UNITED STATES DISTRICT COURT

FOR THE EASTERN DISTRICT OF CALIFORNIA

CALIFORNIA RIVER WATCH, Plaintiff, v. CITY OF VACAVILLE, Defendant.	No. 2:17-cv-00524-KJM-KJN ORDER

In this case in which plaintiff California River Watch ("plaintiff" or "River Watch") alleges toxic contamination under the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. § 6972(a)(1)(B), each party moves for summary judgment on the sole remaining claim related to the presence of hexavalent chromium in the public water supply as endangering human health.[1] Plaintiff also moves to exclude portions of the expert witness report offered by defendant City of Vacaville ("defendant" or "Vacaville") and also moves to strike the declaration of Adam Love in support of Vacaville's summary judgment motion. Vacaville

[1] The complaint originally set forth a single claim under the RCRA with two component parts: one for endangerment to human health and one for endangerment to the environment. *See* Compl. ¶¶ 27–32, ECF No. 1. On February 10, 2020, the court approved the parties' stipulation dismissing the environmental endangerment component of plaintiff's RCRA claim. *See* ECF No. 78. Therefore, the sole remaining issue in this case relates to alleged endangerment to the health of the City of Vacaville's customers through exposure to the City's potable water system.

separately moves to strike proposed corrections made in the deposition errata submitted by Dr. Larry Russell, plaintiff's expert witness.

On April 10, 2019, the court heard oral argument on the motions. Counsel Jack Silver and David Weinsoff appeared for plaintiff; counsel Gregory Newmark appeared for defendant. Having considered the motions and all evidence in support thereof, and for the reasons explained below, the court GRANTS in part and DENIES in part defendant's motion for summary judgment. Plaintiff's motion for summary judgment is DENIED, and the motion to exclude and motions to strike are DENIED as moot.

Ultimately, the court concludes the case should be CLOSED. While it cannot be disputed that hexavalent chromium itself presents a risk to human health, plaintiff here attempts to stretch the RCRA statute well beyond its application, seeking to force a square peg into a round hole. As the court explains below, the RCRA cannot bear the interpretation plaintiff advances.

I. BACKGROUND

This case turns on a question of statutory interpretation; therefore, the court provides only a brief recitation of the facts and procedural history. California River Watch, a non-profit organization, brings this citizen's suit under 42 U.S.C. § 6972(a)(1)(B) of the RCRA. Pl.'s Mot. Summ. J. ("MSJ") at 1, ECF No. 40. River Watch asserts, among other things, that Vacaville is generating and transporting hexavalent chromium through its potable water system and distributing that water to its customers for consumption. *Id.* Specifically, River Watch alleges "hexavalent chromium in the CITY's water supply [drawn from its wells and surface water sources] is a waste that is stored, transported or otherwise managed by the CITY from its water treatment plant and facilities." Compl. ¶ 17, ECF No. 1. Vacaville's water treatment process, River Watch argues, creates an imminent and substantial endangerment to the health and safety of Vacaville's residents, resulting in a violation under § 6972(a)(1)(B). Pl.'s MSJ at 1. Most important to plaintiff's claim is whether the product it says Vacaville carries in its water constitutes "solid waste" under the RCRA. *Id.* Vacaville challenges plaintiff's allegations on many fronts, chief among them plaintiff's failure to satisfy the statutory definition of "solid

waste" because, it says, the hexavalent chromium contained within its potable water was and is not "discarded" as required by the statute. Def.'s MSJ at 1, ECF No. 51.

River Watch initiated this action on March 13, 2017, bringing a single claim under § 6972(a)(1)(B) and seeking various forms of injunctive relief. *See generally* Compl. Vacaville moved to dismiss the complaint for failure to state a claim and violation of the RCRA's anti-duplication provision. Def.'s Mot. Dismiss, ECF No. 5. On September 1, 2017, in denying Vacaville's motion, the court found the complaint states a valid RCRA claim and the anti-duplication provision is inapplicable. Dismissal Order, ECF No. 20. The pending summary judgment motions followed, along with Vacaville's motion to exclude and plaintiff's motion to strike. As the court notes above, in February 2020, plaintiff trimmed its RCRA claim to focus on alleged harm to human health alone. The court resolves the pending motions here.

II. LEGAL STANDARD

A court will grant summary judgment "if . . . there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). The "threshold inquiry" is whether "there are any genuine factual issues that properly can be resolved only by a finder of fact because they may reasonably be resolved in favor of either party." *Anderson v. Liberty Lobby, Inc*., 477 U.S. 242, 250 (1986).

The moving party bears the initial burden of showing the district court "that there is an absence of evidence to support the nonmoving party's case." *Celotex Corp. v. Catrett*, 477 U.S. 317, 325 (1986). The burden then shifts to the nonmoving party, which "must establish that there is a genuine issue of material fact . . . ." *Matsushita Elec. Indus. Co. v. Zenith Radio Corp*., 475 U.S. 574, 585 (1986). In carrying their burdens, both parties must "cit[e] to particular parts of materials in the record . . .; or show [ ] that the materials cited do not establish the absence or presence of a genuine dispute, or that an adverse party cannot produce admissible evidence to support the fact." Fed. R. Civ. P. 56(c)(1); *see also Matsushita*, 475 U.S. at 586 ("[The nonmoving party] must do more than simply show that there is some metaphysical doubt as to the material facts"). Also, "[o]nly disputes over facts that might affect the outcome of the suit under

the governing law will properly preclude the entry of summary judgment." *Anderson*, 477 U.S. at 247–48.

In deciding a motion for summary judgment, the court draws all inferences and views all evidence in the light most favorable to the nonmoving party. *Matsushita*, 475 U.S. at 587–88; *Whitman v. Mineta*, 541 F.3d 929, 931 (9th Cir. 2008). "Where the record taken as a whole could not lead a rational trier of fact to find for the non-moving party, there is no 'genuine issue for trial.'" *Matsushita*, 475 U.S. at 587 (quoting *First Nat'l Bank of Ariz. v. Cities Serv. Co.*, 391 U.S. 253, 289 (1968)). Where a genuine dispute exists, the court draws inferences in plaintiffs' favor. *Tolan v. Cotton*, 134 S. Ct. 1861, 1868 (2014). Parties may object to evidence cited to establish undisputed facts. *In re Oracle Corp. Sec. Litig.*, 627 F.3d at 385–86. A court may consider evidence that would be "admissible at trial." *Fraser v. Goodale*, 342 F.3d 1032, 1036 (9th Cir. 2003). But the evidentiary standard for admission at the summary judgment stage is lenient: A court may evaluate evidence in an inadmissible form if the evidentiary objections could be cured at trial. *See Burch v. Regents of the Univ. of Cal.*, 433 F. Supp. 2d 1110, 1119–20 (E.D. Cal. 2006). In other words, admissibility at trial depends not on the evidence's form, but on its content. *Block v. City of L.A.*, 253 F.3d 410, 418–19 (9th Cir. 2001) (citing *Celotex Corp.*, 477 U.S. at 324). The party seeking admission of evidence "bears the burden of proof of admissibility." *Pfingston v. Ronan Eng'g Co.*, 284 F.3d 999, 1004 (9th Cir. 2002). If the opposing party objects to the proposed evidence, the party seeking admission must direct the district court to "authenticating documents, deposition testimony bearing on attribution, hearsay exceptions and exemptions, or other evidentiary principles under which the evidence in question could be deemed admissible . . . ." *In re Oracle Corp. Sec. Litig.*, 627 F.3d at 385–86. However, courts are sometimes "much more lenient" with the affidavits and documents of the party opposing summary judgment. *Scharf v. U.S. Atty. Gen.*, 597 F.2d 1240, 1243 (9th Cir. 1979).

The Supreme Court has taken care to note that district courts should act "with caution in granting summary judgment," and have authority to "deny summary judgment in a case where there is reason to believe the better course would be to proceed to a full trial." *Anderson*, 477 U.S. at 255. A trial may be necessary "if the judge has doubt as to the wisdom of terminating

the case before trial." *Gen. Signal Corp. v. MCI Telecommunications Corp.*, 66 F.3d 1500, 1507 (9th Cir. 1995) (quoting *Black v. J.I. Case Co.*, 22 F.3d 568, 572 (5th Cir. 1994)). This may be the case "even in the absence of a factual dispute." *Rheumatology Diagnostics Lab., Inc v. Aetna, Inc.*, No. 12-05847, 2015 WL 3826713, at *4 (N.D. Cal. June 19, 2015) (quoting Black, 22 F.3d at 572); *accord Lind v. United Parcel Serv., Inc.*, 254 F.3d 1281, 1285 (11th Cir. 2001).

However, when the trial court is presented with a question of statutory interpretation at summary judgment, resolution of such question, even if dispositive, is appropriate. *See Singh v. Clinton,* 618 F.3d 1085, 1088 (9th Cir. 2010) ("We review the district court's grant of summary judgment as well as its statutory interpretations de novo."); *Johnson v. Land O' Lakes, Inc.*, 18 F. Supp. 2d 985, 993 (N.D. Iowa 1998) ("statutory interpretation . . . is primarily a legal question amenable to summary judgment.").

III. DISCUSSION

This case turns on the meaning of "solid waste" and asks whether the hexavalent chromium in Vacaville's potable water satisfies the definition of that term as used in the RCRA. Before turning to that question, however, the court addresses the threshold issue of plaintiff's standing to bring this citizens' suit.

A. Standing

To obtain Article III standing, a plaintiff must show (1) he is under threat of suffering an injury in fact that is concrete and particularized; (2) the threat must be actual and imminent, not conjectural or hypothetical; (3) it must be fairly traceable to the challenged action of the defendant; and (4) it must be likely that a favorable judicial decision will prevent or redress the injury. *Summers v. Earth Island Inst.*, 555 U.S. 488, 493 (2009). When an organization brings suit, it must establish that at least one of its members "ha[s] standing to sue in [his] own right." *Ecological Rights Found. v. Pac. Gas & Elec. Co. ("Ecological Rights II")*, 874 F.3d 1083, 1092 (9th Cir. 2017) (quoting *Ecological Rights Found. v. Pac. Lumber Co.,* 230 F.3d 1141, 1147 (9th Cir. 2000)).

Here, in bringing its summary judgment motion, River Watch preemptively asserts standing to sue on behalf of its members. Pl.'s MSJ at 20–22. River Watch claims the injuries of

its members Eliesa Brown, Larry Hanson and Robert Rawson, as articulated in their respective declarations, satisfy the requirements of Article III standing, and thus satisfy River Watch's ability to initiate this action on its members' behalf. *Id.*; *see also* Brown Decl., ECF No. 41; Rawson Decl., ECF No. 42; Hanson Decl., ECF No. 43. Specifically, Ms. Brown states she visits her father nearly every day at his Leisure Town home, located in a Vacaville suburb, spends extensive time in Vacaville, is exposed to and consumes water from Vacaville's water filtration system and experiences "substantial aesthetic and personal health concerns" based on that exposure, because she fears "that no water in Vacaville is safe." Pl.'s MSJ at 21; Brown Decl. ¶¶ 7, 16, 17. Mr. Hanson, an avid outdoor enthusiast, also spends extensive time in Vacaville visiting a friend and enjoying Vacaville's many outdoor opportunities, particularly Lagoon Valley Park. Pl.'s MSJ at 21; Hanson Decl. ¶ 7. Hanson claims that knowledge of the elevated levels of hexavalent chromium in Vacaville's drinking water keep him and his wife from returning to the area for further recreational enjoyment. Pl.'s MSJ at 21–22; Hanson Decl. ¶ 7. Finally, River Watch member Mr. Rawson intends to relocate his elderly mother to Vacaville because of its central location and affordable cost of living; however, knowledge of Vacaville's hexavalent chromium levels prevents him and his family from completing the relocation for fear of adverse health effects that may arise from his mother's exposure to chromium. Pl.'s MSJ at 22; Rawson Decl. ¶¶ 3–4.

Vacaville argues River Watch fails to meet the "injury in fact" threshold because it has not shown any "injury was in fact due to the constituents of drinking water. Therefore, it says, there is 'no causal connection' between the injury and the conduct complained of." Def.'s Opp'n to Pl.'s MSJ at 22–23, ECF No. 61. Vacaville also asserts River Watch fails to show the harm it claims is redressable because River Watch cannot establish a violation under RCRA; thus, the injunctive relief River Watch seeks, the bringing of defendant's water treatment operations into compliance with the RCRA, is unattainable because Vacaville already is in compliance. *Id.*

The court finds River Watch has adequately established standing to bring suit on behalf of its members. As the court in *Ecological Rights II* explained, "The 'injury in fact' requirement in environmental cases is satisfied if an individual adequately shows that she has an

aesthetic or recreational interest in a particular place, or animal, or plant species and that that interest is impaired by a defendant's conduct." 874 F.3d at 1093 (citing *Pac. Lumber Co.*, 230 F.3d at 1147). Additionally, an injury in fact may be prospective or retrospective in nature. *See, e.g., Summers*, 555 U.S. at 493 ("[P]laintiff must show he is under *threat* of suffering 'injury in fact.'" (emphasis added)). The declarations of Eliesa Brown, Larry Hanson and Robert Rawson, and the alleged effects they say they are experiencing or will experience by their exposure to elevated levels of hexavalent chromium, supply a causal connection between the alleged harmful activity and the harm to plaintiff's members. *See generally* Pl.'s MSJ (detailing detrimental effects of hexavalent chromium exposure). Moreover, given the broader statutory minima for citizen suits brought under § 6972(a)(1)(B) (providing for citizen suits "against any person . . . present[ing] an imminent and substantial endangerment to health and the environment"), River Watch need not prove a RCRA violation has actually occurred in order to satisfy standing's redressability requirement, because, for purposes of standing under § 6972(a)(1)(B), it need only show Vacaville "created a substantial probability of increased harm to the environment." *Maine People's All. And Nat. Res. Def. Council v. Mallinckrodt, Inc.*, 471 F.3d 277, 285 (1st Cir. 2006). Again, given the allegations in River Watch's summary judgment motion, and its supporting evidence, the court finds, for purposes of standing, the redressability element is satisfied. River Watch has standing to sue.

B. Applicability of RCRA's Anti-Duplication Provision

Vacaville argues that River Watch's claim violates the RCRA's anti-duplication provision. Def.'s MSJ at 13–16. As Vacaville notes, the court previously rejected this same argument in its order denying Vacaville's motion to dismiss, *see* Dismissal Order at 3–5; thus, Vacaville effectively asks the court to reconsider its ruling here albeit at a different stage of the proceedings, Def.'s MSJ at 13–14. The outcome below moots this request.

Vacaville's motion for summary judgment is DENIED as to the RCRA's anti-duplication provision.

C. RCRA Analysis

1. Nature of River Watch's Claim

In order to properly resolve the parties' competing summary judgment motions, it is important to accurately frame the nature of River Watch's claim. The complaint alleges "[Vacaville] is transporting hexavalent chromium – a listed hazardous waste under RCRA – through [its] water system" to its residents for consumption. Compl. ¶ 2. The complaint further states that the "RCRA specifically includes transporters of hazardous waste within the identified class of actions liable under the statute." *Id.* In light of these allegations, it at first appears River Watch seeks to impose liability because Vacaville is using its water treatment system to carry and dispose of a hazardous substance. Upon more focused briefing, however, and as clarified at hearing, what River Watch actually claims is that Vacaville is generating a hazardous substance, namely hexavalent chromium, through its potable water pumping, treatment and distribution activities, and then carrying that substance through its distribution channels to its consumers in the form of potable water. *See* Pl.'s MSJ at 7 ("Hexavalent Chromium is a Byproduct of Vacaville's Production, Treatment, Transportation and Delivery of its Product - Drinking Water."); Hr'g Tr. at 14:9–14, ECF No. 75 ("[W]hat our claim is, is that the product that they're providing is potable water, which is water that is safe to drink. . . . Hexavalent chromium is just a byproduct of the extraction of that water."); Pl.'s MSJ Reply at 5 ("[T]he hexavalent chromium present in Vacaville's potable water is a 'useless byproduct derived from the commercial product and sale of goods and services.' The 'goods' are potable water. The 'services' are the delivery of that water to customers."). In other words, River Watch is not claiming Vacaville is participating in the hazardous waste disposal and transportation process as, for example, a hazardous waste disposal company would; rather, River Watch claims that in the process of creating potable water, Vacaville is generating high concentrations of hexavalent chromium, which is then incorporated into the potable water and distributed to city residents. *See* Hr'g Tr. at 11:16–20 (Court: "The [byproduct] theory based on the process of the city's obtaining and preparing the water for introduction into the potable water system, I mean that's really – that's argument characterizing what the city does, right?" River Watch counsel: "Right").

This understanding is crucial to determining what is and is not "discarded material" within the statutory meaning of "solid waste," and whether hexavalent chromium qualifies as such, as relevant here.

2. Statutory Context

Turning to the interpretative task at hand, which requires discerning the meaning of "solid waste," the court first orients itself within the statutory framework, while recognizing that statutory interpretation must begin with the text of the statute itself. Context is particularly important when considering the RCRA, because, as one court has described them, the "[RCRA] regulations are . . . dense, turgid, and circuitous." *Zands v. Nelson*, 779 F. Supp. 1254, 1261 (S.D. Cal. 1991) (internal quotations omitted) (quoting *Untied States v. White*, 766 F. Supp. 873, 880 (E.D. Wash. 1991)). "RCRA is a comprehensive environmental statute that governs the treatment, storage, and disposal of solid and hazardous waste." *Meghrig v. KFC W., Inc.*, 516 U.S. 479, 483 (1996). Congress's primary concern "was to establish the framework for a national system to insure the safe management of hazardous waste." *Am. Min. Cong. v. U.S. E.P.A.*, 824 F.2d 1177, 1179 (D.C. Cir. 1987) (citing H.R. Rep. No. 1491, 94th Cong., 2d Sess. 3 (1976)). In doing so, Congress sought "to reduce the amount of waste and unsalvageable materials and to provide for proper and economical solid waste disposal practices." 42 U.S.C. § 6901(a)(4).

The RCRA permits a private cause of action, *i.e.*, a citizen's suit, against any person "who has contributed or who is contributing to the past or present handling, storage, treatment, transportation, or disposal of any solid or hazardous waste which may present an imminent and substantial endangerment to health or the environment." *Ecological Rights II*, 874 F.3d at 1089 (quoting 42 U.S.C. § 6972(a)(1)(B)). "Solid wastes are regulated under Subchapter IV §§ 6941–49a; hazardous wastes are subject to the more stringent standards of Subchapter III §§ 6921–39b." *Connecticut Coastal Fishermen's Ass'n v. Remington Arms Co.*, 989 F.2d 1305, 1313 (2d Cir. 1993). This distinction is critical because "hazardous wastes are a subset of solid wastes . . . Accordingly, for a waste to be classified as hazardous, it must first qualify as a solid waste under RCRA." *Id.* (internal quotations and some citations omitted) (citing 42 U.S.C. § 6903(5)).

Here, Vacaville's primary contention is that River Watch cannot succeed in demonstrating that Vacaville's potable water, and the hexavalent chromium traces the water contains, constitutes a "solid waste" under the RCRA. *See generally* Def.'s MSJ. To assess Vacaville's argument the court must first determine the correct meaning of "solid waste"; in so doing, the court follows the interpretive steps set out by the Ninth Circuit in *Ecological Rights Found. v. Pac. Gas & Elec. Co. ("Ecological Rights I")*, 713 F.3d 502 (9th Cir. 2013).

3. Analysis

As explained in *Ecological Rights I*, there are three elements to a § 6972(a)(1)(B) claim:

> (1) the defendant has been or is a generator or transporter of solid or hazardous waste, or is or has been an operator of a solid or hazardous waste treatment, storage or disposal facility; (2) the defendant has "contributed" or "is contributing to" the handling, storage, treatment, transportation, or disposal of solid or hazardous waste; and, (3) the solid or hazardous waste in question may present an imminent and substantial endangerment to health or the environment.

713 F.3d at 514 (citing 42 U.S.C. § 6972(a)(1)(B)). Vacaville contends the potable water it serves its customers, and the hexavalent chromium the water contains after pumping, treatment and distribution process, together do not constitute a "solid waste"; therefore, Vacaville argues, River Watch's claim fails as a matter of law. Def.'s MSJ at 5–13.

Addressing the same interpretive question here, the meaning of "solid waste," the court in *Ecological Rights I* began with the text of the statutory definition: "We begin with RCRA's definition of 'solid waste,' which is 'garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material . . . resulting from industrial, commercial, mining and agricultural operations, and from community activities . . . .'" *Id.* at 515 (alteration in original) (citing 42 U.S.C. § 6903(27)). In the absence of a statutory definition for the term "discarded," the court then defined that term as "cast aside; reject; abandon; give up," referencing a dictionary definition. *Id.* (citing *Safe Air for Everyone v. Meyer*, 373 F.3d 1035, 1041 (9th Cir. 2004) (quoting 1 The New Shorter Oxford English Dictionary 684 (4th ed. 1993)); *see also Am. Min. Cong.*, 824 F.2d at 1184 (defining "discarded" as "disposed of; thrown away or abandoned" (internal quotations and citation

omitted)).[2] If the terms of the statutory definitions are clear on their face, then the court need go no further. *Chevron, U.S.A., Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837, 842–43 (1984) ("If the intent of Congress is clear, that is the end of the matter; for the court . . . must give effect to the unambiguously expressed intent of Congress."). The court considers whether the terms are clear and unambiguous below.

a) Applicability of "Discarded" and "Hazardous Waste" as Subset of "Solid Waste"

Before the court examines the facial applicability of the statutory terms, it briefly addresses two other matters for clarification. First, in light of the statutes' terms and the parties' arguments, River Watch must show Vacaville, as a generator or transporter, has "discarded" the hexavalent chromium into its potable water to satisfy the statutory definition of "solid waste."[3] Although there are a number of possible categories of "waste" listed in § 6903(27), plaintiff makes no contention the hexavalent chromium in Vacaville's water is anything but "other discarded material." Indeed, River Watch concedes the material must be discarded to satisfy the definition of solid waste. *See* Pl.'s MSJ at 17 (arguing hexavalent chromium is a "municipal by-product,"[4] which is a component of the broader definition of "discarded materials"); *id.* at 19

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[2] River Watch uses the term "disposing" to characterize Vacaville's activity that it says runs afoul of the statute: "Vacaville is disposing of hexavalent chromium into its drinking water distribution system and the environment which may present an imminent and substantial endangerment to both." Pl.'s MSJ at 19. The RCRA itself defines "disposal" as "the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water . . . ." 42 U.S.C. § 6903(3). While "disposal" may be part of the broader RCRA vernacular, the relevant question here is whether Vacaville's water containing traces of hexavalent chromium is "discarded" material such that it can satisfy the statutory definition of "solid waste."

[3] Although the court previously concluded hexavalent chromium could satisfy the meaning of hazardous waste regardless of whether it has been discarded, *see* Dismissal Order at 5–6, upon more focused briefing, considering the broader statutory definition applicable to suits brought under 42 U.S.C. § 6972(a)(1)(B) and plaintiff's concession on the matter, the court is persuaded the material at issue must be discarded in order to satisfy the statutory definition of solid waste.

[4] Under 40 C.F.R. § 261.1(c)(3), a "by-product" is defined as "a material that is not one of the primary products of a production process and is not solely or separately produced by the production process."

(citing regulatory definition, "which provides that abandoned materials have been 'disposed of' and thus discarded . . . . As such, Vacaville is disposing of hexavalent chromium into its drinking water"); Pl.'s Opp'n to Def.'s MSJ at 4, ECF No. 59 ("Hexavalent Chromium Being Transported by Vacaville to its Customers and Discharged to Surface Waters is 'Discarded Material.'"); *see also* Def.'s MSJ Reply at 12, ECF No. 63 ("Apparently, the Parties now agree that a failure to show there is a solid waste is dispositive."). As relevant here, hexavalent chromium must be discarded into Vacaville's potable water to be considered a solid waste. *See Ecological Rights I*, 713 F.3d at 515 ("Congress enacted RCRA to 'eliminate[] the last remaining loophole in environmental law' by regulating the 'disposal of discarded materials and hazardous wastes.'" (alterations in original) (citing H.R. Rep. No. 94-1491(I), at 4 (1976)).

Secondly, given plaintiff's reliance on the term "hazardous waste," that term must be clarified as well. Section 6972(a)(1)(B) refers to "solid *or* hazardous waste," and two separate definitions are provided in § 6903 (subsection (5) defining "hazardous waste" and subsection (27) defining "solid waste"). However, as referenced above, within the broader statutory scheme "hazardous waste is defined as a subset of solid waste"; thus plaintiff must satisfy the definition of solid waste to prevail in its arguments here. *Connecticut Coastal*, 989 F.2d at 1313; *see also Am. Min. Cong.*, 824 F.2d at 1179 ("Because 'hazardous' waste is defined as a subset of 'solid waste,' . . . the scope of EPA's jurisdiction is limited to those materials that constitute 'solid waste.'"). Plaintiff confirms as much: "To be a hazardous waste under RCRA § [6972](a)(1)(B) the waste must first be a solid waste. The determination of whether the waste is also a hazardous waste is therefore unnecessary and advisory." Pl.'s Opp'n to Def.'s MSJ at 2. For these reasons, the court focuses on the term "solid waste," without dwelling on potentially confusing and ultimately irrelevant differences between solid and hazardous waste.

b) Statutory Analysis

Turning back to the first step of statutory analysis, asking whether the statute's meaning is plain, the court finds the definition of solid waste is ambiguous with respect to whether Vacaville's drinking water containing traces of hexavalent chromium, collected from surface and well waters and distributed through its potable water system to city residents, satisfies

the statutory definition of solid waste. As the court in *Connecticut Coastal* explained, "The statute itself does not further define 'discarded material,' and this creates an ambiguity with respect to the specific issue raised: At what point . . . do the materials become discarded?" 989 F.2d at 1314; *see also Ecological Rights I*, 713 F.3d at 515 (finding ambiguity in definition of "solid waste" when considering whether wood preservative escaping utility poles encompassed within statutory definition). Because a facial ambiguity exists, the court turns to the second step of statutory construction: reviewing the legislative history. *Ecological Rights I*, 713 F.3d at 515 (citing *James v. City of Costa Mesa*, 700 F.3d 394, 399 n.8 (9th Cir. 2012)).

"RCRA is a comprehensive environmental statute that empowers EPA to regulate hazardous wastes from cradle to grave." *City of Chicago v. Envtl. Def. Fund*, 511 U.S. 328, 331 (1994). Specifically, it was "designed to address the waste disposal problem, which was, at base, the high volume of waste being generated and the capacity to dispose of that waste in the traditional manner." *Ecological Rights I*, 713 F.3d at 515 (internal quotations and citations omitted). Congress intended that the statute's reach be broad:

> It is not only the waste by-products of the nation's manufacturing processes with which the committee is concerned: *but also the products themselves once they have served their intended purposes and are no longer wanted by the consumer*. For these reasons the term discarded materials is used to identify collectively those substances often referred to as industrial, municipal or post-consumer waste; refuse, trash, garbage and sludge.

Connecticut Coastal, 989 F.2d at 1314 (emphasis in original) (citing H.R. Rep. No. 1491, 94th Cong., 2d Sess. 2 (1976)). "The key to whether a manufactured product is a 'solid waste,' then, is whether that product 'has served its intended purpose and is no longer wanted by the consumer.'" *Ecological Rights I*, 713 F.3d at 515 (alterations and citation omitted). And a determination of whether something is a "solid waste" must be made with an eye to the statute's overarching purpose: "[T]o help States deal with the ever-increasing problem of solid waste *disposal*." *Am. Min. Cong.*, 824 F.2d at 1185 (emphasis in original).

With this understanding, the court turns to the question posed by the pending motions: Does Vacaville's potable water contain traces of hexavalent chromium generated through the production process and distributed to its residents and thus qualify as a "solid waste"

under the RCRA? The court finds it is not. On this question, plaintiff's position can be distilled to the following passage:

> The unifying factor in all these cases for determining whether or not the material in question was discarded, is whether the material was still useful or that its presence in the environment was an expected consequence of that use. Since hexavalent chromium in drinking water has no intended use, is not wanted by the consumer, and its presence and persistence is not an "expected consequence" of Vacaville's potable water production, it is a "discarded material."

Pl.'s Opp'n to Def.'s MSJ at 6 (collecting cases). As noted above, River Watch attempts to draw a distinction between the hexavalent chromium and the drinking water itself, with the water being the product, and the hexavalent chromium being a "useless byproduct." *Id.* at 7. In other words, because hexavalent chromium serves no beneficial use in the potable water itself, the water cannot "give that toxin a safe haven." *Id.*

Vacaville argues River Watch misconstrues the meaning of "byproduct" by attempting to isolate the contaminant from the product itself, a maneuver Vacaville asserts goes beyond the statute's intent. Def.'s MSJ Reply at 6–12. Vacaville contends:

> It is undisputed that the product at issue in this case is the water the City delivers to its customers. That water is not a waste, and is not discarded, until after it has served its intended purpose. The intended purpose of Vacaville's drinking water is, obviously, drinking. It is not a solid waste subject to RCRA at that time because it is serving its intended purpose.

Id. at 9. Further, Vacaville contests River Watch's claim it is disposing of "hexavalent chromium by placing it into its drinking water distribution system," *see* Pl.'s Opp'n to Def.'s MSJ at 9, stating: "This allegation suggests that the City has vessels of [hexavalent chromium] that it needs to get rid of, and it does so by dumping the [hexavalent chromium] into its drinking water system. Of course, nothing of the sort is happening and River Watch has not proven otherwise." Def.'s MSJ Reply at 11–12. The court does not reach this latter argument in light of the resolution below.

In theory, there is logic to plaintiff's argument, that a host product cannot or should not provide a safe haven for a discarded contaminant under the RCRA simply because that host product is serving its intended purpose; nonetheless, the RCRA's language, history and

supporting case law lead the court to conclude the RCRA is not intended to regulate Vacaville's water production process here. To satisfy the statutory definition of solid waste, the material must be discarded; meaning, there must be a point at which the hazardous or contaminating material is separated from the manufactured product, with no intention the material be reserved or returned for further use. On this point, a number of cases addressing the question of what constitutes a solid waste provide guidance, although their factual underpinnings are distinguishable. *See, e.g.*, *Ecological Rights I*, 713 F.3d at 515–18 (holding that point at which wood preservative "leaks, spills, or otherwise escapes" from utility poles to which preservative applied does not convert preservative to "solid waste"); *Connecticut Coastal*, 989 F.2d at 1309–18 (finding lead shot and clay targets discharged by patrons of gun club constitute substantial endangerment under statutory definition of solid waste); *Safe Air for Everyone*, 373 F.3d at 1047 (concluding that grass residue remaining after a Kentucky bluegrass harvest is not a "solid waste" under RCRA); *cf. Am. Min. Cong.*, 824 F.2d at 1186 (EPA regulation could not extend to materials intended for reuse in manufacturing process because "materials have not yet become part of the waste disposal problem; rather, *they are destined for beneficial reuse of recycling in a continuous process by the generating industry itself*" (emphasis in original)). As these cases help clarify, to be considered discarded material, and in turn a solid waste, there must be a point at which the contaminant separates from the product itself with no intent for reuse, and remains in a separated state with only harmful effects because stripped of any host for which it at one point served a beneficial purpose.

Here, River Watch does not present sufficient argument or evidence to demonstrate how Vacaville's water processing activities can qualify as "discarding" "solid waste" under the statute. For example, in its reply brief, River Watch asserts, "Vacaville extracts highly contaminated water from a small portion of its water sources and disposes of that water into its drinking water distribution system." Pl.'s MSJ Reply at 5, ECF No. 62. In support of this assertion, River Watch cites the expert opinion of Dr. Larry Russell. *See* Russell Report, ECF No. 27-5. A review of Dr. Russell's report reveals only conclusory allegations regarding how

Vacaville actually discharges hexavalent chromium into its potable water system.[5] For example, Dr. Russell discusses the Wickes Site, located in the town of Elmira proximate to Vacaville's Elmira well-field area, and former home to companies including Pacific Wood Preserving and Wickes Forest Industries, Inc.; he notes the Site is a known source of hexavalent chromium and other groundwater contaminants, and says that Vacaville's pumping activities have caused a greater concentration of groundwater to pull from the east, the direction of the Wickes Site from the pumping stations. Russell Report at 9. Similarly, Dr. Russell identifies a number of other sources of hexavalent chromium: he explains that local industry, including a business named Walker Custom Chrome, as well as a process he describes as in situ oxidative remediation and agricultural activities in the region dating back to the 1800s have all contributed to the elevated levels of hexavalent chromium up to 30 µg/l (micrograms per liter) in the areas from which Vacaville sources its potable water. *Id.* at 2, 10; *see also* Pl.'s MSJ Reply at 6 ("Hexavalent chromium in Vacaville's water is anthropogenic . . . . mean[ing] originating in human activity."). Even accepting all of Dr. Russell's assertions as true, they fail to establish the point at which Vacaville "discards" the hexavalent chromium contaminant as part of its water production process. The conclusory allegation that "[h]exavalent chromium [is] discharged by Vacaville into its potable water system" is insufficient to create a dispute of material fact. Russell Report at 10. River Watch itself argues: "Vacaville pumps water from its wells, disinfects via chlorination, adds fluoride and delivers its product to the taps of homes, businesses, schools, and public venues (customers) through its distribution system." Pl.'s MSJ at 7. This argument, with plaintiff's supporting evidence, suggests Vacaville is pumping its potable water from sources that are contaminated prior to any treatment. This is because, as Dr. Russell's report asserts, these sources contain elevated levels of hexavalent chromium before Vacaville's pumping activities, not as a result of Vacaville's pumping activities. *Compare Ecological Rights I*, 713 F.3d at 515

[5] Vacaville objects to the admissibility of Dr. Russell's report in its entirety. *See* Def.'s Obj. to L. Russell Decl., ECF No. 61-13. The court need not address every objection, but does sustain Vacaville's objections to the extent they challenge the vague or conclusory opinions offered by Dr. Russell. *See* Fed. R. Evid. 402, 403.

(considering point at which "wood preservative [the product at issue] [] leaks, spills, or otherwise escapes from the poles").

Here, even if Vacaville's water collection, treatment and distribution process did work to elevate hexavalent chromium concentrations such that the finished drinking water product contained higher levels of the contaminant than when first collected, this still would not implicate the RCRA's fundamental requirement that the contaminant be "discarded." As Vacaville asserts, the water itself is still being delivered to the intended customers in the product's intended state for use as drinking water. Def.'s MSJ Reply at 5 ("[W]hen the City delivers its drinking water to its customers, it is still a useful product and would not be considered discarded material."). Pointing to other laws regulating drinking water, Vacaville represents that its water is subject to and complies with the permitting requirements under the Safe Drinking Water Act ("SDWA"), *see, e.g.*, Hr'g Tr. at 27:19–28:9 ("The city has absolutely maintained compliance with all th[e] requirements [of the SDWA]."); the court does not reach the merits of this argument given its resolution of the anti-duplication issue above. Vacaville correctly notes the RCRA is not an environmental catch-all designed to regulate all traces of potential contaminants, *id.* at 3–5; rather, it "was designed to 'eliminate the last remaining loophole in environmental law' by regulating the 'disposal of discarded materials and hazardous wastes.'" *Connecticut Costal*, 989 F.2d at 1314 (alterations omitted) (citing H.R. Rep. No. 1491, 94th Cong., 2d Sess. 4 (1976)).

River Watch relies on the Third Circuit's holding in *Interfaith Cmty. Org. v. Honeywell International, Inc.*, 399 F.3d 248, 259 (3rd Cir. 2005), in which the court observed, "given RCRA's language and purpose, Congress must have intended that 'if an error is to be made in applying the endangerment standard, the error must be made in favor of protecting public health, welfare and the environment.'" (citation omitted). The factual backdrop of *Interfaith*, however, underscores the type of disposal activities the RCRA is intended to remediate. *Interfaith* addressed nearly a century's worth of waste residue, containing high concentrations of hexavalent chromium, produced by a chrome manufacturing conglomerate and its successors. *Id.* at 252. The chrome producers would "pile[] this waste at a tidal wetlands site," which over the

years resulted in "some 1,500,000 tons of [] waste, 15 to 20 feet deep, on some 34 acres." *Id.* Elevated pH levels at the site prevented the hexavalent chromium from reducing naturally to its less-toxic form and enhanced its ability to leach into surface water and groundwater. *Id.* The ensuing citizen's suit brought under RCRA § 6972(a)(1)(B) sought to affirmatively enjoin the manufacturers to clean up the site by excavating the contamination. *Id.* The court ultimately found that "evidence of contamination of water, river sediments, and the river itself" more than supported an endangerment finding under RCRA. *Id.* at 262.

Interfaith illustrates the type of process whereby a product, such as chrome, is manufactured, and its harmful derivatives, such as hexavalent chromium, are then discarded or separated in a manner prohibited by the RCRA. Indeed, in that case, there was no question defendant manufacturers were discarding the hazardous material, and the defendants conceded as much. *Id.* ("Honeywell conceded that its Site is discharging into the river and that it is possible for those discharges to be harming aquatic organisms."). *Interfaith* represents the type of discarding activity that generates "solid waste" under the RCRA, and stands in stark contrast to the activity at issue here, in which a municipality's potable water incorporates traces of hexavalent chromium as a result of sourcing and production processes.

Finally, plaintiff's argument that hexavalent chromium is a useless byproduct does not hold up because it circumvents the "discarded material" requirement for a solid waste; as plaintiff agrees, this requirement is part of the broader statutory definition applicable in suits brought under § 6972(a)(1)(B). *See id.* at 1316 ("RCRA regulations apply the broader statutory definition of solid waste to imminent hazard suits."); *see also* Pl.'s Opp'n to Def.'s MSJ at 2 (under RCRA § [6972](a)(1)(B) the broader statutory definition of RCRA waste applies."). Plaintiff's reliance on the EPA definition of "byproduct," or even the dictionary definition it noted at hearing, *see* Hr'g Tr. at 10:5–12, does not acknowledge the need to show the material at issue has been discarded. *See* Pl.'s Opp'n to Def.'s MSJ at 6 (citing 40 CFR 261.1(c)(3)). As Vacaville argued persuasively at hearing, were the court to accept River Watch's "byproduct" theory, doing so would effect an "extreme expansion" of the RCRA by bringing a vast swath of products under its reach when post-production contaminants are present. *See* Hr'g Tr. at 29:14–

23 (arguing plaintiff's theory could theoretically bring a package of Romaine lettuce contaminated with E. coli within RCRA's reach).

In reaching this conclusion, the court clarifies it is not concluding hexavalent chromium itself poses no threat to Vacaville citizens. *See Interfaith*, 399 F.3d at 252 ("[H]exavalent chromium is highly soluble, a known carcinogen to humans, and toxic to the environment."). Rather, the court's findings are based solely on the manner and process by which hexavalent chromium ends up in Vacaville's potable water. Having considered the RCRA's definition of "solid waste," the legislative history motivating its passage and the applicable case law, the court finds no material question of law or fact remains such that a factfinder is needed to resolve whether Vacaville's collection, treatment and dissemination of potable water containing detectable levels of hexavalent chromium renders its water supply subject to the statutory definition of "solid waste."

Vacaville's summary judgment motion will be GRANTED, and, in turn, plaintiff's summary judgment motion DENIED.

D. Motions to Strike and to Exclude

River Watch also moves to exclude portions of Vacaville's expert witness reports, ECF No. 50, and to strike the declaration of Adam Love in support of Vacaville's motion for summary judgment, ECF No. 60. Vacaville separately moves to strike River Watch's deposition errata as to Dr. Russell. ECF No. 57. Because the court relied on neither Vacaville's expert reports, the declaration of Adam Love nor the proposed corrections to the deposition of Dr. Russell in resolving the summary judgment motions above, it need not resolve either of these motions here. Accordingly, the motions are denied as MOOT.

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IV. CONCLUSION

Based on the foregoing discussion, defendant's motion for summary judgment, ECF No. 51, is GRANTED and plaintiff's motion for summary judgment, ECF No. 40, is DENIED. Plaintiff's motion to exclude, ECF No. 50, and motion to strike, ECF No. 60, as well as defendant's motion to strike, ECF No. 57, all are DENIED as moot. The Clerk of Court is directed to enter judgment in defendant's favor and close this case.

IT IS SO ORDERED.

DATED: July 19, 2020.

CHIEF UNITED STATES DISTRICT JUDGE