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January 15, 2021

Via electronic mail and Federal Express

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Re: Notice of Dispute, Statement of Position and Effort to Informally Resolve a Dispute Pursuant to Section VIII of the 2002 Administrative Order By Consent, Docket Number V-W-02C-698 (The "2002 Consent Order").

Dear Mr. Krueger, Mr. Ohl, Mr. Habeck and Mr. Petroff:

This dispute arises out of an email sent by Matthew Ohl to Julie Konzuk of Geosyntec on December 17, 2020. Mr. Ohl's email was in response to a Revised Report and Response to Comments submitted by Ms. Konzuk to Mr. Ohl regarding the results of sampling in the Third Site sheet pile enclosed DNAPL area. In 12 and item 13, Mr. Ohl's comments were as follows:

12. Disagree. The Enforcement Action Memorandum has no such limitation and is not modified by Environ's 2008 memo or our 2009 letter. In addition, our 2009 letter specifically states, "U.S. EPA does not consider treatment to be complete when DNAPL is detected and the total VOC concentration exceeds the performance standard in the DNAPL area." Provide **bold font** at all locations that have reported concentrations that exceed the specified ERH treatment standard. By February 1, 2021, initiate additional treatment to achieve the performance standards throughout the DNAPL area.

13. Disagree. Refer to the response provided for Comment 12.

As explained below, that email fundamentally changed the criteria for success in the Third Site DNAPL area that the parties agreed on and abided by since EPA's 2001 Action Memorandum dated May 11, 2001 (the "2001 Action Memorandum") and an approved 2003 ENVIRON Work Plan – a period of 17 consecutive years. The compliance point for achieving 90% reduction of total Volatile Organic Compounds (VOCs) in the enclosed sheet pile DNAPL area of Third Site was the sump, as augmented in 2008-2009 by three surrounding piezometers P-1, P-2 and P-3. The effect of Mr. Ohl's response is to change that to requiring every square foot of the sheet pile enclosed DNAPL area to achieve a 90% reduction in total VOCs "throughout the DNAPL area." That constitutes "moving the goal posts" when compliance has been achieved at three of the four agreed sampling points.

The imposition of such a requirement at this late date is "arbitrary and capricious," a breach of a contract by which EPA is bound and is particularly unreasonable after the Trust has already expended in excess of $2.1 million dollars on the implementation of the ERH remedy, expressly designed and approved by EPA to achieve compliance at those four sampling points within the sheet pile enclosed DNAPL area. A work plan is being submitted to EPA to remedy the remaining VOC problem at one sampling point, P-1, and to resolve one other small DNAPL problem within the sheet pile enclosed DNAPL area. The need to break down that DNAPL is not disputed.

The 2002 Consent Order was approved by the US Department of Justice on September 19, 2002 and by EPA on November 21, 2002. The Consent Order, Section V. Paragraph 2. describes the work to be performed in relevant part as follows:

> "The actions consist of the following: (a) With respect to the DNAPL area - … (3) injecting hydrogen peroxide (or other reagents approved by U.S. EPA) into the contained area to break down remaining DNAPL in the soil and ground water in the contained area."

The 2002 Consent Order only references the "break down" of remaining DNAPL in the soil and ground water in the DNAPL contained area but does not specify how much reduction is to be achieved nor where that reduction is to be measured. The Order does specify in Section V. Paragraph 2.1 that a work plan is to be submitted for "the performance of the work required by this Order" and also "the response actions selected in the U.S. EPA's Action Memorandum." The 2001 Action Memorandum referenced is appended to the Consent Order as Exhibit D. Section VI.a. of the 2001 Action Memorandum in turn states that the action levels to be used for determining compliance with cleanup objectives and provides:

> a. DNAPL Area, following containment and chemical oxidation: Within the containment wall, achieve a minimum 90% reduction in total VOC ground water concentration from current levels in monitoring wells MW-19A and MW-19B.

A Work Plan for Non-Time Critical Removal Action Revision 2 was submitted to EPA by ENVIRON International Corporation ("ENVIRON") dated June 2003 (the "2003 Work Plan"). In Section IV. B. of the 2003 Work Plan, it was provided that "the DNAPL Containment Area removal action will be considered complete when the water from this area has achieved 90% reduction of total TCL VOCs (based on *concentrations measured in water pumped from the collection well/sump* prior to pumping)" [emphasis added] or achieves the groundwater action levels set forth in Table 1 of the 2001 Action Memorandum. It was also specified that if the 90% reduction has not been achieved

another chemical oxidation treatment may be completed "*and the water from the collection well/sump will be resampled*....When the laboratory data indicate that the criteria listed above, have been met, "removal/treatment activities in this area *will be considered complete*." 2003 Work Plan Section IV. B. [emphasis added].

It should be noted that in an exchange of letters on October 15, 2001 and October 30, 2001 (prior to the submission of the 2003 Work Plan and included in it as Appendix D) EPA agreed that since MW-19A and MW-19B would be removed during construction of the containment wall and therefore could not be monitored after construction, "this technical detail in the Action Memorandum *can be modified or clarified in the design documents as appropriate*." [emphasis added].[1] On September 4, 2003, EPA confirmed the approval of the 2003 Work Plan without any change as to monitoring in the sump being the controlling location for determining compliance.

Two points thus had been established in 2003 that were consistently followed for 17 years thereafter. First, that technical details such as the two monitoring locations set forth in the 2001 Action Memorandum could be modified by mutual agreement through the exchange of correspondence or the submission of work plans that were approved by EPA and second, that the agreed location for the monitoring of the 90% reduction in total VOCs in the confined DNAPL area would be the sump with EPA reserving the right to request additional wells if needed to confirm results at the agreed monitoring location (i.e., the sump).

After the first effort at chemical oxidation failed and as provided in the 2003 Work Plan a second round of chemical oxidation was conducted. After the second effort at chemical oxidation also failed to achieve 90% total VOC reduction in the sheet pile enclosed DNAPL area the parties

[1] EPA reserved the right to review the details and to consider whether additional monitoring wells should be installed to confirm reduction in contaminate concentrations in the sump.

conferred. The confirmation sampling for the second round of chemical oxidation in the sump was reported to Mr. Ohl on October 11, 2007. (See summary memorandum of sampling ENVIRON February 19, 2008 - *In Situ* Chemical Oxidation Confirmatory Ground Water Sampling Memorandum). A conference call was held with EPA on October 29, 2007 to discuss the sampling results. It was concluded that additional ground water samples from P-1, P-2 and P-3 would be beneficial in interpreting dissolved phase concentrations within the DNAPL containment area. Ground water samples were collected from P-1, P-2 and P-3 in December 2007 and reported on February 11, 2008. ENVIRON February 11, 2008 Ground Water Sampling Results – Piezometers P-1, P-2 and P-2.

In February 2008, ENVIRON also proposed that in future sampling the chemical treatment phase would be considered complete when the arithmetic average of total VOC concentration collected from each of the three piezometers achieved a 90% reduction in total VOCs. During 2008 a revised design plan was submitted that proposed the combination of low pumping followed by high rate dewatering and then chemical treatment. In a conference call on October 15, 2008 and in a meeting at EPA's offices on December 14, 2008 and yet another call on December 15, 2008 the procedures for conducting the treatment were agreed upon. Additionally, sampling procedures were also discussed. ENVIRON, in the December 31, 2008 memorandum, again proposed that the analytical results for the three piezometers would be summed and that if there were any significant difference between the average of the total VOCs concentrations in the three piezometers and the total VOC concentrations in the extraction well, i.e. the sump, the parties would confer and evaluate whether the results for the extraction well (the sump) are reasonably representative of dissolve phase conditions. "Treatment of the DNAPL Containment Area will be considered complete when the Total

VOCs for the dissolved-phase concentrations in the DNAPL Containment Area is less than or equal to 4,285ug/l, Total VOCs (the value that is equal to 10% of the baseline concentrations measured in January 2005[sic]". On January 14, 2009, EPA responded as to the completion of the DNAPL VOC reduction work. It did not disagree with the ENVIRON proposal for using data the three piezometers but noted that "the use of an average of analytical results from the piezometers may not be appropriate due to subsurface conditions in the DNAPL area." EPA acknowledged that the extraction well was designed to serve as the monitoring point for confirmatory sampling (as well as to collect DNAPL from the DNAPL area.)[2] In short EPA had doubts about averaging but accepted the use of the additional data from the three piezometers as suggested by ENVIRON'S Dec. 31, 2008 memorandum to supplement the results in the sump.

A third round of chemox was then conducted using the four agreed sampling points for compliance purposes. *See* ENVIRON Monthly Report of July 9, 2013, Table 4. EPA did not have any problem accepting those results. Since Table 4 of that Report, measuring compliance at just those four monitoring locations, showed that the 90% reduction had not been achieved at any of those locations (after three rounds of chemox), the parties spent the better part of two years trying to develop a better approach to remediation for the sheet pile enclosed DNAPL area than as set forth in the 2001 Action Memorandum, including a meeting at EPA's office on or about August 5, 2015. Those discussions and that meeting resulted in submission in 2015 of a draft and then revised (to address EPA comments) Alternatives Analysis submitted in final form on April 19, 2016 which reviewed various alternatives and recommended the implementation of ERH. That

[2] EPA's letter also noted that the objective of treatment continued to be the breakdown of residual DNAPL. As noted above, the Trustees do not dispute the need to breakdown residual DNAPL. This dispute is about the attempt to change the measuring points for the 90% reduction in total VOC concentrations.

Alternatives Analysis, as we understand it, was then used by EPA to support EPA's 2016 Amended Action Memorandum and the 2016 Amended Consent Order. As noted above, neither the 2016 Amended Action Memorandum nor the 2016 Amended Consent Order said anything about changing the objective from a 90% reduction in total VOCs at the four previously established compliance locations to a goal of a 90% reduction in total VOCs "throughout the DNAPL area."

The Applicable Law

1. **The 2002 Consent Order and Its 2016 Amendment**

Courts construe consent orders as contracts. *U.S. v. ITT Continental Baking Co.*, 420 U.S. 223, 238 (1975) ("Since a consent decree or [consent] order is to be construed for enforcement purposes basically as a contract, reliance upon certain aids to construction is proper, as with any other contract."); *NCR Corp. v. George A. Whiting Paper Co.*, 768 F3d 682, 692 (7th Cir. 2014) ("The question whether NCR has resolved its liability to the government through the consent order—and thus is limited to section 113(f)—is a matter of contract interpretation."). In *Bernstein v. Bankert*, the Seventh Circuit applied the principles of contract interpretation to the Third Site 2002 Consent Order rejecting, based on the contract's terms, DOJ's argument that EPA had resolved its differences with settling defendants. 733 F.3d 190, 207-15 (7th Cir. 2013), *cert. denied*, 571 U.S. 1175 (2014).

By the plain terms of the agreement with EPA there was one central location, the sump, at which compliance would be measured supplemented by the data from the three piezometers, P-1, P-2 and P-3. That agreement was carried out in measuring achievement of the 90% VOC reduction in the first and second rounds of chemox using the sump as the compliance point. In the third round of chemox, as agreed in December. 2008 and January 2009, that sampling point was supplemented by

the results of the three surrounding piezometers. EPA had no problem accepting those results from those four sampling points as determinative of compliance. Those same four sampling points were incorporated as the objectives in the 2018 ERH Remedial Design Report submitted by McMillan McGee ("MM") in April 2018. EPA authorized MM to proceed to implement that Design Report, all as summarized below.

EPA now argues that "the Enforcement Action Memorandum has no such limitation [as to the four compliance points] and is not modified by Environ's 2008 memo or our 2009 letter." Both points are incorrect. The original 2001 Enforcement Action Memorandum specified two sampling locations and in correspondence in October 2001 EPA expressly agreed that "this technical detail [as to compliance points] in the Action Memorandum *can be modified or clarified in the design documents as appropriate*." [emphasis added].[3] On September 4, 2003, EPA confirmed the approval of the 2003 Work Plan without any change as to monitoring in the sump being the controlling location for determining compliance. As noted below, EPA agreed in January 2009 that sump data was to be supplemented by the data from P-1, P-2 and P-3. Neither the 2016 Consent Order Amendment authorizing ERH nor the 2016 Enforcement Action Memorandum altered the original compliance location (the sump) or the three supplemental compliance points agreed upon in the exchange of correspondence in December 2008 and January 2009. And if there were the slightest doubt, that agreement was reconfirmed by EPA's approval of the ERH work under the April 2018 Remedial Design Report submitted to EPA by MM. That Report expressly provided

[3]October 30, 2001 letter from Mathew Ohl to Roy O. Ball. EPA also reserved the right to review the details and to consider whether additional monitoring wells should be installed but only to confirm reduction in contaminate concentrations in the sump.

that the goal of the ERH was a 90% reduction in VOCs as measured in the sump and in the three previously agreed piezometers.

EPA's decision to now change the compliance point location from the four points it agreed on in January 2009, accepted in the report of the third round of chemox, and again ratified in its approval of the work under the ERH Remedial Design Report, and to now demand achieving the 90% reduction "throughout the DNPL area" is plainly a breach of the contract by which EPA is bound and is "arbitrary and capricious."

The cases hold that an unexplained change in position by an agency is the hallmark of arbitrary and capricious behavior.[4] Moreover, imposing such an arbitrary and capricious requirement serves no legitimate environmental purpose. EPA itself has acknowledged that DNAPL remediation is difficult: "remediation objectives for a DNAPL zone should be to remove the free-phase, residual, and vapor phase DNAPL to the extent practicable and contain DNAPL sources that cannot be removed. EPA recognizes that it may be too difficult to locate and remove all of the subsurface DNAPL within a DNAPL zone. Removal of DNAPL mass should be pursued wherever practicable and, in general, where significant reduction of current or future risk will result" *EPA Guidance for Evaluating the Technical Impracticability of Ground-Water Restoration,*

[4] *See, e.g., Motor Vehicle Mfrs. Ass'n. v. State Farm Mut. Auto Ins. Co.*, 463 U.S. 29, 43 (1983); *Physicians for Social Responsibility v. Wheeler*, 956 F.3d 634, 644-45 (D.C. Cir. 2020); *Southwest Airlines Co. v. FERC,* 926 F. 3d 851, 856 (D.C. Cir. 2019); *Jicarilla Apache Nation v. United States DOI*, 613 F3d 1112, 1119 (DC Cir. 2010).("[A]n agency changing its course . . . is obligated to supply a reasoned analysis for the change. . . We have held that reasoned decision making . . . necessarily requires the agency to acknowledge and provide an adequate explanation for its departure from established precedent, and an agency that neglects to do so acts arbitrarily and capriciously.")

Interim Final, Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, September 1993, Sec. §3.0 Remedial Strategy for DNAPL Sites.[5]

Subsequent to the adoption of the 2001 Action Memorandum, and pursuant to the terms of that document and the 2002 Consent Order, a sheet pile wall going down to a depth of 40 feet below grade was installed around the DNAPL area. That wall effectively contains the residual VOCs in the sheet pile enclosed DNAPL area from migrating to areas outside the sheet pile wall. To the extent that recent sampling has shown that there are VOC concentrations at a some locations at a depth of 40'- 46' below grade, those concentrations occur in a zone called the Lower Till. The Lower Till is highly impervious to lateral movement.[6] While it is correct that concentrations detected at depth could migrate laterally through a higher porosity sand seam and thus pose a potential risk of outward migration, the January 2021 work plan being submitted to EPA on behalf of the Trust calls for the addition of two new monitoring wells in the area that EPA was concerned about and testing to determine whether there is such a sand seam that could potentially act as a

[5] Indeed, between 1988 and 2011 out of 47 TI [Technical Impractability] waivers involving NAPL at NPL sites "43 of those cited DNAPL and 8 cited both LNAPL and DNAPL." *Summary of Technical Impracticability Waivers at National Priority Sites – Report With General Technical Impracticability Site Information Sheets.* United States Environmental Protection Agency, Office of Solid Waste and Emergency Response, OSWER Directive 9230.2-24, August 2012.

[6] The Upper Till has low effective porosity of 20 to 24%. (ENVIRON, 2014). The Lower Till is more dense than the Upper Till. During MIP profiling in 2014 (ENVIRON, 2014), increased pressure and reduced estimated hydraulic conductivities (K) were observed in intervals corresponding to the Lower Till. The MIP/HPT tooling was also only able to penetrate a few feet at most into the Lower Till before refusal occurred. The MIP/HPT logs in Appendix A of ENVIRON (2014), show that when the MIP/HPT tool penetrated into the Lower Till, there was a rapid increase in the pressure required to push water out of the tool into the Till and the flow rate dropped off dramatically in some cases. In these depth intervals, the estimated K values reduced to quite low values (<1 ft/day). (In comparison, the K values of the Upper Till seemed to range between 10 and 50 ft/day). When wells were installed below 40 ft bgs in the most recent investigation (Geosyntec, 2021), 25% of the wells were found to be dry. The soil profiling completed during the 2020 investigation also showed that the elevated VOC concentrations were found in conjunction with sand stringers, and that the soil concentrations dropped off considerably within short vertical distances (< 1-2 feet) away from the sand stringers. These data show the advective transport pathway is within the permeable sand stringers.

pathway under the sheet pile wall at depth. In the absence of such a seam, there is no completed pathway to the area outside the sheet pile containment wall.

Moreover, EPA was on notice in the revised Alternatives Analysis that it received on April 20, 2016, that the cost of implementing the ERH would be about $2 million. In fact, the Trust has already paid MM over $2.1 million dollars to carry out its ERH work based on the remedial goals set forth in Section 1.5.2 of the Remedial Design Report and Table 5 to that Report. The goals set out in Section 1.5.2 were expressly to achieve 90% reduction measured at the four locations: "this reduction is to be measured through the collection of groundwater samples from the centrally located extraction well (Sump) and the surrounding three piezometers P-1 to P-3." EPA had opportunities to review and comment on prior drafts of the MM work plan (and did) and also had an opportunity to review the final April 2018 Remedial Design Report. EPA said nothing about those measuring locations (which were the same locations that were used in the third round of chemox) being incorrect or requiring remediation of every square foot of the DNAPL area to 90% VOC reduction. To the contrary, on February 16, 2018 it emailed to MM "You have our authorization to proceed." The Trust entered into a contract with MM to achieve compliance according to those sampling points and has spent over $2.1 million to do so. The Trust has changed position in reasonable reliance on EPA's approval of the MM Remedial Design Report to do that work and the compliance criteria set forth therein, and it would be grossly unfair to move the goal posts after over $2.1 million has been spent to achieve the goals provided for and three of the four sampling points have already achieved compliance.[7]

[7] To remedy the remaining deficiencies in MM's work, the Trust is proposing to bring the last remaining compliance point at P-1 into compliance with the 90% VOC reduction requirement and to break down the small amount of DNAPL newly located at one location, PSGS-11. This is consistent with the goals set out in the 2001 Action Memorandum as modified by the 2003 ENVIRON work plan, the way in which compliance was measured when chemox was used, and

Indiana Contact Law[8]

The leading case in Indiana is *First Natl. Bank v. Logan Mfg. Co.*, 577 NE2d 949 (Ind 1991). There the Plaintiff relied upon and suffered damages as a result of bank's representation that it would provide plaintiff a term loan and line of credit to open a business. Although there were insufficient terms for the enforcement of an express oral contract and unfulfilled pre-existing conditions that prevented recovery for breach of any written contract, the court concluded that the bank had made a promise to loan plaintiff the money and that the doctrine of promissory estoppel applied. The Court emphasized that the bank had knowledge that the plaintiff had relied on its representation, concluding that injustice could be avoided only by enforcing the promise. *Id.* at 954-56.

The Indiana Supreme Court adopted the doctrine of promissory estoppel embraced in § 90 of the *Restatement (Second) of Contracts* and ruled that "a promissor who induces a substantial change of position by the promisee in reliance upon the promise is estopped to deny enforceability of the promise. The reason for the doctrine is to avoid an unjust result in that justice and fair dealing require that one who acts to his detriment on the faith of a promise should be protected by estopping denial of that promise." *Id.* at 954. "Even though there were insufficient terms for the enforcement of an express oral contract (see our discussion in section I), and unfulfilled pre-existing conditions

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the ERH work plan, all of which were approved by EPA. As noted, there is nothing in the 2016 Amended Action Memorandum or the 2016 Amended Consent Order that modified those goals. Moreover, the cost of doing the remaining additional work that we propose in the DNAPL area and confirming that there is no sand lens that would allow the migration of contamination at depth under the 40' sheet pile wall is estimated to cost another $750,000. The cost of attempting to achieve 90% VOC reduction "throughout the DNAL area" is unimaginable.

[8] *See U.S. v. City of Northlake, Ill.*, 942 2d 1164, 1167 (7th Cir. 1991) ("… fundamental principles of contract interpretation under relevant state law apply when a court is presented with the task of interpreting the provisions of a consent decree.") (emphasis added).

prohibiting recovery for breach of a written contract (see section II), we are not precluded from finding a promise under these circumstances. Indeed, it is precisely under such circumstances, where a promise is made but which is not enforceable as a "contract", that the doctrine of promissory estoppel is recognized." *Id.* at 955.

That case is widely cited in Indiana. Thus, even if there was no enforceable breach of contract by EPA (and in this case there clearly was), EPA would be equitably estopped from breaking its promise. It is no answer under Indiana law to argue "we are the government and equitable estoppel does not apply to us." The Indiana Supreme Court has directly addressed the issue of when equitable estoppel of governmental agencies is appropriate:

> As a general matter, government entities are not subject to equitable estoppel. *State ex rel. Agan v. Hendricks Superior Court*, 250 Ind. 675, 678, 235 N.E.2d 458, 460 (1968). However, this Court has held that in certain situations application of estoppel of government entities is appropriate. *See id.*; *see also Cablevision of Chicago v. Colby Cable Corp.*, 417 N.E.2d 348, 356 (Ind. Ct. App. 1981); *Tippecanoe County Area Plan Comm'n v. Sheffield Town Developers, Inc.*, 181 Ind. App. 586, 599-600, 394 N.E.2d 176, 185 (1979), *trans. denied. Specifically, estoppel may be appropriate where the party asserting estoppel has detrimentally relied on the governmental entity's affirmative assertion or on its silence where there was a duty to speak. See Hendricks*, 250 Ind. at 678, 235 N.E.2d at 460 (applying estoppel to the State where the State failed to raise its objections in prior proceedings); *Sheffield*, 181 Ind. App. at 599-600, 394 N.E.2d at 185 (holding that estoppel was applicable where the County had a duty to speak and did not, and developer relied on the County's silence to its detriment); *cf. Ind. Dep't of Envtl. Mgt. v. Conard*, 614 N.E.2d 916, 921 (Ind. 1993) (denying estoppel in the absence of any detrimental reliance on statements made by the government agency); *City of Crown Point v. Lake County*, 510 N.E.2d 684, 688 (Ind. 1987) (same).

Equicor Dev. Inc. v Westfield-Washington Twp. Plan Commn., 758 NE2d 34, 40 (Ind 2001) (emphasis added). If EPA wanted to "move the goal posts," the time to tell the Trust that was before we entered into a contract to implement ERH and spent over $2.1 million to achieve the goals that EPA had agreed to.

Section VIII. of the Consent Order requires EPA to maintain an administrative record of this dispute. We request that it do so. We reserve the right to supplement the materials contained in this letter including as to information that becomes available in the future. Since the documents referred to herein are voluminous and all are already in EPA's possession or a matter of public record we are not physically attaching copies. If EPA is unable to locate a document referenced in this letter, please let us know so that we can provide it.

Additionally, please note that the Consent Order also gives the parties an opportunity to "expeditiously and informally" attempt to resolve any dispute that arises under the Consent Order. Accordingly, we request a telephone conference call at a mutually agreed time and date to review the disputed issue in an effort to informally resolve this dispute. Unless the attempt to informally resolve this dispute is successful, the parties will need to proceed as provided for in the Consent Order.

Very truly yours,

/s/ *Norman W. Bernstein and Peter M. Racher*

Trustees of the Third Site Trust Fund