged source area will not risk ignoring actual significant source areas, improperly locating remedial actions, or the compounding of an ill defined problem. On the contrary, data from these deep monitoring wells would provide additional information regarding discharges from the 160-acre site (a significant source area), would assist in locating future remedial actions, and would fill or lessen existing data gaps, which is a prerequisite for developing an effective and efficient remedial response action.

- **Emhart Industries, Inc (November 7, 2005) and American Promotional Events, Inc. (November 7, 2005)**

(Emhart and APE submitted similar legal comments on the proposed Agreement. Their comments have been summarized and are addressed together)

A. Comments on Agreement

1. **Comment:** *No technical or legal analysis in the administrative record supports a finding that perchlorate is a “hazardous substance” under federal law, as defined in Section 101(14) of CERCLA, 42 U.S.C. Section 9601(14). Under CERCLA, a material must retain its RCRA hazardous waste characteristic (ignitability).*

Response: The Federal District Court for the Central District of California has concluded that perchlorate is a “hazardous substance” under CERCLA. See *Castaic Lake Water Agency, et al. v. Castaic Lake Water Agency, et al.* (2003) 272 F. Supp. 2d 1053. APE has cited no authority supporting its argument that perchlorate must remain ignitable to retain its hazardous classification. It should be clear, however, that even if the federal court finding did not conclude as it did, the proposed Settlement Agreement could proceed in any event under the California Water Code. The hazardous waste designation of perchlorate is relevant only to a future determination by a federal court regarding Goodrich’s compliance with all CERCLA requirements in order to enable itself to seek recovery under applicable theories for its costs from other dischargers. To this extent, the comment constitutes an effort by other dischargers to seek to prejudice Goodrich’s ability to seek that contribution protection against them.

2. **Comment:** *The Regional Board is not authorized to conclude “the work conducted under the Order shall be performed in compliance with the CERCLA National Contingency Plan (‘NCP’).”*

Response: The Regional Board is a state regulatory agency with authority to order dischargers to conduct investigations and cleanups under the Water Code. Its authority is at times overlapping with that of the USEPA. The USEPA has initial authority under CERCLA. In this case, the Regional Board and the USEPA have been working cooperatively to require timely investigation and cleanup of the perchlorate plume in Rialto. The Regional Board has inherent authority to comment on whether or not the work being conducted is in compliance with the NCP, and there is no provision in law that prevents the Board from doing so. In fact, it has been held that a state agency’s determination regarding NCP compliance is adequate to support federal courts’ reliance on that fact. *Bedford Affiliates v. Sills*, 156 F3d at 428 (2d Cir. 1998); *Benderson Development Co., Inc. v. Neumade Products Corporation* (2005) WL 1397013 (W.,D.N.Y.). In those cases, the federal courts permitted contribution claims to proceed based, in part, on the state regulatory agency’s determination that the party had complied with the NCP. Nonetheless, inclusion of the subject statement in the Settlement Agreement does not bar others from proving at a later time that the work contemplated under the Order is NOT in compliance with the NCP, and so there is no actual prejudice to the objecting parties.

3. **Comment:** *The Water Code confers no authority on the Regional Board to decide that the Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(B) of CERCLA, 42 U.S.C. Section 9613 (f)(3)(B). Such an agreement would have to resolve CERCLA liabilities, not State Law liabilities. Moreover, it is neither a*

final settlement nor a cash out settlement under CERCLA. Federal courts have denied contribution rights under similar facts.

Response: Again, these comments appear to be intended to foreclose Goodrich from being able to satisfy the CERCLA requirements that would permit its recovery for contribution against other dischargers. The federal court will ultimately have to resolve the substantive issues of whether or not the Settlement Agreement constitutes an administrative settlement under CERCLA and all other requirements under federal law. Those will be issues in the litigation filed by City of Rialto and City of Colton. Goodrich has filed counterclaims in federal court against other dischargers, seeking that they contribute to the investigation and cleanup effort. The resolution of these issues will determine whether Goodrich is successful in its claims for contribution for its costs from other dischargers. There are compelling arguments that support Goodrich's position that its participation in the proposed Settlement Agreement will preserve its right to seek contribution from the other dischargers under CERCLA. There are other arguments, raised both by Emhart and APE, to the contrary. The proposed Settlement Agreement does not purport to decide those issues and it is not necessary for the Regional Board to decide those issues. Rather, by including the appropriate language citing CERCLA provisions, the proposed Settlement Agreement merely sets up the framework necessary for Goodrich to continue to pursue any contribution claims it may have against other dischargers, such as Emhart and APE. The Settlement Agreement does not decide those issues, and Emhart and APE remain free to raise the same arguments to the federal court against Goodrich's ability to seek contribution from them.

In support of its arguments urging the Board to remove all references to CERCLA from the proposed Settlement Agreement, APE cites a case in which a federal court rejected a state agency's "attempt to bestow a PRP with the benefits of a CERCLA settlement." (W.R. Grace & Co. v. Zotos International, Inc. (2005) WL 1076117 (W.D.N.Y.)) However, the Board should be aware that in another case, the same court permitted a contribution action to proceed where a state agency had opined favorably on the sufficiency of the subject settlement agreement under CERCLA. See, Benderson Development Co. v. Neumade Products (2005) WL 1397013 (W.D.N.Y.). Clearly, the question of the proposed Settlement Agreement's sufficiency under CERCLA to allow Goodrich to recover contribution is not a question before the Regional Board

- 4. Comment:** *The Regional Board should clarify that it does not intend that the Settlement Agreement confer upon Goodrich contribution protection under CERCLA.*

Response: Contribution protection (as opposed to right to seek contribution against others) would confer protection upon Goodrich against contribution claims that may be filed against it by others. This is clearly not an intended consequence of the Settlement Agreement. There is no language in the Settlement Agreement that suggests that this is the staff's or the Board's intent. If desired by the Board, staff will be prepared to make a minor language change at the hearing to make this even clearer.

5. **Comment:** *The provision in paragraph 8, Section III, allowing Goodrich to assist the Regional Board and participate in hearings would commit the Board to improperly abandoning its neutrality and join forces with a partisan.*

Response: Under Title 23, CCR, Section 648, a party may request that it be nominated a "Designated Party" in a Regional Board adjudicative proceeding. Such designation would, among other things, allow the party to introduce evidence and cross-examine witnesses. Alternatively, a party may be considered an "Interested Party" and submit comments. The provision in the proposed Settlement Agreement acknowledges that Goodrich may elect to seek Designated or Interested Party status in future proceedings before this Regional Board related to the perchlorate contamination investigation. There is no intent to bestow upon Goodrich any more authority to assist and participate in future hearings than is permitted under the regulations. In fact, the actual details of Goodrich's participation in future proceedings against other dischargers will have to be decided by the Board in light of the strictures set forth in Title 23. Moreover, the same opportunity envisioned by this provision in the draft Settlement Agreement is available to Emhart, should it seek to participate in future proceedings against other dischargers.

- **Miller Starr & Regalia, on behalf of the City of Rialto and Rialto Utility Authority (November 7, 2005)**

- A. **Comments on Agreement**

1. **Comment:** *The proposal to install up to nine wells clearly advances efforts to address Rialto's health goals and find a permanent solution to the perchlorate contamination. This work will provide necessary data that will lead to a feasibility study, water replacement order and interim and permanent solutions. It is important that the data be used in a manner that complies with the NCP and allows Rialto and Goodrich to recover costs.*

Response: Comment noted.

2. **Comment:** *It is the objective of the Rialto City Council that replacement water, a permanent solution for aquifer treatment, and financial relief to the rate payers be achieved at the earliest feasible dates. It is important that the data from the proposed wells be viewed as a step to development of further cleanup and abatement orders for water replacement and cleanup of the aquifer. Rialto understands that appropriate data must be received before further legally enforceable orders can be issued.*

Response: Comment noted.

3. **Comments:** *The Regional Board should implement a water replacement order and interim and permanent work plans as soon as possible. The proposed agreement and order may yield essential information at an earlier date that would be achieved by an additional administrative proceeding against Goodrich. We encourage the Board to make wise choices that will protect the citizens of Rialto and bring about solutions at the earliest date.*

Response: Comment noted.

- **Environment California, et al., (November 7, 2005)**

- A. **Comments on Agreement**

1. **Comment:** *The Agreement as drafted will unnecessarily and capriciously preempt the Board from taking any further enforcement action against Goodrich while the monitoring activities described in the Agreement take place. Such a clause may result in an unnecessary slow-down of cleanup activities. The Agreement would preempt the Board from requiring any additional cleanup action prior to completion of the Agreement. The Board should not approve any agreement that allows a preemption of its authority while characterization of the plume occurs.*

Response: Additional data are needed in order to prepare a technically supportable feasibility study that evaluates remedial alternatives and selects the most appropriate and effective remedial response action. Board staff believes that an agreement and consent order provides a more effective means of obtaining these data than through a conventional enforcement mechanism. This would also allow Board staff resources to be used more efficiently and allow staff to focus efforts on other recalcitrant parties. This agreement would not slow down activities related to cleanup of the aquifer. On the contrary, data generated under this agreement would result in a more efficient and effective cleanup program than that which would occur by implementing a cleanup program prematurely without the additional groundwater quality data and aquifer

parameters that are necessary to determine appropriate locations and pumping rates of extraction wells that would be necessary.

2. **Comment:** *Despite a petition submitted to the Board on October 26th, 2005 that requests that any cleanup agreement with Goodrich require the provision of replacement water, the Agreement under consideration does not require Goodrich Corp. to provide replacement water to the citizens of Rialto. The document thereby fails to address concerns regarding short-term exposure to perchlorate contamination in the City of Rialto's drinking water supply. We urge the Board to issue replacement orders against Goodrich immediately or ensure that the Agreement is revised to include such a requirement.*

Response: Board staff agrees that replacement water is a critical component of the solution to the perchlorate problem in the Rialto area. However, there is no immediate need to require replacement water, and the investigation required by the Agreement and Order would allow future replacement water solutions to be more effective. The California Office of Environmental Health Hazard Assessment has established a Public Health Goal (PHG) for perchlorate of 6 parts per billion (ppb). A PHG is the concentration in drinking water that does not cause or contribute to adverse health effects. The water purveyors in the Rialto area have provided treatment for some wells that exceeded 4 ppb, and water produced from these wells is non-detectable for perchlorate (based on the California Department of Health Services reporting detection limit of 4 ppb). The water purveyors have shut down all other wells that contain perchlorate over 4 ppb. Therefore, the water supplied to residents in the Rialto area is of high quality and does not exceed or approach the PHG.