

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO
Judge William J. Martínez**

Civil Action No. 19-cv-1246-WJM-STV

PAMELA STONE, an individual,
TWYLA RUSAN, an individual,
M. JAMIE MORROW, an individual, and
THE SOUTH PARK COALITION, INC., a non-profit 501(c)(4) Colorado corporation,

Plaintiffs,

v.

HIGH MOUNTAIN MINING COMPANY, LLC, a Wyoming limited liability company, and
JAMES R. MURRAY, an individual,

Defendants.

**FINDINGS OF FACT AND CONCLUSIONS OF LAW
ENTERED UPON TRIAL ON THE MERITS TO THE COURT**

Defendant High Mountain Mining Company, LLC (“High Mountain”) owns and operates the Alma Placer Mine, a “gold placer mine” located next to the town of Alma, Colorado. ECF No. 148 ¶¶ 9, 12. Defendant James R. Murray is a managing member and a part-owner of High Mountain. *Id.* ¶ 8; Tr. 866:16–19 (Test. of James R. Murray).¹

Plaintiffs Pamela Stone, Twyla Rusan, M. Jamie Morrow, and the South Park Coalition, Inc. (collectively, “Plaintiffs”) allege that High Mountain and Murray (jointly, “Defendants”) have been discharging pollutants from the Alma Placer Mine into the Middle Fork of the South Platte River (the “Middle Fork”), a navigable water of the

¹ Citations to “Tr.” refer to the trial transcript, docketed in multiple parts. See ECF No. 168 (April 26, 2022, Vol. 1, pp. 1–254); ECF No. 169 (April 27, 2022, Vol. 2, pp. 255–501); ECF No. 170 (April 28, 2022, Vol. 3, pp. 502–718); ECF No. 171 (April 29, 2022, Vol. 4, pp. 719–967).

United States that runs through Alma. ECF No. 1 ¶¶ 1, 21. Plaintiffs allege that, in doing so without a National Pollutant Discharge Elimination System (“NPDES”) permit, Defendants are in violation of §§ 301 and 402 of the Clean Water Act (“CWA”), 33 U.S.C. §§ 1331(a), 1342(a)(1). *Id.* ¶ 58.

On April 26, 2022, the case proceeded to a four-day bench trial before the undersigned. ECF Nos. 162–65. After the trial, the parties submitted proposed findings of fact and conclusions of law. ECF Nos. 173, 174. As relief, Plaintiffs request that Defendants be fined one million dollars and that the Court issue a permanent injunction prohibiting Defendants from operating the Alma Placer Mine in violation of the CWA. ECF No. 174 ¶¶ 144–45.

Having considered the arguments and evidence submitted, the Court makes the following findings of fact and conclusions of law pursuant to Federal Rules of Civil Procedure 52(a) and 65(d).

For the reasons discussed below, the Court orders that the Clerk shall enter judgment in favor of Plaintiffs on their claim against Defendant High Mountain and against Plaintiffs on their claim against Defendant Murray.

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I. FINDINGS OF FACT

A. The Parties and Introductory Facts

1. Plaintiffs

1. **Pamela Stone** has lived in Fairplay, Colorado, since 2007. Tr. 404:12–405:1 (Test. of Pamela Stone).

2. The Middle Fork is across the street from her home in Fairplay. Tr. 405:13–15 (Stone).

3. She engages in recreational activities in and around the Middle Fork, including panning for gold and bird watching. Tr. 406:4–10 (Stone).

4. She is concerned that pollution in the Middle Fork may affect its cleanliness and the health of creatures that live in and near it. Tr. 443:15–25 (Stone).

5. She is also concerned that if the Middle Fork is polluted it could affect tourism in Fairplay. *Id.*

6. **M. Jamie Morrow** has lived in Fairplay since 2008. Tr. 470:13–17 (Test. of M. Jamie Morrow).

7. She is worried about contamination in the water and has curbed her use of the Middle Fork as a result. Tr. 477:21–478:6 (Morrow).

8. **Doris LeDue** is a founding member of The South Park Coalition, Inc. Tr. 498: 4–18 (Test. of Doris LeDue).

9. She has lived just south of Fairplay since 1998. Tr. 490:13–21 (LeDue).

10. She has doubts about the cleanliness of the water and has curbed her use of the Middle Fork as a result. Tr. 494:25–495:9 (LeDue).

2. Defendants

a. *High Mountain*

11. High Mountain is a Wyoming limited liability company, formed in 2011. ECF No. 148 ¶ 7; Tr. 792:13–14 (Murray).

12. In October 2011, High Mountain purchased the 512 acres of property containing the Alma Placer Mine, and it began operating the mine in 2012. Tr. 793:16–794:9 (Murray); Tr. 796:21–797:4 (Murray).

13. The Alma Placer Mine property is bounded by the town of Alma to the west and southwest. ECF No. 148 ¶ 13.

14. The active mining site is directly adjacent to the Middle Fork. *Id.*

15. High Mountain is the owner-operator of the Alma Placer Mine, which is a gold placer mine and gravel operation. *Id.* ¶¶ 9, 12, 18.

16. High Mountain operates the Alma Placer Mine under Colorado Division of Reclamation, Mining, and Safety permit number M-1985-029, which was first issued in 1985. *Id.* ¶¶ 15, 16.

17. High Mountain possesses no state or federal permit to discharge pollutants into the Middle Fork. *Id.* ¶¶ 23, 24.

b. *James R. Murray*

18. Murray is one of five managing members of High Mountain, and he owns approximately 12.5% of the company. *Id.* ¶ 8; Tr. 781:5–13 (Murray); Tr. 790:10–791:3 (Murray).

19. He is the only managing member who lives in Colorado. Tr. 843:13–14 (Murray); Tr. 790:25–791:3 (Murray).

20. He does not run the day-to-day operations at the Alma Placer Mine, but he

is the first managing member notified in the event something goes wrong since he is the only one who lives in Colorado. Tr. 791:14–17 (Murray); Tr. 792:1–12 (Murray).

21. Murray signs Alma Placer Mine permitting documents as its “manager/operator.” Tr. 868:10–13 (Murray); Ex. T at 8.

3. Overview of the Alma Placer Mine’s Operations

22. A placer mine is a mine “where the minerals are not located in veins or lodes within rock but are usu[ally] in softer ground near the earth’s surface.” *Dahl v. United States*, 319 F.3d 1226, 1227 (10th Cir. 2003).

23. The Alma Placer Mine operates, as follows: High Mountain digs a hole and transports that material to the processing plant. When the material arrives at the processing plant, it is put into a feed conveyor and fed into the plant. Tr. 799:10–803:19 (Murray).

24. Inside the plant, High Mountain applies water and uses screens and sluices to separate materials by size and weight. The plant produces many materials, including sand, gravel, and gold. *Id.*

25. The larger diameter materials like gravel and sand are piled outside of the plant to be sold. The sluices separate gold particles from other small-diameter materials, and those are also separated to be sold. *Id.*

26. The materials that are not sifted out by the above process include sand, clay, and silt. Those materials flow into a large pipe in the processing plant which discharges into Pond 1, the first of four settling ponds. As the water from the plant flows from Pond 1 to Pond 2 the heaviest particles, like fine sand, sink to the pond’s bed. As the water flow from Pond 2 to Pond 3 and from Pond 3 to Pond 4, particles continue to fall to the pond beds so that by the time the water reaches Pond 4 it contains much less

suspended material. The water in Pond 4 is then recycled back to the processing plant, and the process repeats. *Id.*

27. In this Order, the Court refers to Ponds 1, 2, 3, and 4 collectively as the “Settling Ponds.” The Settling Ponds are depicted in Exhibit F, and they are labeled on page 4 of Exhibit M. Both of these admitted exhibits are appended to this Order with their original trial exhibit labels.

28. High Mountain obtains water from the Middle Fork at two points of diversion. One point of diversion is the pumphouse below Pond 4, which may pump water from the Middle Fork into Pond 4 or up to the processing plant. The other point of diversion is north of the mine at the Columbia Ditch. The Columbia Ditch obtains water from the South Platte River many miles upstream. *Id.*

29. For some areas of the Alma Placer Mine, High Mountain uses portable trommels. This portable mining system is used in the south area of the Alma Placer Mine. The mining process works similarly to the mining process that utilizes the processing plant and the Settling Ponds. But, instead of the Settling Ponds, the portable mining system uses a different set of ponds in the south area of the Alma Placer Mine. The South Pond was utilized as one of the ponds to recycle water during portable mining, but it was filled in and ceased operation in 2020. *Id.*; Tr. 851:8–9 (Murray).

30. Water in the South Pond was picked up with a portable pump and returned to the portable trommel to be used in the processing of material during the portable mining process. If there was not sufficient water to recycle from the South Pond to the trommel, High Mountain would open a gate on the Columbia Ditch and

direct water to the South Pond. Tr. 799:10–803:19 (Murray).

4. The Nature of this Case

31. Plaintiffs bring this case pursuant to the citizen suit provision of the CWA, 33 U.S.C. § 1331(a) and § 1365(a), alleging that Defendants are discharging pollutants from their property into the Middle Fork without a permit. ECF No. 1 ¶ 57.

32. Plaintiffs allege that High Mountain’s activities produced pollution in the Settling Ponds. *Id.* ¶ 41.

33. They allege that polluted water in the Settling Ponds discharges through the bottoms of the ponds, enters groundwater, and flows into the Middle Fork. *Id.* ¶¶ 27–28, 39, 60.

34. They also allege that, while it existed, polluted water in the South Pond seeped through the bottom and sides of the pond, entered groundwater, and discharged into an Arroyo and a Bog situated below the pond. From there, they allege that water flowed through two culverts and into the Middle Fork. *Id.* ¶¶ 33–34.

35. On February 19, 2019, Plaintiffs sent Defendants a notice of their intent to sue based on the allegations described above. ECF No. 1-1. When no pretrial resolution of Plaintiffs’ claims was achieved, they filed this action against Defendants on April 29, 2019. ECF No. 1.

36. To prove a violation of the CWA, Plaintiffs must prove that Defendants: (1) discharged (2) a pollutant (3) into navigable waters (4) from a point source (5) without an NPDES permit. *Sierra Club v. El Paso Gold Mines, Inc.*, 421 F.3d 1133, 1142 (10th Cir. 2005); 33 U.S.C. §§ 1311(a), 1342(a)(1).

37. NPDES permits are issued by the Environmental Protection Agency (“EPA”) Administrator or by a state agency under an EPA-approved permitting program.

33 U.S.C. § 1342(b). The Water Quality Control Division (“WQCD”) of the Colorado Department of Public Health and Environment is responsible for administering Colorado’s NPDES permit system. See C.R.S. § 25-8-501.

38. Defendants concede that High Mountain does not have an NPDES permit or the state equivalent. ECF No. 48 ¶¶ 23, 24.

39. Defendants also concede that Middle Fork is a navigable water of the United States. *Id.* ¶ 14.

B. The Settling Ponds

40. The Middle Fork and the Settling Ponds are depicted and labeled in Exhibit F and on page 4 of Exhibit M.

41. The ponds are 20 feet above the Middle Fork. Tr. 676:19–21 (Test. of Greg Lewicki).

42. There is an embankment between the Middle Fork and Ponds 3 and 4. Tr. 676:19–21 (Lewicki).

43. The distance between the Middle Fork and the top of the embankment of Pond 3 is approximately 70 feet. Tr. 68:22–69:2 (Test. of Carla Johnson).

44. The distance between the Middle Fork and the top of the embankment of Pond 4 is approximately 90 feet. *Id.*

1. Discharge to Groundwater

a. *Geophysical Survey*

45. Plaintiffs retained Collier Geophysical to perform geophysical investigations of Ponds 3 and 4 to determine whether they were discharging water into the Middle Fork. ECF No. 148 ¶ 25.

46. Philip Sirles works for Collier as an operations manager and senior

geophysicist. Tr. 185:7–8 (Test. of Philip Sirles).

47. The Court qualified Sirles under Federal Rule of Evidence 702 to provide expert opinion testimony in the fields of geology and geophysical investigations, with a specialty in impoundment seepage. Tr. 188:24–189:3.

48. One of Sirles' tasks was to determine whether Ponds 3 and 4 had clay liners that effectively sealed the ponds. Tr. 189:12–17 (Sirles).

49. In July of 2021, Sirles' team conducted two geophysical surveys on and around Ponds 3 and 4, namely: a Frequency Domain Electromagnetic ("FDEM") survey and Ground Penetrating Radar ("GPR") survey. ECF No. 148 ¶ 26; Ex. 47.

50. Using GPR, Sirles' team sent a signal through the water to look at the thicknesses of various layers in the material at the bottom of Ponds 3 and 4. Tr. 193:7–19 (Sirles).

51. GPR works by sending radio signals down in the ground and recording the time it takes for those signals to return to the receiver. Tr. 193:11–19 (Sirles).

52. The amount of GPR signal reflection indicates the type of materials that are "seen" by the radar. Tr. 194:3–11 (Sirles).

53. Sirles testified that the GPR signals were able to be transmitted through the material at the bottom of Pond 3, which demonstrated that significant portions of the bottom were not comprised of clay. Tr. 198:1–9 (Sirles); Ex. 47 at 8.

54. He concluded that Pond 3 "possess[es] a bottom that is highly reflective and that is indicative of a fines material," Tr. 204:4–7 (Sirles), and that he had "never seen fines that are impermeable," Tr. 252:3–4 (Sirles).

55. Further, Sirles concluded that the bottom of Pond 3 "doesn't possess

enough clay to be an impermeable clay liner.” Tr. 200:16–17 (Sirles); *see also* Tr. 201:20–24 (Sirles).

56. With respect to Pond 4, Sirles testified that the GPR signals penetrated to greater depths across the entire survey area, suggesting that the bottom of Pond 4 is comprised of even more permeable materials than Pond 3, and those materials are present over a broader area. Tr. 203:1–21 (Sirles); Ex. 47 at 8.

b. *Design*

57. Plaintiffs introduced substantial evidence showing that the Settling Ponds were *designed* to leak.

58. In 2003 and 2004, the Colorado Division of Minerals and Geology inspected the Alma Placer Mine. Exs. E, H. Those inspection reports described the mining process and explained that water is discharged “into a series of settlement basins that allow the water to infiltrate into the ground before any actual surface discharge occurs.” *See, e.g.*, Ex. E at 2.

59. A 2015 permit, prepared for High Mountain by Greg Lewicki, labeled Ponds 3 and 4 as “groundwater ponds,” because, at that time, they “believed that water would infiltrate into the ground.” Tr. 725:2–3 (Lewicki); Tr. 728:14–22 (Lewicki).

60. Lewicki has been involved with permitting at the Alma Placer Mine since the early 2000s. He has worked with all operators at the Alma Placer Mine since that time and has visited the Alma Placer Mine numerous times to observe operations. ECF No. 148 ¶ 11.

61. In 2015, Lewicki represented to Colorado officials that “[w]ater from the slurry seeped into the ground at all pond sites.” Tr. 684:16–19 (Lewicki); Tr. 722:1–4 (Lewicki).

62. Carla Johnson, who was qualified as Plaintiffs' expert in geology and hydrogeology, Tr. 49:1-3, opined that "[the ponds] were designed exactly as the permit describes," Tr. 84:21–22 (Johnson).

63. She explained that such infiltration is a "typical way in placer mining of designing ponds. They would have to design the ponds to leak, otherwise they would have a significant water problem on site." Tr. 84:22–25 (Johnson).

64. Further, Johnson testified that High Mountain did not utilize the industry standard or typical methods for preventing pond leakage, e.g., a synthetic liner or mechanically applied bentonite liner. Tr. 95:11–17 (Johnson); Tr. 96:3–4 (Johnson).

c. *Pond Liners*

65. High Mountain introduced evidence that since at least 2017, Ponds 3 and 4 have had an impermeable clay liner. But for the reasons discussed below, the Court finds that the Settling Ponds did not have effective clay liners.

66. In December of 2017, High Mountain submitted a revised permit application, which was also prepared by Lewicki. Exs. T, U.

67. Regarding the Settling Ponds, this revised permit application states the following: "The pond is excavated in native material that has a significant portion of fines within it. Sluicing operations directed to the pond will decrease the permeability of the pond even further as silt and fines build up along the pond's base. *Water will leave the pond in two ways: recycling to the sluice itself, and evaporation. Infiltration will be negligible.*" Ex. T at 37 (emphasis added).

68. Lewicki testified that this revision was the result of a discussion in 2017 between High Mountain representatives and a representative of the Colorado Division of Reclamation, Mining, and Safety in which they determined that water in the Settling

Ponds was not infiltrating into the ground. Tr. 687:16–688:8 (Lewicki).

69. Lewicki explained that over time Ponds 3 and 4 have, in his opinion, formed an impermeable seal. He claims that when High Mountain cleans out Ponds 3 and 4, it leaves many feet of clay in as a liner. According to Lewicki, Ponds 3 and 4 may contain as much as twenty feet of clay in them, which he believes is enough to provide a seal. Tr. 609:17–20 (Lewicki); Tr. 616:19–25 (Lewicki); Tr. 617:25–618:21 (Lewicki); Tr. 695:25–696:6 (Lewicki).

70. Lewicki admitted that he had not done any test or survey to determine how much clay is at the bottom of Ponds 3 and 4. Tr. 609:1–2 (Lewicki).

71. The Court is not persuaded by this testimony for several reasons. First, his opinion is inconsistent with Sirles' interpretation of the GPR and FDEM surveys, discussed in Section I.B.1.a, above. The Court credits Sirles' opinion, which is based on survey data, over Lewicki's opinion which is not supported by any geophysical survey or testing.

72. Second, in 2015, Lewicki opined that Ponds 3 and 4 *were* permeable, and the Court does not find his change of opinion in 2017 to be credible. Lewicki has been involved with permitting at the Alma Placer Mine for more than two decades, and he has significant financial ties with High Mountain. ECF No. 148 ¶ 11. The most significant change in circumstances between 2015, when Lewicki opined that the ponds were permeable, and 2017 when he opined that they were impermeable, is that High Mountain was sued for violations of the CWA based on the theory that the ponds were seeping into the Middle Fork.²

² The first suit was filed on January 12, 2015. *Hamilton v. High Mountain Mining Co.*,

73. Thus, the Court is not persuaded that Ponds 3 and 4 have an effective impermeable liner. Based on the geophysical survey and the design of Ponds 3 and 4, the Court finds by a preponderance of the evidence that Ponds 3 and 4 are not effectively sealed and are discharging into the groundwater below them.

d. *Ponds 1 and 2*

74. The Court finds that Ponds 1 and 2 were also discharging to groundwater.

75. Lewicki testified that water from the processing plant flows through Pond 1 in one day, which does not give Pond 1 time to collect any clays. Tr. 709:7–14 (Lewicki). Rather, Pond 1 collects materials with a diameter of 3/8-inch to 1/4-inch. Tr. 709:19–20 (Lewicki). He also testified that Pond 2 does not collect significant amounts of clay; mostly, Pond 2 collects sand. Tr. 709:22 (Lewicki).

76. Based on this testimony, the Court finds that it is even less likely that Ponds 1 and 2 developed an impermeable seal than that Ponds 3 and 4 did so. Therefore, the Court finds that Ponds 1 and 2 were also discharging to groundwater.

2. Hydrological Connection to the Middle Fork

a. *Geophysical Survey*

77. As part of the geophysical survey Collier performed for Plaintiffs, Sirles was tasked with determining whether there were seepage paths from Ponds 3 and 4 into the Middle Fork. Tr. 189:12–17 (Sirles).

78. Sirles' team conducted an FDEM investigation to detect potential seepage paths from Ponds 3 and 4. Tr. 189:22–190:4 (Sirles).

79. They conducted the FDEM investigation using a hand-carried

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electromagnetic instrument that transmitted electric signals into the ground and received signals from depths of 5, 10, and 15 feet below the ground, respectively. Tr. 207:1–21 (Sirles); Ex. 47 at 7.

80. Readings from the FDEM instrument were taken as the technician walked through all accessible areas around the Ponds 3 and 4 and along the ponds' embankments. Tr. 209:6–12 (Sirles).

81. With respect to Pond 3, Sirles identified an unusual pattern on the northwest corner of the pond, near the crest of the embankment. He defined this area as "Anomaly A." Tr. 214:19–23 (Sirles); Ex. 47 at 7.

82. He concluded that Anomaly A showed a narrow and shallow flow path with higher moisture content than surrounding soils. Tr. 215:8–17 (Sirles); Tr. 217:23–25 (Sirles); Ex. 47 at 7.

83. And he found that Anomaly A was also indicative of the "vertical migration of the water." Tr. 215:20–23 (Sirles).

84. With respect to Pond 4, Sirles identified another area, defined as "Anomaly B," in which the data indicated "blanket seepage," that is, seepage occurring across a much broader area than Anomaly A. Tr. 216:8–13 (Sirles); Ex. 47 at 7.

85. Anomaly B showed higher volumes of water at a depth of 15 feet, as compared to the shallower Anomaly A. Tr. 216:19–21 (Sirles); Tr. 218:1–4 (Sirles).

86. The FDEM survey also produced data about the sides of Ponds 3 and 4. The blue-colored area on Sirles' figures that fully encircled Pond 4 and much of Pond 3 was indicative of soils comprised of fines and mud, with a conductivity of 10 millisiemens/meter ("mS/m") on his linear scale. Ex. 47 at 7; Tr. 211:9–13 (Sirles).

87. Sirles testified that, had the blue area encircling the ponds been comprised of the type of material that would provide an impermeable barrier or seal, the conductivity detected with the FDEM instrument would have been at least 100 mS/m: an order of magnitude higher than what was actually detected. Ex. 47 at 7; Tr. 248:16–249:22 (Sirles); Tr. 250:1–19 (Sirles).

88. Sirles’ testimony about Anomalies A and B is also relevant to the previous question of whether the Settling Ponds are discharging. The Anomalies indicated water in concentrated areas below the Settling Ponds but *above* the Middle Fork. Since, as a general matter, water does not flow uphill, the Anomalies were not likely produced by the water in the Middle Fork. Further, Sirles testified that rainwater would not account for the anomalies because rain falls uniformly. Therefore, the Anomalies are additional evidence that the Ponds are leaking.

b. *Expert Testimony*

89. All but one expert who testified on the issue agreed that if the Settling Ponds discharged to groundwater, that groundwater would flow to the Middle Fork. The only expert to take a different position was Murray, who is a partial owner of High Mountain and a Defendant in this case.

90. Defendants’ own witness, Lewicki, testified that if there were a discharge of water into the ground below the Settling Ponds, the water would flow into the Middle Fork:

Q. If there was a discharge of water into the ground, that water would flow to the Middle Fork, wouldn’t it?

[Lewicki]. I believe so.

Q. It wouldn’t flow anywhere else, correct?

[Lewicki]. I — I — I agree with that.

Tr. 732:5–13 (Lewicki).

91. Plaintiffs' expert, Sirles, testified that liquids seeping beneath the pond bottoms will move down-gradient towards the Middle Fork, passing through the geologic materials, which are coarse materials that are highly permeable. Tr. 204:20–23 (Sirles).

92. On the other hand, Murray testified that the ground around the Settling Ponds was a “natural cement,” and he testified:

The fact that it is cement, you've in effect got — you know, if you dig a hole, you've got a natural cement liner in the pit that you're digging.

Tr. 816:18–20 (Murray).

93. The Court does not find Murray's testimony credible for two reasons. First, he has a clear financial interest in the outcome of this litigation, and the Court finds his opinion to be biased and self-serving. Second, he signed permits during the period of 2012 to 2015 which specifically stated that the ponds *did* allow for water to seep into the ground. Tr. 868:10–13 (Murray); Exhibit T at 8. And he failed to provide a reasonable explanation at trial for why his opinion changed after Plaintiffs filed their lawsuit.

94. Therefore, with regard to this issue, the Court gives no weight to Murray's opinion. Based on the expert opinion of Sirles and Lewicki, as well as the results of the FDEM survey, the Court finds that Plaintiffs have shown by a preponderance of the evidence that water discharged by the Settling Ponds flows through groundwater to the Middle Fork.

c. *Transit Time: Darcy's Law*

95. Johnson, Plaintiffs' hydrology expert, opined that water discharged from

Pond 4 would travel to the Middle Fork in approximately two days. Tr. 899:17–20 (Johnson).

96. Her opinion is based on a calculation she made according to Darcy’s Law, a formula that mathematically describes the flow of a fluid through a porous medium. Her calculation assumed that the discharge was 100 feet from the Middle Fork, at a height of 20 feet, and that the soil was composed of 25% fine clay, 25% silt and clay, 25% sand, and 25% gravel. Tr. 896:9–897:2 (Johnson); Tr. 898:8–13 (Johnson).

97. Her assumption of 25% fine clays is conservative relative to Murray’s testimony that the clays made up 10–15% of the native soils. Tr. 915: 6–12 (Johnson); Tr. 807:12–14 (Murray).

98. The Court gives some weight to Johnson’s estimate of transit time. But because her calculation was only based on an approximation of the soil composition, the Court does not find that her result is likely to be precise. However, her assumptions are generally in line with Defendants’ own witness’s testimony regarding soil composition, and the inaccuracy of her assumptions would likely cause her calculations to overestimate the transit time since she assumes that there were more fine clays in the soil than Murray estimated. See Tr. 701:5–21 (Lewicki explaining that courser materials are more permeable).

d. *WQCD Regulation of Discharges to Groundwater*

99. The WQCD is responsible for administering Colorado’s NPDES permit system. See C.R.S. § 25-8-501. The WQCD uses the same legal standard in enforcing the requirements of a Colorado Water Quality Control Act permit as are used to enforce the requirements of the CWA. Tr. 264:9–15 (Parish). The only distinction between the WQCD permit program and the federal CWA program is that the WQCD limits pollution

into state waters, which is a broader category than federal waters. Tr. 264:14–15 (Parish).

100. Since the mid-1990s, the WQCD has considered discharges of pollutants to groundwater that are directly connected to the surface water to require an NPDES discharge permit. Tr. 271:24–272:2 (Parish).

101. It is the duty of the facility discharging to groundwater to affirmatively determine whether the facility is effectively discharging to surface water through groundwater, and if so, to apply for a permit. Tr. 299:1–300:3 (Parish).

102. The WQCD applies a rebuttable presumption that any discharge to groundwater within 300 feet of a mountain stream surface water body is itself a surface water discharge. Tr. 276:21–277:20 (Parish).

3. Pollutants

103. High Mountain obtains water from the Middle Fork at two points of diversion. One point of diversion is the pumphouse below Pond 4 which may pump water into Pond 4 or up to the processing plant. The other point of diversion is north of the mine at the Columbia Ditch. The Columbia Ditch obtains water from the South Platte River many miles upstream. Tr. 799:10–803:19 (Murray).

104. In July 2016, High Mountain contracted Arrakis, Inc. (“Arrakis”) to perform water quality testing at the Alma Placer Mine. Ex. 18 at 1.

105. Murray is the owner and CEO of Arrakis, Inc. Tr. 780:19; ECF No. 148 ¶ 10.

106. Arrakis analyzed ten water samples taken from different areas in and around the Alma Placer Mine. Ex. 18 at 1.

107. The results of Arrakis analysis show a marked increase in pollutant levels

in Pond 4 as compared to the levels of the same pollutants in the water at both diversion points:

Pumphouse Intake Compared with Pond 4

Pollutant	Pumphouse	Pond 4	Increase
Calcium	17.66	19.77	11.9%
Potassium	1.55	2.36	52.3%
Magnesium	7.48	9.74	30.2%
Sodium	2.89	3.11	7.6%

Ex. 18 at 7 (measurements are in average milligrams per liter).

Columbia Ditch Discharge Compared with Pond 4

Pollutant	Columbia Ditch	Pond 4	Increase
Calcium	17.02	19.77	16.2%
Potassium	1.61	2.36	46.6%
Magnesium	7.1	9.74	37.2%
Sodium	2.65	3.11	17.4%

Ex. 18 at 6–7 (measurements are in average milligrams per liter).

C. The South Pond

108. The South Pond is southeast of Ponds 3 and 4 and just north of the North Culvert. Ex. 40 at 1, 3; Ex. M at 4.

109. The South Pond was filled in by High Mountain in 2020. Tr. 851:8–9 (Murray).

110. There is an arroyo (the “Arroyo”) to the southwest of the South Pond, Tr. 745:13–22 (Lewicki); Exhibit 56, and a bog (the “Bog”) to the south of the South Pond, Tr. 107:1–5 (Johnson); Tr. 418:23–25 (Stone); Ex. 40 at 3.

111. The Court did not hear evidence regarding the distance between the South Pond and the Middle Fork. However, based on satellite imagery, it appears that

the South Pond was at least 4 times further from the Middle Fork than were Ponds 3 and 4. See Ex. 40 at 1. Thus, the Court finds that the South Pond was more than 360 feet from the Middle Fork.

112. The Court did not hear any evidence as to the geographic height of the South Pond compared to the Middle Fork.

1. Discharge to Groundwater

113. Plaintiffs did not conduct geophysical surveys of the South Pond. Sirles' GPR and FDEM surveys, which were described in Sections I.B.1 and I.B.2, only examined the area around Ponds 3 and 4.

114. Plaintiffs support their allegation that the South Pond discharged pollutants with testimony from three witnesses: Wes Wilson, Pamela Stone, and Johnson.

115. For the reasons discussed below, the Court finds that Plaintiffs have failed to show that the South Pond was discharging pollutants.

116. **Wes Wilson** testified that on November 5, 2016, he observed water "seeping" from the South Pond embankment which flowed downhill into the North Culvert and the South culvert. Tr. 345–346:6 (Wilson); Tr. 347:6–13 (Wilson); Tr. 379:2–4 (Wilson).

117. He deduced that the water from the embankment came "from the pond." Tr. 347:17–20 (Wilson).

118. The Court finds Wilson's testimony unpersuasive. Wilson's conclusion that the South Pond was the source of the water he saw is undermined by his failure to consider alternate sources for the water. He testified that he never searched for a spring in the area, Tr. 358:2–11 (Wilson), and that he had not ruled out the possibility

that all the water in that area was due to a spring, Tr. 358:12–14 (Wilson).

119. Additionally, Wilson’s testimony was not corroborated by any photographs, contemporaneous notes, or test results. Wilson’s expert report, which discussed his November 5, 2016 visit to the Alma Placer Mine, did not include a description of his observation of seepage from the embankment.

120. **Pamela Stone** testified to standing near the North Culvert and using binoculars to look at the embankment of the South Pond, on which she saw a “dark area.” Tr. 410:24–411:6 (Stone).

121. She believed the dark area of the embankment was dark because it was wet. Tr. 453:14–19 (Stone).

122. The Court does not find Stone’s testimony on this point persuasive for several reasons. First, Stone’s testimony was not supported by any photographs of what she claims to have seen. Stone attempted to take pictures of the dark spots but found that “they were useless and “[t]hey didn’t look like anything.” Tr. 453:4–5 (Stone).

123. Second, Stone did nothing to confirm her suspicion that the dark areas she saw were wet: she testified that she never investigated the cause of the dark spot she believed she saw. Tr. 453:6–11 (Stone).

124. Third, Stone is a plaintiff in this case and has a substantial interest in the outcome of this litigation. Her role in this case leads the Court to conclude that her testimony on this point was not credible.

125. **Carla Johnson** testified that she visited the area below the South Pond. She testified that she observed dense vegetation, typical of wetlands, which would require a long-term water source. Tr. 106:16–24 (Johnson).

126. She testified that the water source for water flowing through the North Culvert was drainage water from the since-removed South Pond which was “still contained in the pore space in the southern pond.” Tr. 107:1–5 (Johnson).

127. The Court is not convinced by Johnson’s testimony because Defendants introduced un rebutted testimony that the vegetation below the South Pond was uniform and relatively unchanged from 2000 until the time of trial. Tr. 653:5–656:24 (Lewicki). Satellite imagery shows that the vegetation in that area has existed before and after the South Pond existed. *Id.*

128. When confronted with the satellite imagery on cross-examination, Johnson conceded that vegetation existed in the area below the South Pond since before the South Pond existed. Tr. 155:16–156:1 (Johnson).

129. Since the vegetated area below the South Pond was present even before the pond was built, its existence does not necessarily establish that the South Pond was seeping.

130. For the reasons discussed above, the Court finds that Plaintiffs have failed to show by a preponderance of the evidence that the South Pond was discharging water.

2. The Arroyo, the Bog, and the Culverts

131. Plaintiffs presented credible evidence that water from the Arroyo and the Bog flowed through the North and South Culverts into the Middle Fork. Tr. 412:12–17 (Stone); Tr. 468:18–469:16 (Stone); Tr. 491:23–493:4 (LaDue). Plaintiffs also presented substantial evidence that water in the Bog and the Culverts contained pollutants. Tr. 107:10–12 (Johnson), 118:1–4 (Johnson), 119:9–12 (Johnson); Ex. 18 at 6–7.

132. However, the Court need not make factual findings on these matters because Plaintiffs' failure to show that the South Pond was discharging pollutants to groundwater is fatal to this claim. See Section II.B.

II. CONCLUSIONS OF LAW

133. Plaintiffs bring this case pursuant to the citizen suit provision of the CWA, 33 U.S.C. §§ 1331(a) and 1365(a), alleging that Defendants are discharging pollutants from their property into the Middle Fork without an NPDES permit.

134. Pursuant to 33 U.S.C. § 1365(a), this Court has jurisdiction over this citizen suit alleging violations of the CWA.

135. Congress enacted the CWA in 1972 with the stated objective to “restore and maintain the chemical, physical and biological integrity of the Nation’s waters.” 33 U.S.C. § 1251(a).

136. To prove a violation of the CWA, Plaintiffs must prove that Defendants: (1) discharged (2) a pollutant (3) into navigable waters (4) from a point source (5) without an NPDES permit. *El Paso Gold Mines*, 421 F.3d at 1142; 33 U.S.C. §§ 1311(a), 1342(a)(1).

137. It is undisputed that High Mountain does not have an NPDES permit or the state equivalent. ECF No. 148 ¶ 23.

138. It is also undisputed that the Middle Fork is a navigable water of the United States. ECF No. 148 ¶ 14.

139. Plaintiffs present two distinct theories of liability based on Defendants operation of (1) the Settling Ponds and (2) the South Pond. The Court addresses each theory separately.

A. Liability: The Settling Ponds

1. Point Source

140. Section 1362(14) defines a “point source” as: “any discernible, confined and discrete conveyance including, but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged.”

141. The CWA “was designed to regulate to the fullest extent possible those sources emitting pollution into rivers, streams and lakes.” *United States v. Earth Scis., Inc.*, 599 F.2d 368, 373 (10th Cir. 1979). “The concept of a point source was designed to further this scheme by embracing the broadest possible definition of any identifiable conveyance from which pollutants might enter the waters of the United States.” *Id.*

142. “Mining and the other categories listed in § 1314(f)(2) may involve discharges from both point and nonpoint sources, and those from point sources are subject to regulation. *Id.*

143. The Court finds that the Settling Ponds are point sources because they are discrete conveyances that channel pollutants into the Middle Fork by way of groundwater. *Sierra Club v. Abston*, 620 F.2d 41, 47 (5th Cir. 1980) (“Gravity flow, resulting in a discharge into a navigable body of water, may be part of a point source discharge if the miner at least initially collected or channeled the water and other materials.”); *United States v. Alpha Nat. Res., Inc.*, 2014 WL 6686690, at *1 (S.D.W.Va. 2014) (sediment ponds in mining operation are point sources); *Washington Wilderness Coal. v. Hecla Min. Co.*, 870 F. Supp. 983, 988 (E.D. Wash. 1994) (ponds are point sources if they act to collect and channel contaminated water).

144. In *Earth Sciences*, as here, the defendant claimed that its gold mine operation was “designed to be a closed system without any pollutant discharge.” *Earth Sciences*, 599 F.2d at 369. However, the Tenth Circuit found that when a circulating system “fails because of flaws in the construction or inadequate size to handle the fluids utilized, with resulting discharge, whether from a fissure in the dirt berm or overflow of a wall, the escape of liquid from the confined system is from a point source.” *Id.* at 374.

145. Here, as in *Earth Sciences*, liquid escaped from a supposedly confined system of the Settling Ponds, which are operated by Defendants. ¶¶ 73, 76.³

Therefore, the Settling Ponds are point sources.

2. Pollutants

146. The CWA defines “pollutant” as a “dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and *industrial*, municipal, and agricultural *waste* discharged into water.” 33 U.S.C. § 1362(6) (emphasis added).

147. The water contained by the Settling Ponds meets the definition of pollutant because it is industrial waste produced as a byproduct of the mining process. ¶ 26.

148. Further, as compared to the Middle Fork, Ponds 3 and 4 contain significantly higher concentrations of Calcium, Potassium, Magnesium, and Sodium. ¶ 107.

149. Concentrations of such elements fall within the CWA’s definition of pollutant. *N. Plains Res. Council v. Fid. Expl. & Dev. Co.*, 325 F.3d 1155, 1158 (9th Cir.

³ References to “¶__,” without more, refer to the numbered paragraphs of this document.

2003) (pollutants include “suspended solids, calcium, magnesium, sodium, potassium, bicarbonate, carbonate, sulfate, chloride, and fluoride”); *El Paso Gold Mines*, 421 F.3d at 1136 (zinc and manganese are pollutants when discharged into water from a gold mine).

3. Discharge and Hydrological Connection

a. *Legal standards*

150. District courts in Colorado have long recognized that the CWA precludes discharges to groundwater that reach navigable waters. *Sierra Club v. Colo. Ref. Co.*, 838 F. Supp. 1428, 1433–34 (D. Colo. 1993). Recently, the Supreme Court directly addressed the question of whether the CWA “requires a permit when pollutants originate from a point source but are conveyed to navigable waters by a nonpoint source, here, groundwater.” *Cnty. of Maui, Hawaii v. Hawaii Wildlife Fund*, 140 S. Ct. 1462, 1468 (2020) (quotations omitted).

151. The Supreme Court held that “the statutory provisions at issue require a permit if the addition of the pollutants through groundwater is the functional equivalent of a direct discharge from the point source into navigable waters.” *Id.*

152. The *Maui* decision listed seven factors to consider in determining whether a discharge to groundwater is the functional equivalent of a direct discharge: (1) transit time; (2) distance traveled; (3) the nature of the material through which the pollutant travels; (4) the extent to which the pollutant is diluted or chemically changed as it travels; (5) the amount of pollutant entering the navigable waters relative to the amount of the pollutant that leaves the point source; (6) the manner by or area in which the pollutant enters the navigable waters; and (7) the degree to which the pollution (at that point) has maintained its specific identity. *Id.* at 1476–77.

153. The Supreme Court noted that “[t]ime and distance will be the most important factors in most cases.” *Id.* at 1477.

b. *Analysis*

154. As an initial matter, the Court notes that Ponds 3 and 4 are upgradient from the Middle Fork and less than 100 feet away, ¶¶ 43–44, and it makes physical and logical sense that a discharge to groundwater so close to the river is the functional equivalent of a direct discharge into the river. This commonsense notion is supported by the Supreme Court’s reasoning in *Maui*:

Consider a pipe that spews pollution directly into coastal waters. There is an “addition of” a “pollutant to navigable waters from [a] point source.” Hence, a permit is required. But *Maui* and the Government read the permitting requirement *not* to apply if there is *any* amount of groundwater between the end of the pipe and the edge of the navigable water. If that is the correct interpretation of the statute, then why could not the pipe’s owner, seeking to avoid the permit requirement, simply move the pipe back, perhaps only a few yards, so that the pollution must travel through at least some groundwater before reaching the sea? We do not see how Congress could have intended to create such a large and obvious loophole in one of the key regulatory innovations of the Clean Water Act.

Maui, 140 S. Ct. at 1473 (emphasis in original).

155. In addition, all experts who testified on this issue—except Murray, whose testimony was not credible—agreed that if the Settling Ponds discharged to groundwater, that discharged water would reach the Middle Fork. ¶¶ 89, 93.

156. Next, the Court turns to the *Maui* factors.

(i) Distance Traveled and Transit Time

157. In *Maui*, the Court stated that distance is an “obviously important” factor. To guide district court’s application of this factor, the Court defined two ends of a

spectrum for addressing distance:

Where a pipe ends a few feet from navigable waters and the pipe emits pollutants that travel those few feet through groundwater (or over the beach), the permitting requirement clearly applies. If the pipe ends 50 miles from navigable waters and the pipe emits pollutants that travel with groundwater . . . the permitting requirements likely do not apply.

Maui, 140 S. Ct. at 1476.

158. Ponds 3 and 4 are less than 100 feet away from the Middle Fork. ¶¶ 43–44. And Ponds 1 and 2 are only slightly further away. See Ex. 40 at 1.

159. The geological surveys conducted by Sirles show that the discharged water from Ponds 3 and 4 travel through discernable paths, identified as Anomalies A and B, to the Middle Fork. ¶¶ 81–85.

160. The Court concludes that the distance traveled factor weighs heavily in favor of the Plaintiffs. One hundred feet is orders of magnitude shorter than 50 miles, the distance at which the CWA would likely not apply. *Maui*, 140 S. Ct. at 1476.

161. The Court’s conclusion is further buttressed by its consistency with the permitting practice of the WQCD, which applies a rebuttable presumption that discharges to groundwater within 300 feet of a mountain stream are the functional equivalent of surface water discharges. ¶ 102; see *Maui*, 140 S.Ct. at 1476 (“Decisions should not create serious risks either of undermining state regulation of groundwater or of creating loopholes that undermine the statute’s basic federal regulatory objectives.”).

162. Along with distance traveled, transit time is one of the most important factors. In *Maui*, the Court states that a transit time of “many years” would weigh against applying the CWA. *Id.* at 1476 (emphasis added). Here, the only expert to opine on transit time calculated it to be approximately two days. ¶ 95. Even if this

estimate were off by a factor of ten, in other words, if the transit time were actually 20 days, which the Court finds unlikely given Johnson’s method, transit time would still be less than three weeks. And needless to say, three weeks is but a tiny fraction of “many years.”

163. Thus, the transit time at issue in this case is on a vastly different scale than the “many years” referenced in *Maui*. Given, in addition, that this testimony was un rebutted, the Court gives this factor considerable weight and finds that it favors the Plaintiffs.⁴

(ii) Nature of the Material Through Which the Pollutants Travel

164. Sirles’s geophysical investigation showed that “[a] combination of fine and coarse-grained sediments exists from the embankment east, south, and north of the ponds.” Ex. 47 at 2. Murray agreed with that statement. Tr. 870:5–13. Johnson testified that the soils around the ponds are comprised of boulders, cobbles, gravels, silts, and clays. Tr. 72:9–10 (Johnson); see *also* Tr. 626:22–627:2 (Lewicki testimony that “the material on the surface at the Alma Placer that’s been disturbed for years has an extremely high percolation rate”).

⁴ On remand, the District of Hawaii applied this “functional equivalent” test and found that Maui County’s wastewater constituted the functional equivalent of a direct discharge of pollution into the Pacific Ocean, mandating an NPDES permit. *Hawai’i Wildlife Fund v. Cnty. of Maui*, 550 F.Supp.3d 871, 873 (D. Haw. 2021). The court underscored the factors of time and distance—that is, the time it took the wastewater to reach the ocean and the distance the wastewater had to travel to get there. See *id.* at 885, 889. The court cited a study in which dye placed in two wells reached the ocean in “as little as 84 days, with peak concentration of the dye occurring 9 to 10 months after placement” and an average transit time of 14 to 16 months. *Id.* at 886. The court noted that these wells were located “one-half mile or less from the Pacific Ocean” and that “even with diffuse flow, the wastewater likely travel[ed] a relatively short distance through groundwater.” *Id.* at 888. The court found that these factors weighed in favor of requiring a permit. *Id.* Here the factors of distance and time weigh even more heavily in favor of requiring a permit since both the time and distance are significantly shorter than in *Maui*.

165. Defendants introduced no evidence that the nature of the materials through which the pollutants traveled should weigh in their favor.

166. The Court finds that this factor also weighs in favor of Plaintiffs because the evidence presented at trial indicated that the pollutants traveled through porous materials. However, because of the limited evidence presented about the composition of the soil below the Settling Ponds, the Court gives this factor little weight.

(iii) Remaining Factors

167. Neither party presented evidence regarding the extent to which the pollutants were diluted or chemically changed as they traveled to the Middle Fork. Nor was there evidence presented about the degree to which the pollution maintained its specific identity as it traveled to the Middle Fork.

168. Again, Defendants presented no evidence to persuade the Court that these factors should weigh in their favor.⁵

169. Based on the lack of evidence relevant to these two factors, the Court gives them no weight.

170. Similarly, there was limited evidence regarding the amount of pollutant entering the navigable waters relative to the amount of the pollutant that leaves. As such, the Court also gives this factor no weight.

B. Liability: South Pond

171. Plaintiffs' claim fails with regard to the South Pond because they have not proven by a preponderance of the evidence that the South Pond discharged pollutants.

⁵ Had Defendants introduced evidence that the materials below the pond were effective at filtering pollutants, this factor would have weighed in their favor.

¶ 130; see *El Paso Gold Mines*, 421 F.3d at 1142 (discharge is an essential element of a CWA claim).

172. Plaintiffs argue that the Arroyo, the Bog, and the Culverts can serve as an alternative source of liability, but the Court disagrees.

173. In order to establish liability under the CWA, Plaintiffs must show that some “human action, as distinguished from a natural occurrence, caused [pollutants] to be present.” *Sierra Club v. Cripple Creek & Victor Gold Mining Co.*, 509 F. Supp. 2d 943, 948 (D. Colo. 2006).

174. The only theory presented at trial to explain how human action caused the presence of pollutants in the Arroyo, the Bog, and the Culverts was that the South Pond discharged pollutants into them.

175. But the Court has determined that the Plaintiffs have failed to show that the South Pond discharged pollutants. ¶ 130.

176. Thus, Plaintiffs’ South Pond claim fails because they have not shown that the existence of pollutants in the Arroyo, the Bog, or the Culverts was the result of human action. See *El Paso Gold Mines*, 421 F.3d at 1146 (the CWA only applies when there is “a connection or link between discharged pollutants and their addition to navigable waters”).⁶

⁶ Plaintiffs cite several cases to support their argument that Defendants are liable for the discharge of pollutants from the Arroyo, the Bog, or the Culverts. ECF No. 174 at 51–53. However, the cases are distinguishable because in each case there was extensive evidence of a human cause for the existence of the pollutants. See *Dague v. City of Burlington*, 935 F.2d 1343, 1347 (2d Cir. 1991), *rev’d in part*, 505 U.S. 557 (1992) (discharge of pollutants causally linked to defendant burying trash below the groundwater table as part of its landfill operation); *Earth Scis.*, 599 F.2d at 374 (discharge of pollutants causally linked to defendant’s defective sump pump); *Driscoll v. Adams*, 181 F.3d 1285, 1291 (11th Cir. 1999) (discharge of pollutants causally linked to defendant’s timber harvesting and development of property).

C. Personal Liability of Defendant James R. Murray

177. In their Proposed Findings of Fact and Conclusions of Law, Plaintiffs do not present any argument to support their claim against Murray in his personal capacity. See *generally* ECF No. 174. Therefore, they have effectively waived this claim. However, even had they not waived their claim, the Court would find that Murray is not personally liable under the CWA.

178. The CWA may impose liability on a “responsible corporate officer.” “[R]esponsible corporate officer” is not defined by the statute, however, the Tenth Circuit has held a corporate officer responsible in CWA actions if he “had primary operational responsibility for the treatment plant,” “he physically observed the NPDES permit violations” in question, and witnesses testified that the officer was informed that illegal discharges were prone to occur in heavy rains and he reviewed logs recording repeated illegal discharges. *U.S. v. Brittain*, 931 F.2d 1413, 1420 (10th Cir. 1991).

179. Here, unlike in *Brittain*, there is no evidence that Murray was personally responsible for illegal discharges from the Settling Ponds. Additionally, unrebutted evidence showed that Mr. Emmert had the “final say” on important decisions regarding the Alma Placer Mine, and day-to-day operations were managed by Mr. David Wiles and Mr. Tom Gibson. Tr. 791:11–13 (Murray).

180. Further, Plaintiffs failed to meet their burden of proof that Murray is a responsible corporate officer under the CWA because they have not shown that he acted knowingly. *California Sportfishing Prot. All. v. Shiloh Grp., LLC*, 268 F. Supp. 3d 1029, 1046 (N.D. Cal. 2017) (personal liability requires “knowledge of the alleged violations.”)

181. Therefore, Plaintiffs’ CWA claim asserted against Murray fails. Judgment

will be entered in favor of Defendant Murray and against Plaintiffs on this claim.

D. Relief

1. Monetary Penalty

182. Section 309 of the CWA provides that “[a]ny person who violates . . . any permit condition or limitation . . . shall be subject to a civil penalty . . . for each violation.” 33 U.S.C. § 1319(d). The purposes of the civil penalty provision are restitution, deterrence, and retribution. *See Tull v. United States*, 481 U.S. 412, 422–23 (1987). Citizens who commence a suit under these provisions cannot personally obtain any monetary relief; instead, any penalty is paid to the United States Treasury. *Friends of the Earth, Inc. v. Laidlaw Env’t Servs., Inc.*, 528 U.S. 167, 175 (2000).

183. Claims for civil penalties in citizen suits under the Act are subject to the five-year default limitations period contained in 28 U.S.C. § 2462.8. *United States v. Telluride Co.*, 146 F.3d 1241, 1243–44 (10th Cir. 1998). Plaintiffs filed their citizen suit on April 29, 2019. ECF No. 1. Accordingly, the relevant period for determining an appropriate civil penalty is from April 29, 2014 through April 29, 2022, the last day of trial.

184. The number of days between April 29, 2022, and April 29, 2014, is 2,922 days.

185. 33 U.S.C. § 1319(d) provides a maximum penalty of \$56,460 per day. 85 Fed. Reg. 83820 (Dec. 23, 2020); *see also Jones v. United Parcel Serv., Inc.*, 674 F.3d 1187, 1205 (10th Cir. 2012) (“action to recover civil penalties usually seeks the amount fixed by Congress”).

186. Therefore, the maximum penalty the Court could impose in this case would be approximately \$165 million.

187. Courts generally calculate a civil penalty under the “top down” or “bottom up” approach. *Pound v. Airosol Co., Inc.*, 498 F.3d 1089, 1095 (10th Cir. 2007); see also *United States v. Mun. Auth. of Union Twp.*, 150 F.3d 259, 265 (3d Cir. 1998).

188. Under the “top down” approach, the court first determines the maximum civil penalty from the total number of violations and, if the court chooses not to impose the maximum penalty, the penalty may be reduced in accordance with certain statutory factors. See *Atl. States Legal Found., Inc. v. Tyson Foods, Inc.*, 897 F.2d 1128, 1142 (11th Cir. 1990); *Mun. Auth. of Union Twp.*, 150 F.3d at 265; *Sierra Club v. Cedar Point Oil Co.*, 73 F.3d 546, 573 (5th Cir. 1996); *U.S. v. Smithfield Foods, Inc.*, 191 F.3d 516, 528 (4th Cir. 1999). The factors that the CWA instructs the Court to consider are: “[1] the seriousness of the violation or violations, [2] the economic benefit (if any) resulting from the violation, [3] any history of such violations, [4] any good-faith efforts to comply with the applicable requirements, [5] the economic impact of the penalty on the violator, and [6] such other matters as justice requires.” 33 U.S.C. § 1319(d).

189. Alternatively, under the “bottom up” approach, the court first determines the economic benefit the violator has realized by failing to comply with the CWA and then adjusts the penalty upward or downward based on the remaining five statutory factors. *Smithfield Foods*, 191 F.3d at 528; *Mun. Auth. of Union Twp.*, 150 F.3d at 265.

190. The Alma Placer Mine is a relatively modest operation: some years it has a negative cash flow of \$2 million, and some years it makes \$2 million. Tr. 885:16-25 (Murray). A penalty anywhere near \$165 million would bankrupt High Mountain many times over and is entirely unwarranted here. Tr. 859:11–12 (Murray).

191. Plaintiffs acknowledge that, given the size of High Mountain’s operation,

the top-down approach is not appropriate here. ECF No. 174 at 69. The Court agrees and applies the “bottom-up” method below.

a. *Economic Benefit*

192. In estimating economic benefit, courts “consider delayed expenses and the cost of construction of other treatment plants and facilities in assessing the economic benefit of noncompliance.” *Sierra Club v. El Paso Gold Mines, Inc.*, 2003 WL 25265873, at *7 (D. Colo. Feb. 10, 2003). “[A] court need only make a ‘reasonable approximation’ of economic benefit when calculating a penalty under the CWA”. *Sierra Club v. Cedar Point Oil*, 73 F.3d at 576 (citing S. Rep. No. 50, 99th Cong., 1st Sess. 25 (1985)) (“The determination of economic benefit or other factors [under section 309(d)] will not require an elaborate or burdensome evidentiary showing. Reasonable approximations of economic benefit will suffice.”).

193. In this case, at a minimum, the economic benefit enjoyed by High Mountain was the ability to avoid taking the necessary steps to install competent liners in the ponds that discharge into the Middle Fork. Tr. 220:24–221:10 (Sirles) (seepage could have been stopped using placed bentonite everywhere on the pond bottom and its banks).

194. Lewicki, Defendants’ own expert, testified that the installation of such liners in Ponds 3 and 4 would be “costly” and would likely amount to “at least a couple hundred thousand dollars” for each pond. Tr. 676:5–14 (Lewicki). The Court finds this estimate to be reliable because it comes from Defendants’ own witness, who has decades of experience working with operators of the Alma Placer Mine and, equally significant, no controverting evidence was introduced at trial.

195. Therefore, based on Lewicki's estimate, the Court finds that High Mountain avoided paying approximately \$400,000 in costs by failing to install competent liners in Ponds 3 and 4.

196. The Court has also found High Mountain liable for discharging pollutants from Ponds 1 and 2. Each pond is approximately one-quarter the size of Pond 3. See Ex. F. Therefore, based on Lewicki's liner cost estimate for Pond 3, the Court finds that by avoiding installing competent liners in Ponds 1 and 2, High Mountain avoided approximately \$100,000 in costs.

197. Thus, in total, the Court finds that High Mountain avoided approximately \$500,000 in costs by failing to install competent liners in the four Settling Ponds. See *Mun. Auth. of Union Twp.*, 150 F.3d at 264 ("Because of the difficulty of determining the appropriate penalty under the CWA, the court will accord the district court's award of a penalty wide discretion, even though it represents an approximation.").

b. *Statutory Factors*

198. The "factor of seriousness should take into account several considerations, including the number, duration and significance of the violations, as well as the actual or potential harm to the environment." *Sierra Club v. City of Colorado Springs*, 2009 WL 2588696, at *13 (D. Colo. Aug. 20, 2009).

199. Plaintiffs introduced no evidence showing that High Mountain's violations led to actual or potential environmental harm. Plaintiffs also failed to introduce evidence of precisely how much polluted water was discharged from the Settling Ponds into the Middle Fork. Nor did Plaintiffs introduce evidence of precisely what concentration of pollutants the discharged water had when it reached the Middle Fork. In the absence of such evidence, the Court has no reason to find that the violations at issue were serious

violations under 33 U.S.C. § 1319(d).

200. Concerning High Mountain's history of such violations, this case concerns violations that occurred from April 29, 2014 to April 29, 2022. ¶ 183.

201. But High Mountain has been operating the Settling Ponds since 2012. ¶ 12.

202. The Court finds that it is likely that High Mountain was operating in violation of the CWA from 2012 until 2014 because, as discussed above, the Settling Ponds were *designed* to seep into the groundwater and were in operation during this earlier time period. ¶¶ 57–63.

203. Accordingly, the Court finds that High Mountain has some history of committing the violations that are at issue in this litigation. The Court takes this history into account in determining the appropriate penalty.

204. Plaintiffs argue that, in considering High Mountain's history of violations of the CWA, the Court should consider a spill that occurred on October 3, 2014, which resulted in a discharge of polluted water from the Alma Placer Mine into the Middle Fork. ECF No. 174 ¶ 137; Tr. 308:12–15 (Test. of Jeff Spohn). On that date, a High Mountain employee left a valve open when he left for the evening; as a result, a pipe remained open overnight connecting Pond 4 to the Middle Fork. Tr. 855:8–859:3 (Murray). High Mountain discovered this discharge of water from Pond 4 to the Middle Fork on October 4, 2014, and submitted a report to the Colorado Department of Reclamation Mining and Safety. *Id.* High Mountain shut down the Alma Placer Mine, developed a plan to avoid such a discharge in the future, and the plan was approved by the Colorado Department of Reclamation Mining and Safety. *Id.* Following a hearing,

High Mountain was fined \$5,000.

205. The Court finds that the October 2014 spill is a violation of a completely different nature than the violations at issue in this case. Therefore, the Court does not consider the October 2014 spill in its evaluation of High Mountain's history of violations. 33 U.S.C. § 1319(d) (courts are to consider whether defendant has a "history of *such* violations," not a history of *any* CWA violation).

206. As to the next factor, good faith, High Mountain made no apparent efforts to comply with the permitting requirements at issue here. Under the WQCD's implementation of the NPDES permit system, High Mountain had an affirmative duty to ensure it is not discharging pollutants to surface waters under the CWA. Tr. 305:18-306:3. And yet, even during the period when High Mountain acknowledged that the Settling Ponds were discharging into groundwater, it made no attempt to obtain an NPDES permit. High Mountain's lack of action weighs against a finding that it acted in good faith.

207. In considering the economic impact of the penalty, the Court considers that Alma Placer Mine has relatively limited cashflow: some years it has a positive cashflow of approximately 2 million, some years it has a negative cashflow of 2 million. ¶ 188. A penalty anywhere near the statutory maximum \$165 million would bankrupt the company. *Id.* On the other hand, given the scale of High Mountain's business, a penalty that is too low would insufficiently incentivize compliance with the CWA.

208. In conclusion, the Court finds that a penalty should be imposed on High Mountain in the amount of \$500,000.

209. \$500,000 represents the Court's best estimate of the economic benefit High Mountain enjoyed by avoiding compliance with the CWA. The Court has not increased the penalty based on the statutory factors because of the lack of evidence that the violations caused serious environmental damage, and because too high of a penalty would likely bankrupt the company.

210. A \$500,000 penalty represents a penalty of \$171.11 for each day that High Mountain violated the CWA from April 29, 2014 to April 29, 2021.

2. Injunctive Relief

211. District courts are statutorily authorized to enter injunctions in citizen suit proceedings under the CWA. See 33 U.S.C. § 1365(a). To obtain a permanent injunction Plaintiffs must demonstrate: (1) actual success on the merits; (2) irreparable harm unless the injunction is issued; (3) the threat of injury outweighs the harm the injunction may cause to the opposing party; and (4) if issued, the injunction will not adversely affect the public. *Fisher v. Oklahoma Health Care Auth.*, 335 F.3d 1175, 1180 (10th Cir. 2003). "The grant of jurisdiction to ensure compliance with a statute hardly suggests an absolute duty to do so under any and all circumstances, and a federal judge sitting as chancellor is not mechanically obligated to grant an injunction for every violation of law." *Amoco Prod. Co. v. Vill. of Gambell*, 480 U.S. 531, 542 (1987) (quoting *Weinberger v. Romero-Barcelo*, 456 U.S. 305, 313 (1982)). Instead, the CWA "permits the district court to order that relief it considers necessary to secure prompt compliance with the Act." *Weinberger*, 465 U.S. at 320.

212. Plaintiffs fail to offer any meaningful arguments to support their request for injunctive relief, and as a result, the Court finds that Plaintiffs have waived this issue. See generally ECF No. 174.

213. Even if Plaintiffs had not waived this issue, the Court would nonetheless find that a permanent injunction is inappropriate under these circumstances. To be entitled to a permanent injunction, Plaintiffs must show that they will suffer irreparable harm unless the injunction is issued. *Fisher*, 335 F.3d at 1180. Plaintiffs have offered no evidence on this point. Therefore, Plaintiffs have not shown that they are entitled to injunctive relief.

214. Further, the Court finds that an injunction requiring High Mountain to obtain an NPDS permit would “constitute an impermissibly vague obey-the-law injunction, and therefore is impermissible under Rule 65.” *Acosta v. Finishing Pros., LLC*, 2018 WL 6603641, at *8 (D. Colo. Nov. 20, 2018) (citing *Keyes v. Sch. Dist. No. 1, Denver, Colo.*, 895 F.2d 659, 668 (10th Cir. 1990)). Such an injunction “would be both duplicative and vague, and the court does not believe issuing such an injunction comports with judicial economy or the requirements of Rule 65.” *Id.* Accordingly, the Court denies Plaintiffs’ request to enter such an obey-the-law injunction.

E. Attorney’s Fees

215. 33 U.S.C. § 1365(d) allows the prevailing party of a CWA lawsuit to recover reasonable attorney and expert witness fees, and litigation costs. The statute provides:

(d) Litigation costs

The court, in issuing any final order in any action brought pursuant to this section, may award costs of litigation (including reasonable attorney and expert witness fees) to any prevailing or substantially prevailing party, whenever the court determines such award is appropriate.

33 U.S.C. § 1365(d).

216. When a plaintiff prevails, the section is to be liberally construed, and fees

are typically awarded. See *Christiansburg Garment Co. v. E.E.O.C.*, 434 U.S. 412, 416–17 (1978); *Browder v. City of Moab*, 427 F.3d 717, 721 (10th Cir. 2005). This is because “the plaintiff is the chosen instrument of Congress to vindicate a policy that Congress considered of the highest priority,” and when the plaintiff prevails, he or she has proven that the defendant is a “violator of federal law.” *Christiansburg Garment Co.*, 434 U.S. at 418.

217. The Court finds that Plaintiffs are the prevailing Parties in this case.

218. Accordingly, Plaintiffs shall file their § 1365(d) motion, along with full supporting documentation, by no later than **October 3, 2022**.

III. RULE 52(C) MOTION

Rule 52(c) provides that “[i]f a party has been fully heard on an issue during a nonjury trial and the court finds against the party on that issue, the court may enter judgment against the party.” Fed. R. Civ. P. 52(c). Judgment under Rule 52(c) must be supported by findings of fact and conclusions of law as required by Rule 52(a). *Id.*

At the close of the Plaintiffs’ case, Defendants made an oral motion pursuant to Rule 52(c) (“Rule 52(c) Motion”). Tr. 503:10–531:2.

Insofar as Defendants’ Rule 52(c) Motion argues that Plaintiffs did not introduce sufficient evidence of CWA violations stemming from Defendants’ use of the South Pond, that portion of the Motion is moot because the Court resolved that issue in favor of Defendants. Similarly, that portion of the Rule 52(c) Motion regarding Murray’s personal liability is also moot given that the Court has concluded that Murray is not personally liable.

Finally, with respect to Plaintiffs’ theory that Defendants violated the CWA by

discharging pollutants from the Settling Ponds into the Middle Fork, that portion of Defendants' Rule 52(c) Motion is denied. For the reasons discussed at length in Section II.A, the Court finds that there is more than sufficient evidence to support a finding in Plaintiffs' favor on this theory of liability and claim.

IV. CONCLUSION

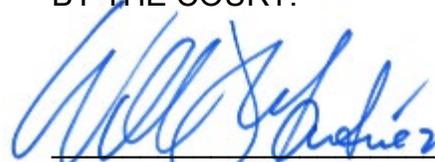
For the foregoing reasons, the Court ORDERS as follows:

1. Defendants Rule 52(c) Motion is DENIED in Part and DENIED AS MOOT in Part, as set forth above;
2. The Court FINDS and CONCLUDES that Plaintiffs are entitled to judgment in their favor on their claim brought against Defendant High Mountain under the CWA, 33 U.S.C. §§ 1331(a), 1342(a)(1), as set forth above;
3. The Court FINDS and CONCLUDES that Defendant Murray is entitled to judgment in his favor on Plaintiffs' claim brought against him under the CWA, 33 U.S.C. §§ 1331(a), 1342(a)(1), as set forth above;
4. The Court ORDERS that, should Plaintiffs wish to be awarded attorneys' fees and costs under 33 U.S.C. § 1365(d), they must file a motion, along with full supporting documentation, no later than **October 3, 2022**. Any response in opposition to such a brief and supporting documentation shall be filed no later than **October 17, 2022**. Any reply in support of such a brief and supporting documentation shall be filed no later than **October 31, 2022**;
5. The Clerk shall enter judgment in favor of Plaintiffs and against Defendant High Mountain in the amount of \$500,000.

6. The Clerk shall enter judgment in favor of Defendant James R. Murray and against Plaintiffs; and
7. The Clerk shall terminate this action.

Dated this 12th day of September, 2022.

BY THE COURT:



William J. Martinez
United States District Judge